



STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

October 21, 2014 - 2:03 p.m. DAY 5
Concord, New Hampshire **AFTERNOON SESSION ONLY**

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

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Special Commissioner Michael J. Iacopino

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Sandy Deno - Clerk

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I N D E X

WITNESS: MICHAEL E. HACHEY (CONT'D)

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AFTERNOON SESSION

CMSR. HONIGBERG: Mr. Glahn.

MR. GLAHN: Thank you.

CROSS-EXAMINATION

BY MR. GLAHN:

Q. Mr. Hachey, I just have a few more questions to ask you. Would you agree that, in determining whether PSNH was prudent in installing the Scrubber, that you'd be required to make an assessment of whether there were viable options to installing the Scrubber?

A. Yes, I believe all options --

CMSR. HONIGBERG: Is your microphone on?

MS. AMIDON: The red light would be on.

A. Yes, I believe all options should have been considered.

BY MR. GLAHN:

Q. And in your testimony you talk about four options: Retirement, divestiture, a study, or seeking a variance; right?

(Witness reviews document.)

1 A. That's my recollection. I'm just looking
2 for --

3 Q. Are there any other options or alternatives
4 that you think should have been considered?

5 A. Could you give me the testimony cite?

6 Q. Yes. It's on Page 30 of your testimony, I
7 believe. I apologize. I think it might be
8 on page -- it's on Page 28 of your testimony,
9 the section called "Options Open to PSNH."

10 A. That's a correct recital of the options, yes.

11 Q. Are there any other options that you
12 considered when you were preparing your
13 testimony?

14 A. I think those cover them, the gamut of them.

15 Q. And is it also your understanding that each
16 of those options would have required PSNH to
17 get the approval of another body, whether
18 it's the PUC or the Legislature or DES, some
19 other body?

20 A. I think that's generally accurate, yes.

21 Q. Okay. All right. So let's talk about the
22 options that you identify.

23 And you measure the prudence of the
24 activity by whether the activity would have

1 resulted in an economic benefit to PSNH's
2 customers. Do you recall that from your
3 testimony on Friday?

4 A. That's been my general focus, yes --

5 Q. Okay.

6 A. -- whether or not the Scrubber made sense for
7 the customers who took electric service.

8 Q. So when you look at whether PSNH was prudent,
9 I think we've agreed that you have to look at
10 the information that PSNH had available to it
11 when it was -- or could have made the
12 decision; right?

13 A. In general, that's what we're talking about
14 here is what information PSNH had at the time
15 it was pursuing the Scrubber.

16 Q. Okay. And in the fall of 2008 and into early
17 2009, what PSNH would have known -- see if
18 you agree with me on this -- is that the PUC
19 had already made a statement about whether
20 the plant could be retired.

21 A. If you're referring to the Order 25,546 --

22 Q. I'm actually referring to 24,898 and to the
23 order on reconsideration of that order, which
24 was issued in November of 2008.

1 A. Okay. You'll have to refresh me on that,
2 then, if you have the document.

3 Q. Well, let me refresh your recollection more
4 specifically on Order 24,898.

5 On Page 12 of that order, the PUC said
6 the following: Nowhere in RSA 125-O does the
7 Legislature suggest that an alternative to
8 installing scrubber technology as a means of
9 mercury compliance may be considered, whether
10 in the form of some other technology or
11 retirement of the facility."

12 Did you know that the PUC had said that
13 when you issued your testimony?

14 A. I think I'd like to see the document.

15 MS. AMIDON: I have a copy if
16 you give me --

17 BY MR. GLAHN:

18 Q. Can you answer the question first before you
19 look at the document?

20 A. Well, it's a little easier to tell if I see
21 the actual document than to try to recollect
22 one statement out of a PUC decision.

23 MS. AMIDON: Your Honor, I
24 have a copy of this. If he could tell me

1 what page it is --

2 MR. GLAHN: We have a copy,
3 too. So let me give a copy to Mr. Hachey.

4 (Mr. Glahn hands document to witness.)

5 MS. FRIGNOCA: What order is
6 this so we can follow along?

7 MR. GLAHN: It's 24,898.

8 MS. AMIDON: It's an order in
9 Docket DE 08-103. The order number is
10 24,898. It's dated September 19th, 2008.

11 (Witness reviews document.)

12 A. Reading that order, it says, "Nowhere in RSA
13 125-O does the Legislature suggest that an
14 alternative to installing scrubber technology
15 as a means of mercury compliance may be
16 considered, whether in... some form [sic] of
17 [sic] other technology or retirement of the
18 facility."

19 BY MR. GLAHN:

20 Q. Would you agree with me that, whatever the
21 PUC may have said about retirement after
22 2011, PSNH would not have known about that at
23 the time it was making the decision to go
24 forward with the Scrubber in 2008 or 2009?

1 A. PSNH would not have known about something in
2 2011 in 2008 -- that occurred in 2011 in
3 2008.

4 Q. Good. I'm glad we can agree on that.

5 A. Yes.

6 Q. So my question to you is this: If no
7 alternative to installing the Scrubber as a
8 means of mercury compliance existed -- that
9 is, if retirement was not an option as an
10 alternative to installing the Scrubber as a
11 means of mercury compliance -- how is it that
12 the plant could have been retired?

13 A. Well, I've always had the common-sense view,
14 I thought, that, to the extent that the cost
15 of the Scrubber did not lead to consumer
16 benefits any longer, that PSNH needed to
17 notify the relevant parties, the PUC and the
18 Legislature, of that fact. And one of the
19 issues, at least for me as I've looked at
20 this, is the only party that really had the
21 information to do that, that commonly would
22 be expected to do that, would be PSNH. In
23 other words, you wouldn't expect that the PUC
24 would have sufficient information to be

1 making the determination that the Scrubber
2 economics weren't working anymore, or you
3 certainly wouldn't expect that of the
4 Legislature. So it really came down to PSNH.
5 And, you know, I worked for a regulated
6 utility for a long time, for about 20 years.
7 And my expectation is that the regulated
8 utility, to the extent that it became aware
9 that the economics of a particular project no
10 longer worked, that it would go back to the
11 Legislature, if it was a legislative change
12 that needed to be made, or go back to the PUC
13 if it was a regulatory change that needed to
14 be made, and say, Hey, this isn't working out
15 as we had originally anticipated. We need to
16 do X, or we need to consider Y. But that
17 isn't what happened.

18 Q. So the only thing a prudent utility could
19 have done at that point is gone back to the
20 Legislature and say change the law.

21 A. Again, I'm not an attorney. But I'm not sure
22 whether or not the variance provisions would
23 have worked. So, anyway, those variance
24 provisions were in the law, and I think we

1 pointed that out.

2 Q. We'll get to variance in a minute.

3 A. Okay.

4 Q. You didn't do any analysis of PSNH's
5 contractual obligations if the Scrubber
6 Project was cancelled, did you?

7 A. I believe I accepted Mr. Long's statement
8 back in September of 2008 that they had
9 committed \$10 million and -- no, I was
10 looking -- I didn't do an independent
11 analysis. I was relying on what PSNH had
12 presented.

13 Q. Okay. And since you didn't do any analysis
14 or study of the cost of benefit -- well, I'm
15 sorry. Strike that. Let me ask another
16 question.

17 You didn't do any analysis of the costs
18 or benefits of retirement of the plant
19 either, did you?

20 A. I didn't do a detailed retirement study, no.
21 I wouldn't have been in the position to do
22 that. That's something that we -- I would
23 have expected PSNH would have had to do,
24 because there's a --

1 Q. Let me make sure I pick up on the word
2 "detailed" in your answer.

3 You didn't do any analysis of the costs
4 or benefits of retirement of the plant, did
5 you?

6 A. I didn't do a retirement study, no, of the
7 plant, no.

8 Q. And since you didn't do any analysis or study
9 of the costs or benefits to PSNH's customers
10 of retiring the plant, you don't know whether
11 retirement would have benefitted PSNH's
12 default service customers in 2008, or at any
13 later date, do you?

14 A. I identified it as an "option."

15 Q. You identified it as an "option." But you
16 don't know whether that option would have
17 returned a benefit to PSNH's customers in
18 2008, or at any other time, do you?

19 A. Again, I didn't do the retirement study. So,
20 without having done the retirement study, I
21 wouldn't have known the result. Correct.

22 Q. So the answer to my question is "Yes"; is
23 that correct?

24 A. I think I -- yes.

1 Q. Yes, you don't know whether there would have
2 been a benefit. Let me go back because --

3 CMSR. HONIGBERG: I would have
4 gone with "No" myself, but...

5 MR. GLAHN: And as Judge
6 Aldrich once said, "I can think of a shorter
7 and perhaps more accurate answer." So let me
8 go back.

9 CMSR. HONIGBERG: I think,
10 stated affirmatively, he doesn't know.

11 MR. GLAHN: All right.

12 BY MR. GLAHN:

13 Q. You don't know whether retirement in 2008, or
14 at any later date, would have provided a
15 benefit to PSNH's customers, do you?

16 A. I do not know without performing a retirement
17 study.

18 Q. Thank you.

19 MR. GLAHN: And thank you,
20 Commissioner Honigberg.

21 BY MR. GLAHN:

22 Q. So you also say that one other option that
23 PSNH had is it could have done a study; is
24 that right? Or it could have asked to delay

1 an order to do a study?

2 A. I think, as I stated at the outset, one of
3 the options that PSNH had was, to the extent
4 that it recognized that the Scrubber
5 economics weren't working, it needed to go
6 back to the PUC, and perhaps the Legislature,
7 probably both, and tell them what the
8 circumstances were and discuss options from
9 there. And undoubtedly, both the Commission
10 and the Legislature would have had some
11 ideas, some thoughts.

12 Q. And did you understand when you gave that
13 answer or prepared your testimony, that the
14 PUC had said it didn't have any jurisdiction
15 over the installation of the Scrubber in the
16 fall of 2008?

17 A. Could you give me a cite?

18 Q. I'm sorry. I didn't hear your answer.

19 A. Could you give me a cite?

20 Q. Well, I'm not asking you for your testimony.
21 I'm asking you whether you understood -- you
22 want a cite to the PUC's statement that it
23 didn't have any jurisdiction?

24 A. Yes.

1 Q. How about 24,898 and the subsequent order?

2 (Witness reviews document.)

3 Q. I direct your attention, Mr. Hachey, to
4 Page 13 of that order, in which the
5 Commission said, "Accordingly, the
6 Commission's authority is limited to
7 determining at a later time the prudence of
8 the costs of complying with the
9 requirements... and the manner of recovery
10 for prudent costs."

11 A. I read that.

12 Q. So, did you take into account when you were
13 determining whether a study could be done,
14 the fact that the PUC had already indicated
15 it had no jurisdiction over construction of
16 the Scrubber under the Modifications section
17 of RSA 369-B:3-a?

18 A. Well, I'm having a hard time understanding
19 how the order says that they couldn't have
20 done a study.

21 Q. Well, we've already established, have we not,
22 that the law provided that PSNH was to
23 install the Scrubber?

24 MS. FRIGNOCA: I'm going to

1 object to that characterization. That's a
2 legal conclusion, and that's what this
3 hearing is about.

4 CMSR. HONIGBERG: Sustained.

5 BY MR. GLAHN:

6 Q. All right. Mr. Hachey, let me cut this part
7 of this short. You didn't do any analysis of
8 whether a delay would have decreased or
9 eliminated economic performance incentives in
10 this Project, did you?

11 A. I didn't do any analysis of a project delay.

12 Q. Okay. And since you didn't do any analysis
13 of the impact of a delay in construction, you
14 don't know whether a delay in 2008 would have
15 benefitted PSNH's default customers or not.

16 A. Well, my testimony on that fact, on that
17 issue, was it could have agreed to study
18 whether proceeding with the Project still
19 made sense. So, no, I didn't do the
20 analysis.

21 Q. And because you didn't do the analysis, you
22 don't know whether a delay on the Project
23 would have benefitted PSNH's customers in
24 2008, or at any other time, do you?

1 A. The outcome of that analysis would be that
2 determination, and I told you I didn't do
3 that analysis.

4 Q. Okay. On the variance issue, who would PSNH
5 have to have asked for a variance?

6 A. As I recall, there's language in the variance
7 as to who it needs to go back to. And I
8 believe -- and, you know, I'd rather not take
9 it from memory -- but I believe there was
10 another body in the state that it would have
11 had to have seen to request the variance.

12 Q. If I represented to you that that was the
13 Department of Environmental Services, would
14 you disagree with me?

15 A. I can accept that as a representation.
16 You've got the law.

17 Q. You also know, don't you, that when the PUC
18 issued Order No. 24,898, it specifically
19 noted -- and this is on Page 12 -- that the
20 law, RSA 125-O, does not set a cap on
21 rates -- on costs or rates, or provide for
22 the Commission review under any particular
23 set of circumstances, or establish some other
24 alternative review mechanism. Did you know

1 that when you drafted your testimony?

2 A. Can you tell me where you're --

3 Q. Yes. I started right below the sentence that
4 we talked about earlier on Page 12, carrying
5 over to Page 13.

6 (Witness reviews document.)

7 A. So you want to start with, Furthermore, RSA
8 125 [sic] does not set any cap on costs or
9 rates, provide for related capital costs, the
10 severe economic downturn, the impact of
11 migration on customers --

12 (Court Reporter interrupts.)

13 Q. What are you reading from, Mr. Hachey?

14 A. Well, I don't know. I'm trying to read from
15 where you were. I thought you said the
16 bottom of 12 on to 13.

17 Q. I'm reading from Page 12 to 13 of the
18 Commission's Order in 24,898.

19 A. I'm sorry. I'm on the wrong order. Do you
20 have the --

21 Q. It's the order that I -- you have it in front
22 of you. I put it in front of you a few
23 moments ago when I was asking you about the
24 law. Okay? Got it?

1 (Witness reviews document.)

2 A. I'm reading it. I thought I was on the
3 bottom of 12 to 13.

4 Q. Yes.

5 A. So, start again.

6 Q. Well, did you know -- tell me if I read this
7 accurately. "Furthermore, RSA 125-0 does
8 not: (1) set any cap on costs or rates; (2)
9 provide for Commission review under any
10 particular set of circumstances; or (3)
11 establish some other alternative review
12 mechanism."

13 A. That's an accurate reading.

14 Q. Okay. Did you know that when you drafted
15 your testimony?

16 A. I was aware of this order, yes.

17 Q. Now, can we agree that you can see that the
18 Scrubber is capable of meeting the mercury
19 reduction requirements in RSA 125-0?

20 A. I believe that's the case, yes. I have no
21 contrary information.

22 Q. Have you ever been involved in the sale or
23 divestiture of a coal plant or natural gas
24 plant?

1 A. Yes.

2 Q. Pardon?

3 A. Yes.

4 Q. How many?

5 A. Well, I was involved in the divestiture of
6 the New England Electric System generation.
7 So that would have been two coal stations, a
8 natural gas station, a number of hydro
9 stations.

10 Q. How long did that take?

11 A. From beginning to close? About a year.

12 Q. Was the New England Electric System required
13 to go to an administrative body to obtain
14 permission to divest before the divestiture
15 proceedings began?

16 A. There were certainly a number of
17 administrative proceedings. I don't recall
18 specifically whether -- what the nature of
19 the approvals required was, but I believe
20 there were some.

21 Q. Okay. Let's see if we can agree on this:
22 Whether divestiture was a good option for
23 PSNH's ratepayers would depend on what could
24 be received for the plant; right?

1 A. What could be -- I would say what could be
2 received for the plant and the nature of any
3 follow-on provision of electric service to
4 customers.

5 Q. Mr. Brennan testified in this case that
6 Merrimack Station is an uneconomic plant, in
7 the last quarter of its life. Do you think
8 that would make a plant more difficult to
9 sell?

10 A. There are many companies out there that have
11 different views. I've just seen the Brayton
12 Point Station sell twice in a fairly short
13 period of time; that's regarding an
14 uneconomic plant. So it could be that
15 there's particular siting advantages. I
16 don't know. But you could find that there
17 are parties out there that have different
18 views of the market.

19 Q. We'll come back to that in a minute.

20 You weren't able to say, when we asked
21 you in a data request, whether a new owner of
22 the plant would be required to install the
23 Scrubber, were you?

24 A. I think I would need that data request to

1 refresh my memory.

2 Q. Well, let me first ask you this: Would a new
3 owner of this plant be required to install
4 the Scrubber?

5 A. Under the prevailing laws -- and, again, not
6 being an attorney -- I wouldn't have
7 anticipated that the new owner would not have
8 to install the Scrubber if it wanted to
9 continue the operation of the coal plant.
10 But it may have other reasons that it wanted
11 to buy the facility.

12 Q. You didn't do any analysis of the costs or
13 benefits of selling Merrimack Station, did
14 you?

15 A. No, I didn't do a --

16 Q. And you didn't do --

17 (Court Reporter interrupts.)

18 A. I didn't do a sales study.

19 Q. And you didn't do an analysis of the
20 ratepayer impact of selling Merrimack
21 Station, did you?

22 A. No. That would be impossible to do without
23 knowing the sorts of numbers that could be
24 received for it.

1 Q. And you didn't do an analysis of the likely
2 market interest in Merrimack Station, did
3 you?

4 A. No, I did not.

5 Q. You didn't do any analysis of whether a sale
6 of the plant was feasible, did you?

7 A. I wasn't aware of any issues that made it
8 infeasible. But I did not do a feasibility
9 analysis, no.

10 Q. Okay. And when you were asked whether --
11 well, let me ask this question: Would the
12 issue of whether a buyer would have been
13 available -- is the issue of whether a buyer
14 would have been available relevant to your
15 analysis?

16 A. I suppose my answer would be: I wouldn't
17 know why it would be an issue, because we've
18 seen numerous facilities change hands in New
19 England. We've seen retiring coal plants
20 change hands -- for example: The Salem
21 Harbor Station. So I wouldn't have thought
22 that there would be an issue as to whether
23 there would be a buyer.

24 Q. I want you to assume for a moment that a

1 buyer of the plant would have been required
2 to install the Scrubber. You got that
3 assumption in mind?

4 A. I have the assumption.

5 Q. Okay. In your view, would it have been more
6 difficult to sell the station with the
7 obligation to build the Scrubber attached to
8 it?

9 A. It would have revised the buyer's price,
10 that's for sure. They would have taken the
11 cost of the Scrubber into account. It's not
12 clear to me whether they would have had a
13 different idea of how to meet the Scrubber
14 requirements at a different cost. I don't
15 know.

16 Q. Because you didn't do any analysis of the
17 impact of divestiture on ratepayers, you
18 don't know whether a divestiture in 2008, or
19 at any other date, would have benefitted
20 PSNH's customers, do you?

21 A. I think I've testified that I don't know the
22 outcome of a study I didn't do. So...

23 Q. You conclude in your report that PSNH should
24 be entitled to recover \$10 million in this

1 case; isn't that correct?

2 A. That's what I concluded, yes.

3 Q. Pardon?

4 A. Yes.

5 Q. And when we asked you in a data request for
6 your support for that \$10 million number,
7 what you did was refer us to Page 30 of your
8 testimony, Lines 6 through 9.

9 MR. GLAHN: Let's actually
10 mark this response.

11 So, Denise, this is our File
12 110, number -- it's the answer to Data
13 Request 124.

14 CMSR. HONIGBERG: And it's
15 going to be 115 for us.

16 MR. GLAHN: Thank you.

17 (Ms. Frazier hands document to witness.)

18 (The document, as described, was herewith
19 marked as Exhibit 115 for
20 identification.)

21 BY MR. GLAHN:

22 Q. Mr. Hachey, I'm confused by your answer. The
23 question was: "...provide support for the
24 \$10 million of allowed recovery you propose."

1 And what you said was, See my testimony
2 at Lines 6 through 9 on Page 3.

3 And on Page 30, what you say is, "I
4 believe that the Commission should only let
5 PSNH recover what it had spent on the project
6 as of that date, which I understand to be \$10
7 million based on the September 2, 2008 filing
8 in DE 08-103."

9 Do you have any support for your \$10
10 million number, other than that's just what
11 you understand was spent as of September 2nd,
12 2008?

13 A. I believe my testimony says that's what the
14 support is.

15 Q. That's not the question I asked you. I asked
16 you: Do you have any other support for your
17 \$10 million number other than that's what was
18 spent at the time?

19 A. Okay. I'm sorry if you didn't take it as a
20 full answer, but that was the support.

21 Q. Okay.

22 A. I didn't say I had additional support beyond
23 that. I said that was my support.

24 Q. So your testimony in this case, what you want

1 the Commissioners to believe, is that the
2 only dollar value at which the Scrubber would
3 have been a prudent investment was
4 \$10 million.

5 A. That's what the testimony is, yes.

6 Q. That's your testimony; right?

7 A. Yes.

8 Q. Okay. So that's the price at which
9 installation of the Scrubber would no
10 longer -- say it this way: Does it follow
11 from that, that any amount above \$10 million,
12 installation of the Scrubber would no longer
13 have been economic or beneficial to PSNH's
14 ratepayers?

15 A. I have a question about your question. Are
16 you asking me to look into the period of time
17 following September of 2008, in terms of how
18 the Scrubber is operated and the economics of
19 the Scrubber and that sort of thing?

20 Q. No. What you've just said is that it's your
21 testimony that the only price at which the
22 installation of the Scrubber would have been
23 prudent was \$10 million. That's your
24 testimony; correct?

1 A. Well, I think the testimony speaks for
2 itself. PSNH should have realized that, by
3 September of 2008, going forward with the
4 Scrubber didn't make sense and should have
5 put a halt to any additional spending on the
6 project until the economics could be further
7 studied --

8 Q. Didn't you make --

9 A. -- and that, to go on, I believe the
10 Commission should only let PSNH recover what
11 it had spent on the Project as of that date,
12 which I understand to be \$10 million.

13 Q. So, at any amount above \$10 million,
14 installation of the Scrubber would not have
15 been prudent. Is that your testimony?

16 A. Yeah, my testimony is that, what makes sense
17 is for PSNH to have recovered the monies that
18 it had spent at that time, up to that point.

19 Q. And I think, as you said earlier today, you
20 didn't -- I asked you whether the
21 installation of the Scrubber at \$250 million
22 would have been prudent. And you said you
23 didn't do any analysis of that, so you can't
24 make a judgment on that. Do you recall that?

1 A. That's what I said.

2 Q. In fact, it is true that you didn't do any
3 analysis of the price at which the
4 installation of the Scrubber would have been
5 economic for PSNH's customers.

6 MR. PATCH: Objection. Asked
7 and answered.

8 CMSR. HONIGBERG: I agree.

9 BY MR. GLAHN:

10 Q. Thank you, Mr. Hachey. That's all I have.

11 A. Thank you.

12 CMSR. HONIGBERG: Staff have
13 any questions for Mr. Hachey?

14 MR. SHEEHAN: I have a couple.

15 CROSS-EXAMINATION

16 BY MR. SHEEHAN:

17 Q. Mr. Hachey, just some clarification for me,
18 please. If we were to group together the 10
19 or so exhibits that were statements from
20 TransCanada that Mr. Glahn went over with you
21 just before lunch, those were a number of
22 statements from TransCanada giving whatever
23 statements they were about price forecasting
24 at Henry Hub, et cetera.

1 So, with those in mind, let me first
2 say, could you just restate the four studies
3 that you say PSNH had available and should
4 have looked at before building the Scrubber
5 forecast.

6 A. The EIA forecast -- I'm sorry -- the Energy
7 Information Agency forecast; the Brattle
8 Group forecast; the Synapse forecast; and the
9 Energy Ventures, what we now know as the
10 Energy Ventures Analysis forecast, which I
11 think we found in their files --

12 Q. And if I understand --

13 A. -- and other places. Sorry.

14 Q. Sorry. And if I understand the gist of your
15 testimony, those are forecasts that are
16 appropriate to rely upon when making a
17 capital decision, such as the Scrubber
18 Project here.

19 A. Yes.

20 Q. And of course, as we've mentioned, the fault
21 the fact that they didn't look at those and
22 instead relied on what they say they relied
23 on.

24 A. Correct.

1 Q. Now, going back to those various documents
2 from TransCanada that Mr. Glahn walked you
3 through, did you see anywhere in any of those
4 documents -- there may be -- a reference to a
5 report or a forecast similar to the four that
6 you say PSNH should have looked at? I'm
7 trying to get apples-to-apples.

8 A. Right.

9 Q. Was he making -- was he comparing
10 apples-to-apples with you, or was there some
11 difference?

12 A. I didn't see any references to reports or
13 forecasts, other than perhaps what
14 TransCanada itself may have developed. And
15 the only reason I say "may" is because I know
16 that we have a corporate forecast, and I
17 recognize that the various CEOs were quoting
18 numbers. And I don't know whether the
19 numbers were based on a forecast or not.

20 Q. So it may well be that the numbers that Mr.
21 Glahn went through --

22 MR. GLAHN: Can I just
23 interrupt with one question? I'm sorry,
24 Mike. I didn't hear the answer to the last

1 question. Could I have the stenographer read
2 Mr. Hachey's answer back to me?

3 (Record read back as requested.)

4 MR. SHEEHAN: All set, Mr.
5 Glahn?

6 MR. GLAHN: Yeah.

7 MR. SHEEHAN: Thank you.

8 BY MR. SHEEHAN:

9 Q. So we heard those numbers through these
10 TransCanada documents. And it may be that
11 those numbers are supported by something like
12 the EIA. But is it fair to say -- well, let
13 me ask you. Did you see any evidence of that
14 through what you saw presented to you today?

15 A. Well, I saw a lot of prices in those papers,
16 and I didn't think any of them were
17 particularly out of line with the four
18 forecasts I cited. But I'd have to go back
19 and look at them. I saw numbers from 6 to
20 10 --

21 (Court Reporter interrupts.)

22 A. I saw numbers between 6 and 10, and that
23 seems to be consistent with where some of the
24 other forecasts we've been talking about here

1 came out.

2 Q. Some of the documents that Mr. Glahn went
3 through with you concerned production,
4 TransCanada production in western Canada; is
5 that correct?

6 A. Correct.

7 Q. The WCSB or whatever it was?

8 A. Correct.

9 Q. Can you tell us how production from that --
10 do you know where production from western
11 Canada goes when it's sold? Does it come
12 this far east so that it would have an impact
13 in New Hampshire? Or would it impact the
14 markets? Do you have any sense of that?

15 A. I'm sure that's something that's developed
16 over time. You know, if you go back far
17 enough westbound, Alberta production was
18 coming into New England.

19 Q. Okay. Far enough in time you mean?

20 A. If you go back far enough in time. And by
21 that I mean the mid-'80s or so. Because my
22 recollection is that some of the non-utility
23 projects that New England Power had contracts
24 with were buying Canadian gas; so that could

1 only have come from Alberta. But how that
2 changed over time, I really couldn't speak to
3 very well.

4 MR. SHEEHAN: That's all I
5 had. Thank you.

6 CMSR. HONIGBERG: Commissioner
7 Iacopino.

8 INTERROGATORIES BY SP. CMSR. IACOPINO:

9 Q. Good afternoon, Mr. Hachey.

10 A. Hi.

11 Q. I just have a few questions. The first one
12 is you've got me a little confused about the
13 relationship between your company and Public
14 Service. You indicated somewhere early in
15 the cross-examination that you did not
16 consider your company to be a "competitor" of
17 Public Service; is that correct?

18 A. That's correct.

19 Q. Okay. What about Northeast Utilities, their
20 parent company? Do you consider your
21 companies to be competitors with them?

22 A. No.

23 Q. Why not?

24 A. When I think of competition and I began our

1 retail program, I think of the people that we
2 compete with at the retail level, where we're
3 trying to -- customer solicitation, devise
4 products, devise terms of contracts -- you
5 know, compete on pricing and put in a firm
6 and final offer and that sort of thing,
7 that's the kind of vigorous competition that
8 I think of, whether it be at the retail level
9 or at the wholesale level. PSNH has a
10 default price. So it's a last-resort price,
11 which is, you know, a fairly stayed product.
12 And it's -- like I say, it's a last resort.
13 So, maybe I've just been in the competition
14 game for too long. But I don't regard that
15 as "competition." I regard competition with
16 now PSNH's former affiliate, Select Energy,
17 was a competitive entity. And they were very
18 much in competition with us when they
19 existed. Others, you know, such as Direct
20 and Constellation and the like, I consider
21 the competitors. I do not, for example,
22 consider the Massachusetts Electric Default
23 Rate to be a competitor to us. It's just my
24 sense and my use of the term.

1 Q. Okay. I have another question about
2 definitions. You mentioned during the course
3 of cross-examination that you couldn't answer
4 Mr. Glahn's question about the price of shale
5 gas unless you knew the "lift price"? What
6 do you define -- how do you define the "lift
7 price"?

8 A. So, my definition -- and I'm not a gas guru,
9 I've just been around gas. And when I think
10 what's the cost, whether the engineering
11 cost, if you will, the OEM cost of getting
12 that gas out of the ground. And that, of
13 course, means drilling the well and all the
14 directional drilling and the use of the sand
15 and the water and the additives. So you go
16 through all of that, and you're going to get
17 into a certain amount of gas; what's the cost
18 per million Btu of that resulting gas. That
19 then gives you a number that fits on the
20 supply curve of natural gas.

21 Q. Wouldn't that price -- wouldn't that cost,
22 though, be included in the various exhibits
23 that Mr. Glahn showed to you regarding shale
24 gas?

1 A. Well --

2 Q. He showed you exhibits that had, you know,
3 market share and cost of gas. Isn't all of
4 that included in those exhibits? And you
5 tried to parse it out, but you couldn't
6 answer the question because you didn't know
7 that lift price. I'm trying to understand
8 why you couldn't answer the question.

9 A. We've got a whole supply curve of ways of
10 producing gas, you know, and then we have a
11 demand curve that intersects. And as I
12 recall, the difficulty I was having is you
13 can have a tremendous quantity of shale gas,
14 for example, in the ground. And if it takes
15 you \$10 to get it out, well, that's not going
16 to be relevant in terms of gas pricing until
17 gas gets up to that level. Other than that,
18 it's not really relevant. On the other hand,
19 if it's \$2, and all the conventional supplies
20 are \$4, well, it's hugely relevant.

21 Q. In the beginning of your cross-examination,
22 or maybe it was at the beginning of your
23 direct testimony, you indicated that one of
24 the things you faulted Public Service for was

1 that they failed to update the Public
2 Utilities Commission about the increase in
3 the price. And I think you're talking
4 about -- I think you were referencing the
5 meeting with Staff. I forget the date, but
6 back in the 2008 time frame. Is that
7 correct?

8 A. Well, there was -- I'm not quite sure which
9 meeting. There was a meeting with Staff
10 where the chart that we've been talking about
11 was discussed. Are we talking about another
12 meeting?

13 Q. Well, I was asking you. Is that the
14 meeting -- is that what you're talking about
15 when you -- at the beginning of your
16 testimony, one of the things you told us was
17 that PSNH failed to provide information to
18 the PUC and the OCA about the gas price, you
19 know, the break-even price and --

20 A. Can you give me the testimony cite?

21 Q. I don't have the cite. That's my note from
22 your direct testimony before you were
23 tendered for cross-examination. You
24 identified three basics of your testimony:

1 First one was about Public Service failing to
2 provide information to the PUC and the OCA
3 with respect to the sensitivity of gas
4 prices, which I took to mean that break-even
5 point.

6 A. Yes.

7 Q. I guess my question is, let's assume that
8 they didn't inform the PUC. They didn't
9 inform the Staff. As a Commission, what are
10 we to make of that in the prudence
11 proceeding?

12 A. Well, that was a fundamental piece of data
13 that told you what the threshold price would
14 be. In other words, you didn't have to run
15 an economic analysis; you had a number. And
16 then you could periodically check to see,
17 well, was that \$5.29 -- how close to the line
18 is that? And as conditions changed,
19 certainly as they did in 2008 and well into
20 2009, conditions were changing radically. So
21 the Commission could have raised further
22 questions, to the extent that PSNH didn't
23 tell you itself, about the changes in
24 conditions. It would have been a very

1 valuable piece of information, for example,
2 to Mr. Janeway, when he brought his bill to
3 have a study done, if, for example, in the --

4 Q. Well, let's stick with the Public Utilities
5 Commission right now, okay.

6 A. Sure.

7 Q. Because I can ask you about the Legislature
8 in a minute.

9 A. Okay.

10 Q. But what are we as a Commission to make of
11 the fact that Staff was not provided with
12 that number? What is your position that we
13 should make of that? That we should make a
14 finding of imprudence because they did not
15 provide that information? Or should we use
16 the \$5.29 number to somehow determine
17 prudence? I guess I'm trying to understand
18 what relevance it should have to the
19 Committee [sic] in our decision or what your
20 position is.

21 A. Well, the end result is that the \$5.29 is not
22 being met, and there could have been earlier
23 questions raised well before major dollars
24 were being committed, major customer dollars,

1 to the extent that all the dollars flowed to
2 customers, to the extent that major customer
3 dollars were being committed and spent.

4 So the questions -- the PUC could have
5 raised quite a number of questions, and it
6 wasn't in a position to do so because it
7 didn't have that information.

8 Q. Okay. Let's assume the same fact, but only
9 change the subject to what should this
10 Commission make of the fact that, if we
11 accept what you say, that the Public Service
12 Company did not provide that information to
13 the Legislature? Is it the same analysis?

14 A. Well, I started with the Janeway Bill as an
15 example. And that was a bill that said we
16 need to stop and take another look at this
17 because of the dramatic run-up in cost. And
18 what that would have led to, that \$5.29
19 number would have led to, is what is the
20 price breakdown, what is the cost
21 differential, and it would have led to an
22 awful lot of questions and perhaps slowing
23 down and re-evaluating whether it made sense
24 to go forward at all.

1 Q. So, as a Commission, we should assume that,
2 if that number had been made known -- taking
3 your testimony that it hadn't been made
4 known -- but as a Commission, we should
5 assume that, had it been made known, the
6 Legislature would have done something else.

7 A. Well, it was a determinant of whether
8 customer benefits were going to result. And
9 I guess I'm making the presumption that both
10 the PUC and the Legislature would have
11 been -- and the OCA to this matter -- would
12 have been looking to ensure that the end
13 result would have been net customer benefits.
14 And to the extent that information was out
15 there that indicated that there wouldn't be,
16 my presumption is, you know, the PUC and the
17 Legislature would have taken action of some
18 sort, whether it be to study or to say, you
19 know, perhaps we need a change in the law
20 here before this gets too far and negative
21 consequences fall onto customers. Because
22 certainly -- and I know that, as PSNH's
23 indicated, most of my analysis is economic.
24 That's what I was focused on. And so that's

1 the scenario I would have seen playing out,
2 that in fact the Commission and the
3 Legislature both would have responded in a
4 manner to ensure that the customer interest
5 was being met. Precisely how? I don't know.

6 Q. Let me shift gears, then, from the
7 Legislature and the PUC to something that
8 you're probably much more familiar with.

9 You mentioned during the course of your
10 testimony that you were involved in the sale
11 of Brayton Point --

12 A. Yes.

13 Q. -- coal facility?

14 A. Yes.

15 Q. And when were you involved in that? What
16 year?

17 A. 1997 to 1998.

18 Q. And what were the circumstances of that sale?
19 Was that a divestiture, or was that just a
20 sale of assets by a generating company?

21 A. That was the divestiture of the New England
22 Power Company fleet of assets and as a result
23 of deregulation of the industry.

24 Q. Okay. And you also indicated that -- well,

1 actually, you said it was sold twice. Were
2 you involved in the other sale?

3 A. No. And I probably have to say it was sold
4 three times. The first sale was to -- of the
5 assets was to USGen, who went bankrupt. From
6 that bankruptcy, Dominion bought the coal
7 assets and Manchester Street. Dominion then
8 constructed the -- quite a variety of
9 back-end and expensive environmental
10 controls, such as closed-cycle cooling and
11 air emission.

12 Q. And when Dominion owns it, it's a unregulated
13 asset?

14 A. Yes. And then Dominion sold it to EquiPower.
15 EquiPower has now -- if you're following the
16 NEPOOL events, EquiPower has announced its
17 closure, and EquiPower has now sold it -- or
18 not; it may not have closed -- but has
19 announced the sale to Dynegy. And I don't
20 believe it has closed. And the other coal
21 plant, which was Salem Harbor, has a similar
22 set of events, a little different twist.

23 Q. When you were involved with the sale, the
24 original sale of Brayton Point, was it sold

1 as a group with other facilities?

2 A. Yes. The sale to USGen was virtually the
3 entire set of assets, with the exception of
4 their equity ownership in Ocean State Power,
5 which TransCanada purchased.

6 Q. You also made a reference in your
7 cross-examination to the fact that "numerous
8 facilities have changed hands in New England
9 under various circumstances" is what I noted.

10 A. Correct.

11 Q. And are you thinking of any particular
12 facilities when you say that? I mean, I
13 guess I'm looking for a time frame. I'm
14 looking for a little more definition, I
15 suppose --

16 A. Facilities are constantly changing hands. Do
17 I have any particular one? I have dozens in
18 my mind. I'm trying to give you the
19 particulars on each and every one of them,
20 but there's -- most of the generation fleet
21 has changed hands two or three times.

22 SP. CMSR. IACOPINO: Thank
23 you. I don't have any further questions.

24

1 INTERROGATORIES BY CMSR. HONIGBERG:

2 Q. Good afternoon, Mr. Hachey.

3 A. Good afternoon.

4 Q. I have a couple areas I want to ask you
5 about. The first is a number of the exhibits
6 that Mr. Glahn showed you this morning were
7 PowerPoint slides that have a TransCanada
8 logo on them.

9 A. Yes.

10 Q. A number of them have a graph that is
11 entitled "NYMEX Gas Prices" for different
12 years, but they all had -- they were all
13 graphs that looked roughly the same. Do you
14 remember those?

15 You can look at -- if you can find
16 Exhibit 106, on the second page, the top
17 slide is an example of one.

18 MR. SHEEHAN: Mr. Honigberg,
19 at a break, I numbered those exhibits for
20 ease. So if it's wrong, blame me, not him.
21 But he should be able to find it.

22 A. It works. I have it.

23 (Witness reviews document.)

24 BY CMSR. HONIGBERG:

1 Q. During your exchange with Mr. Glahn, you used
2 the phrase "cash price." "This might be
3 based on a NYMEX cash price."

4 A. Correct.

5 Q. I do not in any way have any great
6 understanding of what goes on with the New
7 York Mercantile Exchange. Can you tell me
8 what you mean by "cash price"?

9 A. Spot price.

10 Q. Okay. So you -- and what, then, do you
11 believe this graph shows using spot prices?

12 A. The spot price on some basis. I don't know
13 whether it's end-of-month spot or average
14 spot for the month, but it's a spot price
15 for, you know, daily exchanges. So if I
16 needed, you know, 10,000, 20,000 cubic feet,
17 what would I pay on January 2nd in the NYMEX
18 exchange. So it's similar to, for example,
19 what we would have in NEPOOL. So if you went
20 to the ISO Web site and you looked at, you
21 know, today's price, you know -- actually, we
22 have an hourly price. But what's the average
23 of the hourly price. Or you can say, what's
24 the average of the on-peak prices. So that's

1 the "spot market." And of course, we make it
2 even more complicated because we have real
3 time and day ahead. But I'll leave that
4 aside. So it's the spot price of the daily
5 exchange price. That's my presumption. But
6 obviously, as I caveat it, I didn't make the
7 chart.

8 Q. I understand you didn't create this. But if
9 this graph is in some way based on the actual
10 spot prices, what -- so this was prepared in
11 2011. It presumably shows the actual spot
12 price up until sometime shortly before the
13 report was prepared and then a projection
14 going forward?

15 A. That would be my understanding, yeah.

16 Q. Would it in any way, then, have used the
17 futures prices that are also being
18 established at the NYMEX, at least for the
19 shorter term, to create the projections?

20 A. That would not be my expectation, no.

21 Q. The futures prices being set, though, are the
22 projections by those who are paid to make
23 those projections and hedge contracts and
24 purchases for future use of what the price is

1 going to be a month from now, two months from
2 now, a year from now; is it not?

3 A. Well, the futures prices are prices that's
4 off in the future -- that is, buyers and
5 sellers are consummating deals. And so
6 it's -- you know, in my presentation -- I'm
7 sorry -- in my --

8 Q. Testimony?

9 A. -- testimony -- thank you -- you know, I
10 explained what the nature of NYMEX futures
11 prices are. And they're very useful because,
12 you know, people who are quoting -- who have
13 quoted prices to customers and -- for
14 example: It's very useful to power
15 generators, because knowing how they can lock
16 down their gas price, they can then lock down
17 their power price. And so they can quote
18 prices out -- you know, if today we're
19 sitting here, in October, I can quote a
20 December price based on the use of the NYMEX
21 futures.

22 Q. And because it's a prediction of what the
23 spot price is going to be at that time; is it
24 not?

1 A. No, it's not a prediction. It's the price at
2 which parties will exchange -- you've got a
3 buyer and a seller.

4 Q. How do those buyers and sellers know what
5 prices to offer or bid in the future on the
6 futures market?

7 A. It's the nature of the market, I guess.

8 Q. And when they are doing their spot price
9 deals at that time, they're based on supply
10 and demand at that time. Are you saying
11 there's no relationship between one and the
12 other?

13 A. What I think I said in my testimony is that
14 the nature of the NYMEX futures is that
15 there's a tremendous amount of liquidity in
16 about the next year. After that, I've got
17 exhibits in my testimony -- I think the NERA
18 folks have exhibits in their testimony -- and
19 we have the U.S. Senate Committee report
20 which says tremendous volume in the very near
21 term; after that, in the case of the U.S.
22 Senate report, it says it's speculative.

23 So, you know, it's not even an issue of
24 what the forecast is. You can secure the gas

1 at that price for, like, the next year.

2 After that, it gets a lot more interesting
3 because of how thin the market gets.

4 Q. Understood.

5 A. So the point I was making is that it's very
6 robust for trading and locking in in the next
7 year. After that, it's speculative. In
8 fact, the U.S. Senate report is really an
9 investigation of the Amaranth scandal, which
10 is manipulation of those prices, which gets
11 right to the heart of the speculation as you
12 go out into the future. Who's behind those
13 prices? What's going on? I don't know.
14 What I do know is that, in the case of the
15 forecasts, people at the EIA have sat down
16 and gone through the hard work of drawing on
17 a national basis the supply and demand
18 curves -- we're really into Economics 101,
19 drawing supply and demand curves -- and
20 finding the intersection points.

21 Q. But coming back, then, to the slide, the
22 third slide of the PowerPoint, when whoever
23 was creating this graph for the 2011 report,
24 you don't think they would have looked at the

1 futures prices in the short term from that
2 point to get a sense of what the projections
3 should be? They had all the past spot price
4 information. You don't think they would have
5 used the futures prices for some period of
6 time before they started using other sources
7 to project?

8 A. Well, if futures prices are inflated, hyped
9 for some reason, because there's a hurricane
10 coming or -- you know, that's trader --
11 trader games can start hyping prices and
12 pushing up prices because the buyers are
13 worried and that sort of thing. And I think
14 what the forecasters are really doing is
15 taking a calm view of the market, not an
16 inflated view, not a deflated view, and
17 saying, look, these are the -- assuming a
18 competitive market, then -- and of course, we
19 believe it is -- then you go right back to
20 market fundamentals, which is the
21 intersection of the supply and the demand
22 curves.

23 Q. But those people who just did that, you
24 speculated they would have discounted certain

1 of the futures prices because they might have
2 been manipulated. But they look at them and
3 consider whether they are -- whether they
4 have value in making their projections in the
5 short term; would they not?

6 A. Perhaps. I'm sure they're looking at the
7 cash prices, the recent cash prices, too. I
8 really can't sit here and say what -- whether
9 the EIA looks at them or not. I mean, that
10 isn't what they say.

11 Q. Well, we're not talking about the EIA. I'm
12 just trying to get an understanding of what
13 your concerns were about the creation of that
14 graph. And I think I understand where you
15 are.

16 But speaking of hype, one of the things
17 that you felt was important -- and I'm not
18 going to be able to find it in my notes --
19 was a report done, I think by Navigant, for
20 gas producers?

21 A. Yes.

22 Q. The gas producers' interests at that time was
23 certainly to make their industry attractive
24 and interesting to investors and those

1 considering where to take the energy market;
2 was it not?

3 A. I can't read their minds.

4 Q. Well, it certainly would have been in their
5 economic interests for a report to be very
6 bullish on their industry, wouldn't it?

7 A. Well, it wouldn't -- I hear what you're
8 saying. But what I'm thinking of, it's not
9 bullish on pushing gas prices to say that we
10 have these tremendous reserves. So I'm not
11 quite sure how it cuts. I don't really know
12 why they did what they did.

13 Q. Last thing I want to ask you about is the
14 \$10 million that's on Page 30 of your
15 testimony, one of the very last topics you
16 discussed with Mr. Glahn.

17 A. Right.

18 Q. And I had the sense that you and Mr. Glahn
19 were talking right past each other during
20 that stretch.

21 Your basis for saying \$10 million was
22 essentially what their sunk costs were at
23 that time, and that's what they should get
24 back; right?

1 A. Correct.

2 Q. You were making no assertions about whether
3 that number or any other number was the point
4 at which building the Scrubber was economic
5 or not economic; correct?

6 A. That's correct.

7 Q. All right. I have nothing further.

8 INTERROGATORIES BY SP. CMSR. IACOPINO (cont'd):

9 Q. I just want to ask you one more question.

10 Without getting into the whole economic
11 analysis, when you answered Commissioner
12 Honigberg's question about Exhibit 106 --
13 that being the NYMEX gas prices, January 2011
14 forecast slide on the Slide No. 3 -- you've
15 said that it could be -- they could have used
16 spot prices or cash prices, or spot price or
17 whatever you want to call it. Is there
18 something about the prices in the chart that
19 is informing you in saying that, or is it
20 just because you know that those other prices
21 exist? Because it's been suggested by PSNH
22 that these are futures prices.

23 A. Right.

24 Q. So I'm just trying to figure out what informs

1 your suggestion that this chart might be
2 based on cash prices. Is it something about
3 the prices that you know, or is it just
4 because you know that there are two different
5 ways that NYMEX will garner the information?

6 A. Well, as I said, I didn't -- I just want to
7 be careful. I didn't make the chart.

8 Q. I understand that. That's why I'm asking --

9 (Court Reporter interrupts.)

10 A. Sorry. If they were NYMEX futures, they
11 would have said "NYMEX futures." NYMEX gas
12 prices to me is almost synonymous with the
13 Henry Hub prices, which means spot.

14 Q. Okay. So it's just the title that informs
15 you the most.

16 A. Well, the other thing we could do is, I have
17 a chart of Henry Hub prices that the EIA
18 prepares, that my recollection is that it
19 looks a whole lot like that. So...

20 Q. Is that in your testimony as one of your
21 attachments?

22 A. I don't -- I don't know. But it's -- quite
23 frankly, it's about two clicks away on a
24 computer. It's readily available if it's not

1 an exhibit. But I'm not so sure we
2 actually --

3 SP. CMSR. IACOPINO: Mr.
4 Patch, do we know if it's an exhibit or if
5 it's attached to his testimony?

6 MR. PATCH: I'm sorry. I was
7 focused on something else.

8 SP. CMSR. IACOPINO: We're
9 talking about -- he said there's an
10 exhibit -- or, well, he doesn't know if it's
11 an exhibit -- but a document of Henry Hub
12 prices for the time frame, I guess, from 2000
13 to 2020.

14 MS. GOLDWASSER: We can get
15 you that number.

16 SP. CMSR. IACOPINO: It's
17 actually a chart he's talking about.

18 MR. PATCH: I think it's an
19 attachment to his testimony.

20 SP. CMSR. IACOPINO: Okay.
21 If you could just -- you don't have to do it
22 right now, but if you could just alert us if
23 it's already in the testimony. If not, if
24 you could get us the document.

1 THE WITNESS: Sure.

2 MR. GLAHN: If may?

3 CMSR. HONIGBERG: Mr. Glahn.

4 MR. GLAHN: It's a little bit
5 late for TransCanada to be producing
6 documents now. Mr. Hachey's in here
7 testifying about prices and methodology. He
8 hasn't produced any of the documents that
9 would support that. So, of course, we can't
10 question whether in fact this document is
11 based on a particular price or what the
12 methodology was. That's a concern. And
13 we'll address that at the end of it, but --

14 SP. CMSR. IACOPINO: Do
15 you --

16 CMSR. HONIGBERG: Well, Mr.
17 Glahn, there's a document you gave him during
18 cross-examination which raised some
19 questions. Both Commissioners asked him
20 questions about that document. Commissioner
21 Iacopino has asked for a document. I think
22 that, to the extent you want to object to the
23 production of a page that the witness has
24 referred to, it's going to be denied -- it's

1 going to be overruled. But --

2 MR. GLAHN: Well, I'm not
3 going to say anything further because I know
4 where you're going. So I'm going to leave it
5 alone.

6 SP. CMSR. IACOPINO: Mr.
7 Glahn, though, if you -- do you have any
8 information that would inform us as to what
9 the basis of the chart that you put into
10 evidence --

11 MR. GLAHN: No, I think --
12 (Court Reporter interrupts.)

13 MR. GLAHN: I think you can
14 ask Mr. Large about that. But these are just
15 the only documents we've been able to find,
16 all of which are publicly available.

17 SP. CMSR. IACOPINO: Okay.
18 But to the precise question --

19 MR. GLAHN: I don't --
20 (Court Reporter interrupts.)

21 SP. CMSR. IACOPINO: Let me
22 finish. But to your question, you don't have
23 any further information that informs why we
24 should accept your suggestion that these are

1 future prices.

2 MR. GLAHN: I don't know that
3 I suggested anything. I asked him whether in
4 fact they were, to see if I could get his
5 answer and -- but I take your point. And
6 you're going to get the document if it
7 exists, and we'll see then.

8 SP. CMSR. IACOPINO: If you
9 come across anything that informs us, please
10 let us know.

11 MR. GLAHN: I will. And I
12 hope, if he's going to produce the document,
13 he does it before Mr. Large finishes his
14 testimony.

15 CMSR. HONIGBERG: Mr. Hachey.

16 THE WITNESS: Apparently it's
17 Exhibit 53.

18 CMSR. HONIGBERG: Is there a
19 Bates page number?

20 MS. GOLDWASSER: It's a single
21 page.

22 CMSR. HONIGBERG: I'm sorry.
23 It's a document -- it's not an attachment to
24 his testimony? It's an exhibit we've already

1 marked?

2 MS. GOLDWASSER: Exhibit 53
3 was marked as "EIA Natural Gas Prices at
4 Henry Hub." Is that what you were looking
5 for, sir?

6 SP. CMSR. IACOPINO: That
7 sounds like one of the exhibits that's been
8 marked by the parties, but we have not been
9 provided --

10 CMSR. HONIGBERG: No, no, I
11 think we may have it. Yeah, we do.

12 MS. GOLDWASSER: I think it
13 came in on the first day.

14 CMSR. HONIGBERG: It's this
15 right here (indicating).

16 SP. CMSR. IACOPINO: Thank
17 you.

18 MR. SHEEHAN: Mr. Frantz
19 pointed out that it's also attached to Steve
20 Mullen's testimony. SEM-8 is a graph with
21 the Henry Hub...

22 SP. CMSR. IACOPINO: I have
23 no further questions, Mr. Chairman.

24 CMSR. HONIGBERG: Mr. Patch,

1 redirect?

2 MR. PATCH: Yes. Thank you.

3 REDIRECT EXAMINATION

4 BY MR. PATCH:

5 Q. First of all, the Chairman asked you a
6 question about the Clean Skies report.

7 MR. PATCH: And I just want to
8 make it clear for the record. I believe the
9 exhibit number for that is 51.

10 BY MR. PATCH:

11 Q. I don't know if you have in front of you
12 there the exhibits, Mr. Hachey, but that was
13 a response to -- it's mislabeled, I think, in
14 the list I have. It was TransCanada's
15 response to PSNH Question No. 66.

16 (Ms. Goldwasser hands document to
17 witness.)

18 MR. PATCH: And it's not the
19 entire report, I would just point out to the
20 Chairman. We'd be happy to produce the
21 entire report if you would like. We produced
22 a couple of pages from that. We provided a
23 link in the response.

24 BY MR. PATCH:

1 Q. But Mr. Hachey, is that in fact the report
2 that the Chairman was asking you questions
3 about that you referred to?

4 A. Yes.

5 CMSR. HONIGBERG: Thank you,
6 Mr. Patch.

7 BY MR. PATCH:

8 Q. Do you remember Mr. Glahn asking you a
9 question about Ken Colburn and the document
10 that he had provided to the Legislature under
11 his name and Symbiotic Strategies? I think
12 it's Exhibit 96 [sic].

13 A. I remember the question.

14 Q. And I believe he asked you whether
15 TransCanada had paid for that, for the
16 production of that document at all. Do you
17 remember that question?

18 A. Yes.

19 Q. And have you since been able to inform
20 yourself as to whether in fact TransCanada
21 did pay for that?

22 A. I have.

23 Q. And did they?

24 A. No.

1 Q. You were asked a number of questions by Mr.
2 Glahn about things that you did not have
3 before you when you put together your
4 testimony. And I want to ask you a question
5 about Exhibit 37, which I believe is
6 something that you did not have before you
7 when you prepared your testimony, and that is
8 the New Hampshire -- the Public Service
9 Company of New Hampshire affiliate, Yankee
10 Gas, and what Yankee Gas had filed with the
11 Connecticut Commission. Do you have that in
12 front of you?

13 (Ms. Goldwasser hands document to
14 witness.)

15 A. I do now.

16 MR. GLAHN: Someone have an
17 extra copy I can look at?

18 (Ms. Goldwasser hands document to Atty.
19 Glahn.)

20 BY MR. PATCH:

21 Q. Is this a document that was available to you
22 in response to a data request from PSNH or in
23 any other way when you prepared your
24 testimony?

1 A. No.

2 Q. Do you know when and how TransCanada and
3 TransCanada's counsel came across that
4 document?

5 A. My recollection is it was --

6 MR. GLAHN: And again --

7 CMSR. HONIGBERG: Wait, wait,
8 wait, Mr. Hachey.

9 MR. GLAHN: Is he going to
10 open a conversation that he had with his
11 counsel, with his lawyer? Is this privileged
12 communication he's going to waive?

13 CMSR. HONIGBERG: I don't
14 know. He asked the question. Let's find
15 out.

16 A. My recollection is our counsel said publicly
17 that she found this on Columbus Day.

18 BY MR. PATCH:

19 Q. So it was not available to you at the time
20 your testimony was filed; correct?

21 A. That's correct.

22 Q. Have you had a chance to look at the
23 document?

24 A. I've had some chance to look at it, yes.

1 Q. Do you see the letter of March 2nd, 2009?

2 A. I do.

3 Q. Do you a see reference in the first paragraph
4 to, "On November 13, 2008, the Company
5 requested an extension of time to March 1,
6 2009, to allow the Company to assess recent
7 energy and market changes, to incorporate
8 those impacts into a new forecast, and to
9 develop detailed support for the updated
10 forecast"?

11 A. I do.

12 Q. Is that in any way inconsistent with any of
13 the testimony that you put together?

14 A. No.

15 Q. Do you think it supports your testimony?

16 MR. GLAHN: I'm going to
17 object. I don't think there's any evidence
18 here that -- looking at this, this report
19 indicates that it's a report that was
20 required by a specific provision of
21 Connecticut law. I don't think there's any
22 foundation for the fact as to what that
23 update -- whether there was an update
24 required under law or what the update

1 required.

2 CMSR. HONIGBERG: Overruled.

3 A. Well, my testimony was that there were market
4 changes.

5 BY MR. PATCH:

6 Q. And does this seem to suggest that at least a
7 PSNH affiliate was aware of those market
8 changes?

9 A. Yes.

10 Q. I'm going to direct your attention to Page 23
11 of this exhibit. In the lower right-hand
12 corner it's also Roman III-16. At the top it
13 says, "Major Forecast Inputs."

14 A. Yes.

15 Q. Do you see the second paragraph, the first
16 sentence, "Another major input to the
17 forecast models is energy prices"?

18 A. I see that.

19 Q. And the next sentence, "The Company uses
20 Energy Ventures Analysis... forecasts of
21 retail and wholesale energy price in its
22 forecasting process"?

23 A. Yes.

24 Q. Are those, in fact, the forecasts that

1 TransCanada's been trying to get for the last
2 two years?

3 MR. GLAHN: Objection.

4 CMSR. HONIGBERG: Mr. Patch.

5 MR. PATCH: I think it's a
6 simple question. Mr. Hachey knows, as does
7 Mr. Glahn, that TransCanada's asked numerous
8 data requests about this, and we finally got
9 some information on Friday about this. And
10 this is something that was available,
11 apparently, to an affiliate. As we know from
12 the record, PSNH cited it in the LCIRP, the
13 2007 one that is now in the record, that PSNH
14 put in the record. There are other
15 references in the record to it, too.

16 MR. GLAHN: We --

17 CMSR. HONIGBERG: Seems like
18 testimony about the discovery problems. I
19 mean, is that where you're going with this --

20 MR. PATCH: No.

21 CMSR. HONIGBERG: -- or is
22 there something substantive you want to ask
23 him about?

24 MR. PATCH: No, there's

1 something substantive. So I'll ask another
2 question.

3 MR. GLAHN: I'll also note for
4 the record that he -- there's no evidence
5 that he didn't have the EVA forecast for
6 2008, which was produced a long time ago.

7 MR. PATCH: No, it wasn't.
8 That's just not true.

9 CMSR. HONIGBERG: Well, what's
10 the substantive question you want to ask him
11 about the EVA forecast?

12 BY MR. PATCH:

13 Q. Isn't it true, in your testimony, Mr. Hachey,
14 that you made reference to the fact -- and I
15 believe it's -- let me just find the cite in
16 your testimony -- at the bottom of Page 24,
17 that you had eliminated the EVA forecast
18 because you were not provided -- well, as it
19 says there, "We only were provided EVA
20 forecast values through 2018 by PSNH, and we
21 lacked any narrative explanation of how to
22 extrapolate it through 2017 [sic]"?

23 A. I think it's 2027.

24 Q. I'm sorry. I misread that.

1 A. Yes, that's in my testimony.

2 Q. And so you, in fact, discounted the EVA
3 forecast because you weren't provided with
4 sufficient information from PSNH, some of
5 which we have now received; is that correct?

6 A. That's correct.

7 Q. And then there's one more page in this
8 exhibit. The next, Page 24, "Long-Run Growth
9 Potential," the second paragraph. I'm going
10 to read you the third -- actually, the fourth
11 sentence I guess it is. It says, "Natural
12 gas prices, as measured by Henry Hub, also
13 saw a plunge in 2008 and are expected to
14 remain below recent history for the next
15 several years for reasons similar to those
16 affecting oil." Did I read that correctly?

17 A. Yes.

18 Q. "But, also, and perhaps more importantly,
19 prices are likely to remain depressed because
20 of the newly discovered and exploitable
21 supply response available from the
22 unconventional sources (shale plays)." Did I
23 read that correctly?

24 A. Yes, you did.

1 Q. So, is it your understanding that PSNH
2 affiliates, in fact, had this information
3 available to them in the time frame that is
4 under consideration by the Commission in this
5 docket?

6 MR. GLAHN: That time frame
7 being what, Mr. Patch?

8 I object to the question. The
9 time frame isn't specified. This report was
10 issued in March of 2009.

11 MR. PATCH: That's right. But
12 there's a letter indicating November 13th of
13 2008, that they were asking for evaluating
14 the impact of market drivers on the most
15 recent sales forecast.

16 MR. GLAHN: But the report was
17 filed in March of 2009, and you're asking him
18 about a statement in -- Mr. Hachey's asking
19 about a statement -- Mr. Patch is asking
20 about a statement in a 2009 report. And I'm
21 objecting to the question because he's not
22 identifying the time frame in which he
23 purports to argue that PSNH had access to
24 this information.

1 MR. PATCH: Well, it's clearly
2 in the fall of 2008 when they asked for the
3 extension.

4 BY MR. PATCH:

5 Q. Would you think that's fair, Mr. Hachey?

6 A. That's what the document says.

7 Q. And then also in 2009, because that's when
8 the actual report was filed. Would you say
9 that's fair?

10 A. Yes.

11 Q. Do you remember Mr. Glahn walked you through
12 a number of, I guess I'll call them "math
13 problems," on the chart up there in front of
14 the Commission, where he started with the 457
15 million, and then subtracted from that, for
16 example, 35 million for the secondary
17 wastewater treatment, and then also
18 subtracted some other numbers from that? Do
19 you remember that discussion?

20 A. Yes.

21 Q. And I think he came up originally with an
22 83 percent increase in the original estimate
23 of 250 million to the 457 million. Do you
24 remember that?

1 A. Yes.

2 Q. Of all those numbers that he walked you
3 through, isn't that the only relevant one?

4 MR. GLAHN: Objection.
5 Relevant to what?

6 MR. PATCH: I'll reask the
7 question.

8 CMSR. HONIGBERG: Thank you.

9 BY MR. PATCH:

10 Q. Isn't it fair to say that the other math that
11 he had you do was based on information that
12 came out after what was known to PSNH in the
13 summer of 2008?

14 A. That's my understanding.

15 Q. So that, in effect, would be a look-back.
16 That would, in effect, be using hindsight;
17 would it not?

18 A. That's correct.

19 Q. Now, Mr. Hachey, I'd just like to explore a
20 little bit about your own personal
21 background.

22 I think in response to some questions
23 earlier today, you talked about how you had
24 worked for New England Electric System for a

1 number of years. Did I hear that correctly?

2 A. Yes.

3 Q. And New England Electric System, at that
4 time, was a regulated public utility; is that
5 correct?

6 A. Yes.

7 Q. And were you involved at all in doing
8 analyses associated with investments that
9 NEES, the regulated utility, was going to be
10 making in power plants or in other assets
11 that they owned?

12 MR. GLAHN: Objection. I
13 think this witness has already testified that
14 he didn't have any involvement. I asked him
15 about making decisions in real time as to
16 whether things were prudent. He said he
17 didn't have any involvement in that.

18 CMSR. HONIGBERG: I remember
19 that question and answer. Mr. Patch.

20 MR. PATCH: I think the
21 question was with respect to TransCanada and
22 not with NEES. So we can establish
23 now what --

24 CMSR. HONIGBERG: Let's -- all

1 right. You can answer the question.

2 A. For, you know, a number of years as I
3 joined -- it was New England Power; New
4 England Power was the relevant subsidiary --
5 I was assessing capital projects at
6 generating stations, doing the economic
7 assessments. I wasn't making prudence
8 determinations. I was doing the economic
9 analysis of the projects.

10 BY MR. PATCH:

11 Q. And can you give us, you know, just sort of a
12 ballpark, a 10,000-foot summary of the kinds
13 of things that you would look at when you did
14 those kinds of assessments?

15 A. Well, typically it would involve -- the
16 carrying charges on the capital investment
17 would be the cost, and the savings would be
18 the production savings, which would be
19 determined by doing a with and without
20 analysis on a production-cost simulation
21 model, which is very common in the industry.

22 Q. And did that experience that you had inform
23 your testimony in this docket?

24 A. Yes.

1 Q. And going back to the board of trustees
2 presentation, do you recall how they had in
3 there the spread of \$5.29 between the price
4 of natural gas and coal as being basically
5 the break-even point that was necessary to
6 make the Project economic? Do you recall
7 that?

8 A. Yes.

9 Q. And obviously, we've had a lot of testimony
10 so far, and I'm sure there'll be more, about
11 the fact that that was not presented to Staff
12 and not presented to the Commission and not
13 presented to the Legislature.

14 MR. GLAHN: Objection. I
15 think we've had plenty of testimony about
16 what was presented: The sensitivity
17 analysis, the price of gas, the price of
18 coal.

19 CMSR. HONIGBERG: Sustained.
20 Why don't you get to the question that you
21 want to ask him about it.

22 BY MR. PATCH:

23 Q. What did you understand that \$5.29 figure to
24 be?

1 A. That was the differential cost between
2 natural gas prices and coal prices at which
3 the net benefits to electric customers would
4 appear.

5 Q. And based on your experience with New England
6 Power Company, if a utility had that
7 available to them, how would they use that
8 number?

9 A. Well, it's a very concise way of assessing
10 the Project at any point in time as market
11 conditions changed. It's a very useful --
12 trying to come up with a word. But it's a
13 very useful concept, a very useful number.

14 Q. And so, a utility that had that number
15 available to it, would that be the end of the
16 story? Would it ever have gone back and
17 checked that number periodically going
18 forward?

19 A. Well, I would think that the utility would
20 recognize that that's what -- that's the
21 number -- that's the spread that was
22 necessary for there to be consumer benefits.
23 And that would have been a number you'd want
24 to be sure of to -- that as time and life

1 unfolded, that it would be a robust number
2 and would not be an ethereal number, if you
3 will.

4 Q. And if the utility also had available to it
5 information that indicated that that \$5.29
6 spread, looking back historically over a
7 15-year period, had never been met, that in
8 fact the average had been \$3.18, do you think
9 that would have given them pause on whether
10 to proceed?

11 A. Yeah.

12 MR. GLAHN: Objection. The
13 evidence is not that the not been met over
14 that period of time. The evidence is from
15 the chart. If Mr. Patch wants to narrow his
16 question to the period from 1993 or identify
17 the specific time frame, the question makes
18 sense. But he hasn't laid a foundation for
19 it otherwise.

20 MR. PATCH: I thought I did
21 lay the foundation. It's the 15-year period.
22 The average spread over that 15-year period
23 is \$3.18, according to the chart. We can go
24 back to the chart if necessary, but that's

1 what the chart says.

2 MR. GLAHN: If Mr. Patch has
3 evidence as to what the average spread was
4 over the 15 years, I don't know where it is.

5 MR. PATCH: It's right on the
6 chart.

7 CMSR. HONIGBERG: I think --

8 MR. GLAHN: Where?

9 CMSR. HONIGBERG: -- Ms.
10 Goldwasser's going to find it for us, and
11 we'll find out.

12 MS. GOLDWASSER: Do you want
13 me to read it?

14 CMSR. HONIGBERG: Off the
15 record.

16 (Discussion off the record)

17 CMSR. HONIGBERG: All right.
18 Let's go back on the record.

19 MR. GLAHN: With that chart,
20 I'll withdraw my question. But I'd like the
21 question reread, please.

22 MR. PATCH: Would it be easier
23 for me to restate it?

24 MR. GLAHN: I think so.

1 BY MR. PATCH:

2 Q. Well, I guess, just to establish, Mr. Hachey,
3 you have in front of you that chart?

4 A. Yes.

5 Q. And does it indicate what the historical
6 average spread was over the prior 15-year
7 period?

8 A. It says, "Gas/coal spread has averaged \$3.18
9 per million Btu over the last 15 years."

10 Q. And does it also indicate what the spread is
11 that's required to make the Project economic?

12 A. It goes on to say, "as compared to the
13 required customer break-even level of \$5.29
14 per million Btu."

15 Q. So my question to you is: Based on your
16 experience working for a public utility and
17 working on capital projects and analyses that
18 you did, whether that would have given pause
19 to a public utility on whether or not to
20 proceed with this project.

21 MR. GLAHN: That being the
22 statements that are on the chart?

23 MR. PATCH: That's right.

24 A. I believe so, yes.

1 BY MR. PATCH:

2 Q. What is your understanding of when PSNH first
3 became aware of the fact that the estimate
4 for the project had risen to \$457 million?

5 MR. GLAHN: I think that
6 question's been asked a number of times,
7 including of this witness.

8 CMSR. HONIGBERG: Do you
9 know --

10 MR. GLAHN: I don't think
11 there's any dispute that it's May of 2008.

12 CMSR. HONIGBERG: Does that
13 work for you, Mr. Hachey?

14 THE WITNESS: At this point,
15 sure.

16 BY MR. PATCH:

17 Q. Well, I'd like to show you an attachment to
18 Mr. Large's and Mr. Vancho's rebuttal
19 testimony. And I think that has been marked
20 as Exhibit 23.

21 (Ms. Goldwasser hands document to
22 witness.)

23 Q. It's Attachment 2, Page 12 of 17.

24 CMSR. HONIGBERG: Is there a

1 Bates number on the bottom of that?

2 MR. PATCH: Yeah, 431.

3 MR. GLAHN: Give us a minute.

4 Doug, could you give us the numbers again,
5 please?

6 MR. PATCH: Yup. It's the
7 second -- No. 2 attachment to the rebuttal
8 testimony of Large and Vancho, and it's Bates
9 Page 431.

10 BY MR. PATCH:

11 Q. Mr. Hachey, do you have that in front of you?

12 A. I do.

13 Q. And if you look back at Bates Page 420, I
14 think that's actually the beginning of the
15 attachment, or at least that identifies what
16 the information is part of, it says "Clean
17 Air Project, Merrimack Station - PSNH,
18 Progress Update, April 25, 2008."

19 A. Yes.

20 Q. And then, if you look again at Page 12 of the
21 presentation, Bates Page 431, and you look
22 down at the very bottom under the line, what
23 does it say there?

24 A. It says "Merrimack CAP: \$425 million capital

1 investment."

2 Q. So it sounds like, at least in this update in
3 April, PSNH was certainly aware that the cost
4 had gone up to \$425 million. You think
5 that's a fair statement?

6 MR. GLAHN: Objection. Is he
7 asking him what "Merrimack CAP" means? He's
8 asking him to make an inference from this
9 document.

10 MR. PATCH: I can ask him what
11 he thinks "C-A-P" means.

12 MR. GLAHN: Fine.

13 CMSR. HONIGBERG: Go ahead.

14 BY MR. PATCH:

15 Q. Would it be your understanding that that
16 stands for "Clean Air Project"?

17 A. That's the title of the document, "Clean Air
18 Project," and that is an acronym that seems
19 to fit. So...

20 Q. So this document, again, is dated in April of
21 2008. So it appears from this document, does
22 it not, that PSNH actually knew as of April,
23 now, that the Project was going to be far in
24 excess of 450 -- \$250 million. Do you think

1 that's fair?

2 A. Seems to open up the idea that the Clean Air
3 Project is a \$425 million capital investment,
4 certainly.

5 Q. And the reason I'm asking you these
6 questions, Mr. Glahn walked you through a
7 number of questions associated with the
8 timing of notifying the Securities and
9 Exchange commission. Do you remember those
10 questions?

11 A. Yes.

12 Q. And I think it was basically early in August
13 that they notified the Securities and
14 Exchange Commission. Is that your
15 understanding?

16 A. That's my recollection, yes.

17 Q. And it was to try to point out that they did
18 not notify the Legislature at the June 18,
19 2008 meeting; correct?

20 A. Yes.

21 Q. Which we've already established through
22 attachments to your testimony; correct?

23 A. That's correct.

24 Q. But do you know any reason why they couldn't

1 have notified the Securities and Exchange
2 Commission before or why they couldn't have
3 told the Legislature earlier about the
4 increase in the costs of the Scrubber
5 Project?

6 A. I don't know of any reason, no.

7 MR. PATCH: I'm not sure I
8 need to go here, Mr. Chairman, but there was
9 an exhibit that Mr. Hachey was provided with,
10 which was a letter from Mr. Kapala. And
11 there were certain sentences from the letter
12 that were read to Mr. Hachey, and he
13 confirmed that they were in fact read
14 appropriately. And there were follow-up
15 statements in that letter in each of those
16 two locations, that I'm not sure it's
17 necessary, you know, to read them all again.
18 I would if you would like me to. But I just
19 want to make sure that the Commission reads
20 the rest of those paragraphs because I think
21 that information is very important. And if
22 you think it's necessary, I can walk the
23 witness through. But I don't --

24 CMSR. HONIGBERG: We don't

1 think it's necessary. I think you've done
2 what you need to do.

3 MR. PATCH: Okay.

4 BY MR. PATCH:

5 Q. You were asked some questions about the
6 September order in the 08-103 docket. Do you
7 remember those questions? It was Order No.
8 24,898. And I think it was at the bottom of
9 Page 12, where Mr. Glahn had asked you a
10 number of questions about what was in that
11 order?

12 A. I have the order.

13 Q. Is it your understanding that the Commission
14 issued another order in that docket on a
15 motion for rehearing that had been made by
16 TransCanada, among others; that there was, in
17 fact, an Order No. 24,914 that, in fact,
18 clarified a number of positions for a number
19 of things that the Commission had spoken
20 about in the first order?

21 A. Well, if I had the order, it would refresh my
22 recollection.

23 (Ms. Goldwasser hands document to
24 witness.)

1 A. I have order No. 24,914.

2 Q. And so it's your understanding that this
3 order, in effect, superseded the prior order,
4 in the sense that it was an order issued by
5 the Commission on a motion for rehearing in
6 that same document?

7 MR. GLAHN: Objection. I
8 think this witness has said any number of
9 times, "I'm not lawyer," "I can't conclude
10 that," and now he's asking if one order
11 supercedes another, as opposed to simply
12 denying reconsideration.

13 CMSR. HONIGBERG: As asked,
14 that question has a problem.

15 BY MR. PATCH:

16 Q. Is this a later order in that docket? Is it
17 your understanding this is a later order from
18 the Commission in that docket, Mr. Hachey?

19 A. This is Docket 08-103, which I believe is the
20 same docket, and it's dated November 12th,
21 2008, which is after the prior order which
22 was dated September 19, 2008.

23 Q. There's just one provision in the order I'd
24 like to point out to you and ask --

1 MR. GLAHN: What page are you
2 on, Doug?

3 CMSR. HONIGBERG: He hasn't
4 gotten there yet.

5 BY MR. PATCH:

6 Q. I wonder if you would just read into the
7 record the sentence in the order at the
8 bottom of the Page 13 that begins, "RSA
9 125-0:17" and goes over to the top of the
10 next page.

11 A. "RSA 125-0:17 does, however, provide a basis
12 for the Commission to consider, in the
13 context of a later prudence review, arguments
14 as to whether PSNH had been prudent in
15 proceeding with installation of scrubber
16 technology in light of increased cost
17 estimates and additional costs from other
18 reasonably foreseeable regulatory
19 requirements, such as those cited by the
20 Commercial Ratepayers, which include the
21 Clean Air Act, 42 U.S.C., Section 7401, et
22 seq., and the Clean Water Act, 33 U.S.C.,
23 Section 1251, et seq." Not a lawyer.

24 Q. Okay.

1 MR. GLAHN: Was there a
2 question?

3 BY MR. PATCH:

4 Q. Is it your understanding that that was part
5 of the order that was issued later than the
6 one that Mr. Glahn asked you about in the
7 same docket?

8 A. Yes, it is.

9 MR. PATCH: Mr. Chairman, I
10 think that's all we have on redirect. I
11 guess what I would like to do at this point
12 in time, though, is just to reserve the right
13 to bring Mr. Hachey back once we've had a
14 chance to review all the materials that PSNH
15 has provided to us starting on Friday and
16 then again yesterday in response to data
17 requests that we asked a long time ago.

18 MR. GLAHN: I don't think we
19 have any objection to that.

20 CMSR. HONIGBERG: All right.

21 Mr. Hachey, I know this has
22 been a lot of fun, but I think we're going to
23 let you go for a while, anyway.

24 THE WITNESS: Thank you.

1 CMSR. HONIGBERG: We need to
2 give everyone a break. Let's say 10 minutes.
3 Come back shortly before 4:00, and we'll get
4 done what we can with -- I've forgotten who
5 we said we were going to come up with.

6 MS. AMIDON: Large.

7 CMSR. HONIGBERG: Large.
8 That's right. So we'll start with that.

9 (Whereupon a recess was taken at 3:47
10 p.m., and the hearing resumed at 4:03
11 p.m.)

12 MR. PATCH: Mr. Chairman, we
13 had indicated in response to the data request
14 objections that Mr. Glahn was asking of Mr.
15 Hachey that we wanted to fill the record with
16 the ultimate responses, in the case that
17 there were such. That's what I have here,
18 and I guess I'd like to ask that they be
19 marked as an exhibit.

20 MR. GLAHN: Could he just
21 identify what the numbers of the responses
22 are?

23 CMSR. HONIGBERG: Yes, I think
24 he probably can.

1 MR. PATCH: It's 34, 37, 52,
2 57, 66, 67, 68, 71, 74, 75, 97, 151. And we
3 also have a chart in which we listed all of
4 the questions that we had been handed on
5 Friday and then the response or objections,
6 in the case that there was a response, or
7 PSNH had elected not to pursue it. So we
8 have a chart that sort of describes that,
9 that might be useful.

10 CMSR. HONIGBERG: Okay.

11 MR. GLAHN: We haven't had a
12 chance to see the chart, so it's hard for us
13 to object to it.

14 CMSR. HONIGBERG: Why don't
15 you show it to Mr. Glahn.

16 MR. GLAHN: I mean, if I can
17 look at it overnight and let you know in the
18 morning whether --

19 CMSR. HONIGBERG: It's not
20 urgent. So, yes, why don't you hang on to
21 it, and we'll deal with it tomorrow morning.

22 MR. GLAHN: Okay.

23 CMSR. HONIGBERG: So we're
24 going to mark this as Exhibit 116.

1 (The document, as described, was herewith
2 marked as Exhibit 116 for
3 identification.)

4 MR. PATCH: Should we mark the
5 chart now, too, or wait on that?

6 CMSR. HONIGBERG: Wait until
7 tomorrow morning.

8 MR. GLAHN: I do have a motion
9 before we get started with these witnesses.

10 CMSR. HONIGBERG: Mr. Glahn.

11 MR. GLAHN: This is a point at
12 which I'd like to move for the adverse
13 inference again. I'll let the record stand
14 on the adverse inference request that we made
15 on Friday. You recall that we made one with
16 respect to gas forecasting. And the
17 Commission will also recall that after that
18 testimony, I referenced an ESAI forecast that
19 they had in their possession, had not
20 produced until April, and which was
21 inconsistent with Mr. Hachey's testimony and
22 consistent with PSNH's. That was the ESAI
23 forecast for June of 2008 that showed a price
24 above the line.

1 We now have -- in his
2 testimony this afternoon, Mr. Hachey said
3 that TransCanada has a forecasting department
4 and that they prepare corporate forecasts.
5 We've -- that alone, I think, is sufficient
6 to draw the inference, because the -- what we
7 know is this: We put in a lot of documents
8 now that show TransCanada projecting gas
9 prices to increase, that shows very
10 inconsistent positions with respect to Mr.
11 Hachey's testimony about when people knew or
12 didn't know about fracking. All of the
13 statements of Mr. Hachey's testimony is that
14 people would have known as of 2006 and 2007.
15 There was clear documentation. In fact, of
16 course, TransCanada made a series of
17 statements about that, that are inconsistent
18 with that point as we've shown. We've also
19 shown that TransCanada's CEO was projecting
20 gas prices to be between 6 and 10 as late as
21 2009, 2010. So, not only have we tied it to
22 the inference because they haven't produced
23 documents -- remember, this is a witness who
24 said the answer in No. 34 -- I'm sure

1 Mr. Patch will point out that it was
2 subsequently answered, but they didn't
3 withdraw the objection -- that Mr. Hachey has
4 no information about fuel price forecast
5 relating to coal, oil or natural gas produced
6 or available to TransCanada from 2005 to
7 2012. Now he says he does know that
8 corporate forecasts were prepared. To go
9 back to the colloquy we had a moment ago
10 with -- on questions asked by Commissioner
11 Iacopino, if TransCanada had produced
12 documents in a timely manner, produced them
13 at all, or, for that matter, even looked at
14 them, we wouldn't have this dispute about
15 whether these are NYMEX futures prices or
16 NYMEX prices or any other forecasts. We
17 would know because we would have had a chance
18 to ask about it.

19 So, we were instructed that --
20 or the Commission ordered that it may infer
21 as appropriate during the balance of the
22 document, that documents and information that
23 the TransCanada intervenors refused to
24 produce, as required by Order 25,663, would

1 have been adverse to TransCanada's positions
2 relative to those topics -- "those topics"
3 being gas price forecasting and fracking.

4 Not only do we have evidence
5 that there are indeed documents that are
6 contrary to their position, but we now know
7 that they made no effort whatsoever to
8 produce information that was readily
9 available. Mr. Hachey testified on Friday
10 that he made no effort. He didn't call
11 anybody. He didn't look for any documents at
12 TransCanada because, in his view, they were
13 irrelevant. He didn't bother to call up the
14 forecasting department to determine that. So
15 I think this is a point in which the adverse
16 inference should be drawn.

17 (Commissioners conferring.)

18 CMSR. HONIGBERG: And we will
19 consider whether and how to apply the adverse
20 inference during the course of our
21 deliberations. We appreciate the position
22 you've taken.

23 MR. GLAHN: Thank you.

24 CMSR. HONIGBERG: So, are we

1 ready for the next witnesses? They seem to
2 be up there. So, Mr. Needleman, you'll be
3 doing the honors on this one?

4 MR. NEEDLEMAN: I will.

5 (WHEREUPON, TERRANCE J. LARGE AND JAMES
6 J. VANCHO were duly sworn and cautioned
7 by the Court Reporter.)

8 TERRANCE J. LARGE, SWORN

9 JAMES J. VANCHO, SWORN

10 EXAMINATION

11 BY MR. NEEDLEMAN:

12 Q. Mr. Large, why don't we start with you.

13 Could you state your full name, please.

14 A. (Mr. Large) Certainly. My name is

15 Terrance J. large.

16 Q. And your employer is?

17 A. (Mr. Large) Public Service Company of New
18 Hampshire.

19 Q. And what is your position there today?

20 A. (Mr. Large) I'm currently Director of
21 Generation.

22 Q. And has that position changed since the time
23 you filed your prefiled testimony?

24 A. (Mr. Large) Yes, it has.

1 Q. What was your position at the time?

2 A. (Mr. Large) Let me be sure.

3 (Witness reviews document.)

4 A. (Mr. Large) No, it has not changed since the
5 time of the prefiled testimony.

6 Q. And could you provide a very brief overview
7 of your educational background and
8 professional experience?

9 A. (Mr. Large) Certainly. I have two degrees in
10 engineering: One from Dartmouth College and
11 one Union College. I have 31 years'
12 experience in the electric industry, 20-plus
13 of which are in the generation-focused area.

14 Q. And you have in front of you Exhibit 23
15 that's been premarked here?

16 A. (Mr. Large) I do.

17 Q. And is that a copy of the prefiled testimony
18 filed in this proceeding?

19 A. (Mr. Large) Yes, it is.

20 Q. And you have also accompanying that Exhibits
21 23-1 through 23-15?

22 A. (Mr. Large) I do.

23 Q. And those are the exhibits that were attached
24 to your prefiled testimony?

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

2 Q. Before I ask you to swear it out, let me turn
3 to you, Mr. Vancho.

4 Mr. Vancho, could you state your name,
5 please.

6 A. (Mr. Vancho) James J. Vancho.

7 Q. And your employer, please?

8 A. (Mr. Vancho) Northeast Utilities.

9 Q. And just a very brief overview of your
10 educational experience and background?

11 A. (Mr. Vancho) Sure. I have a bachelor's
12 degree in business management and a master's
13 in business administration, with a
14 concentration of finance. I've been with NU
15 for 13 years now, basically involved in
16 project analysis and capital market reviews
17 and corporate planning and areas such as
18 that.

19 Q. What's your current title?

20 A. (Mr. Vancho) Manager, Financial Analysis.

21 Q. And you also have in front of you Exhibit 23?

22 A. (Mr. Vancho) Yes, I do.

23 Q. Together with Exhibits 23-1 through 23-15?

24 A. (Mr. Vancho) Yes.

1 Q. Let me ask either of you at this point if
2 there are any corrections to that prefiled
3 testimony.

4 A. (Mr. Large) Yes. I have two, and they're
5 related to one another. If we could please
6 turn to Page 6. There's a transposition with
7 respect to the exhibit numbers for the last
8 two exhibits. So, on Line 6, the number "14"
9 should be "15"; and on Line 13, the number
10 "15" should be "14." I apologize.

11 Q. Any other corrections besides those?

12 A. (Mr. Large) None.

13 Q. Then let me ask you both. With those
14 corrections in mind, do you adopt this
15 prefiled testimony and swear to it?

16 A. (Mr. Large) Yes, I do.

17 A. (Mr. Vancho) Yes.

18 Q. And Mr. Large, could you please provide a
19 brief summary of the testimony.

20 A. (Mr. Large) Thank you, I will.

21 Our testimony here today focuses
22 primarily on the economic analyses we
23 conducted for PSNH in connection with the
24 Scrubber Project. These analyses were

1 prepared for use by the Northeast Utilities
2 Risk and Capital Committee and the Northeast
3 Utilities Board of Trustees to review the
4 investment requirements associated with the
5 Project for budgeting purposes and to get an
6 understanding of major drivers of project
7 development and execution risks.

8 As the Commission stated in Order 24,979
9 in Docket DE 09-033, "Installation of
10 scrubber technology at Merrimack Station is a
11 legislative mandate," and as such, it "does
12 not reflect a utility management choice among
13 the range of options." Therefore, the
14 economic analyses we performed were for
15 informational purposes and did not form the
16 basis for determining whether the Project
17 should go forward or not. The analyses we
18 conducted are attached to our testimony, as
19 referred by Mr. Needleman.

20 The base case analysis show present
21 value of economic benefits to customers of
22 \$132 million. We also conducted sensitivity
23 assessments in the model to show senior
24 management and the board if changes in key

1 drivers could lead to upside or downside
2 changes from the base case. One aspect of
3 the model involved natural gas prices. We
4 used prices built on our own actual
5 experience in natural gas delivered for use
6 at PSNH generating facilities here in New
7 Hampshire in early 2008. Those prices were
8 consistent with NYMEX futures prices in their
9 development, and they were available with
10 those NYMEX prices in the summer of 2008.
11 They were also consistent with gas price data
12 that was available before the Commission
13 later that year and data as discussed by the
14 Energy Information Administration at that
15 time. We believe the gas price we used was
16 well within the range of reasonableness for
17 gas prices at that juncture.

18 Further analysis was performed during
19 late August 2008 in response to the
20 Commission's Secretarial letter of
21 August 22nd, 2008, seeking specific
22 information from the Company. No further
23 updates were done after this time.

24 Following our September filing to the

1 August 22nd request, the Legislature
2 considered two bills during the 2009 session:
3 Senate Bill 152 and House Bill 496. PSNH
4 monitored those bills carefully. And on
5 March 19th, the House Science, Technology and
6 Energy Committee issued its report, which
7 stated, in part, that it did not want, "a
8 pause in or cancellation of the project."
9 The Senate did not pass Senate Bill 152.
10 Based on the results of these legislative
11 actions or inactions, and the Project status,
12 no further assessments were necessary, in our
13 view.

14 Finally, Mr. Vancho and I were involved
15 in the development of presentations and
16 discussion packets that were presented to the
17 Risk and Capital Committee and the board of
18 trustees and to the Public Utilities
19 Commission Staff and OCA. We are, therefore,
20 prepared to speak to those issues as well.
21 Thank you.

22 Q. Thank you, Mr. Large.

23 MR. NEEDLEMAN: Mr. Chairman,
24 they're available for cross-examination.

1 CMSR. HONIGBERG: Who's going
2 to be asking questions first?

3 MR. SHEEHAN: I think we are
4 first.

5 CMSR. HONIGBERG: Mr. Sheehan.

6 CROSS-EXAMINATION

7 BY MR. SHEEHAN:

8 Q. Good afternoon, gentlemen.

9 A. (Mr. Large) Good afternoon.

10 A. (Mr. Vancho) Good afternoon.

11 Q. I have a few big-picture topics to run
12 through with you, and then I will turn it
13 over to the others.

14 First, you alluded to it -- and either
15 of you answer as appropriate -- you alluded
16 to it in your opening, that throughout this
17 case, PSNH has taken the position that
18 building the Scrubber was a legislative
19 mandate, that you had to do it; yet, the
20 documents from the summer of 2008, the
21 presentations to the committees and to Staff,
22 contain a lot of financial analysis. Why do
23 a financial analysis if at the end of the day
24 you had to build it?

1 A. (Mr. Large) Well, in the case of the RaCC and
2 board presentations, those were required by
3 corporate requirements. In order to gain
4 authorization for spending in excess of
5 \$10 million, corporate requirements were that
6 we need to present before the Risk and
7 Capital Committee. And there was a
8 standardized format that was necessary to
9 complete, and that included an economic
10 analysis. So we performed that. Any project
11 in excess of \$50 million was required to go
12 to the board of trustees, and a similar type
13 of analysis was expected as part of the
14 overall authorization process. So those were
15 done in that regard.

16 A. (Mr. Vancho) I agree.

17 A. (Mr. Large) Sorry.

18 Q. If you could turn to your testimony,
19 Attachment 12, Bates Page 588 is the
20 beginning of Attachment 12.

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

22 Q. That's a data response. And what I'd like
23 you to do is turn further, to pages beginning
24 591. And these are a series of charts

1 showing fuel prices.

2 A. (Mr. Large) Yes.

3 Q. And as I understand it, these are from EVA;
4 is that correct?

5 A. (Mr. Large) Page 591 is the commencement of
6 EVA information that I believe was from the
7 spring of 2008.

8 Q. Now, if you turn further to Page 601, it's
9 the last page of what looks like the EVA-type
10 charts.

11 A. (Mr. Large) Yes.

12 Q. This one is listed "Boston City Gate Natural
13 Gas Price." Other charts have prices for
14 natural gas in different places, and for
15 propane and for oil, et cetera.

16 If we were to look for the most
17 appropriate natural gas price for New
18 Hampshire, would this be the best one to look
19 at -- that being the Boston City Gate Natural
20 Gas Price?

21 A. (Mr. Large) If one were selecting EVA
22 forecasts as the basis for judging rightness,
23 or the right number, of those that are
24 presented here, the Boston City Gate would be

1 the right choice.

2 Q. That's a fair characterization? Of the EVA
3 forecasts, the one most applicable to natural
4 gas in Bow is the Boston City Gate one? Did
5 I say that right?

6 A. (Mr. Large) In New England, yes. Right.

7 Q. Okay. Over the weekend, your attorney
8 provided more of these EVA charts. And in
9 scanning through them, I noted some of them
10 were listed "low case," some "high case,"
11 some "base case." And I can't tell from Page
12 601 which this is. Can you tell me which
13 this is?

14 A. (Mr. Large) Yes, I can. This is a base case
15 forecast.

16 Q. Okay. And is that true of all of the
17 forecasts contained in the pages preceding
18 601 from EVA?

19 A. (Mr. Large) I believe that to be true,
20 subject to check.

21 Q. Okay.

22 A. (Mr. Large) And for completeness, this is the
23 February 2008 EVA forecast.

24 Q. In one of the binders up there you will see

1 Mr. Long's deposition. I'm going to refer to
2 a couple of documents in that, if you can
3 find that.

4 A. (Mr. Large) Okay. Is it okay if I work from
5 my own version --

6 Q. Sure.

7 A. (Mr. Large) -- or is it referenced
8 differently, so that --

9 (Court Reporter interrupts.)

10 A. (Mr. Large) I brought a copy of Mr. Long's
11 deposition. I don't know if you'll be
12 referring to things that might be noted
13 specifically in that one that would make it
14 easier for us to get to the information
15 quickly.

16 Q. I'm looking at a couple attachments to his
17 deposition.

18 A. (Mr. Large) We'll need it, then.

19 Q. The first is No. 9.

20 A. (Mr. Large) So, to ensure I have the right
21 document, is that Exhibit 17?

22 Q. Should be 27.

23 CMSR. HONIGBERG: Let's go off
24 the record.

1 (Discussion off the record)

2 CMSR. HONIGBERG: All right.

3 Let's go back on the record.

4 BY MR. SHEEHAN:

5 Q. So I asked you to look at Attachment 9, which
6 is the report Public Service provided to the
7 Commission in the fall of 2008. Do you
8 recognize that document?

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

10 Q. And if you could turn to Page 14.

11 MR. SHEEHAN: Bates 494, for
12 those following at home.

13 A. (Mr. Large) I have Page 14.

14 Q. And in the middle of the page there are a
15 series of assumptions that the Company says
16 it made in doing its analysis of the Scrubber
17 Project, which includes what we can all see
18 in front of us. What is not in that list is
19 any assumptions on the price of natural gas.
20 Would you agree with that?

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

22 Q. Can you tell me why there is no assumption
23 for natural gas prices in this report?

24 A. (Mr. Large) Certainly. Because the analysis

1 that's being referred to here is a revenue
2 requirement analysis associated with the
3 operation of Merrimack Station, and Merrimack
4 Station does not utilize natural gas.

5 Q. Okay. Fair enough. And Paragraph D
6 underneath the chart?

7 A. (Mr. Large) Yes.

8 Q. It says that sensitivity analyses were
9 conducted to test some of the variables on
10 the overall bus bar cost. Is the bus bar
11 cost -- tell me what the definition of "bus
12 bar cost" is?

13 A. (Mr. Large) "Bus bar cost" is the total
14 annual or monthly cost of operation of the
15 unit divided by the kilowatt hours that it
16 produced.

17 Q. And so the last sentence of Paragraph D that
18 says, "These sensitivity analyses indicated
19 the economics of the Project..." -- and I'm
20 underlining "economics of the Project" --
21 those aren't the economics of the Project to
22 build it; those are the economics of running
23 the Scrubber. Is that fair, or do I have
24 that wrong?

1 (Witness reviews document.)

2 A. (Mr. Large) I think the choice of the word
3 "project" is to be inclusive of operating
4 Merrimack Station with the Scrubber in
5 service.

6 Q. Okay. Because it's clear the focus of my
7 question is, that in other places the price
8 of natural gas is important when you're
9 looking at the overall cost of the Scrubber.
10 Here, it's not mentioned. And I think the
11 distinction you're drawing is this is simply
12 looking at a different cost running the
13 Project rather than building the Scrubber.
14 Did I say that accurately?

15 A. (Mr. Large) Where I would differ is that the
16 cost of comparisons between operating
17 Merrimack Station and alternatives like a
18 natural gas-fired power plant operating,
19 replacing the output for Merrimack Station;
20 or in our analysis, the assumption associated
21 with market purchases would be contingent
22 upon natural gas pricing. But the operation
23 of Merrimack Station in and of itself is not.

24 Q. Wouldn't the bus bar cost include the --

1 well, never mind.

2 So, did you do that comparison that
3 would involve a natural gas analysis?

4 A. (Mr. Large) Yes.

5 Q. And in what context did you do that?

6 A. (Mr. Large) Subsequent analyses that are
7 presented in this report.

8 Q. Okay. And what did you assume for natural
9 gas prices there? Or did you?

10 A. (Mr. Large) We did. The assumption that we
11 utilized was that natural gas would be at \$11
12 per million Btus beginning in the year 2012
13 and then escalated at a rate of 2.5 percent
14 going forward.

15 Q. And as I understand it, that's the price in
16 the forecast that PSNH used throughout the
17 Scrubber Project?

18 A. (Mr. Large) We utilized the \$11 per million
19 Btus in 2012, with 2-1/2 percent inflation
20 consistently through all our analyses, yes.

21 Q. Next topic, sulfur dioxide.

22 A. (Mr. Large) Are we finished with --

23 Q. Yes. Part of the information provided in the
24 original passage of the Scrubber was related

1 to sulfur dioxide credits. Are you aware of
2 that?

3 A. (Mr. Large) Yes, I am.

4 Q. And PSNH and others made certain statements
5 about how much money could be generated from
6 the sale of those credits in the context of
7 pricing the Project; correct?

8 A. (Mr. Large) Yes. And that, with the
9 installation of scrubber technology,
10 Merrimack Station's emissions of sulfur
11 dioxides would be dramatically reduced;
12 therefore, there would be savings, either not
13 having to purchase allowances or the ability
14 to sell allowances that we had in our
15 possession.

16 Q. And the projections -- well, what assumptions
17 was PSNH making at the time the Scrubber Law
18 was passed in '06 about the price of those
19 SO2 credits? And proximations are fine.

20 A. (Mr. Large) At the time the Scrubber
21 collaborative was working to come up with the
22 proposal, it's my recollection that we
23 offered cases of a little over \$1,000 and
24 then plus \$500 or minus \$500. But I could

1 validate that if you wanted to give me a
2 moment to look.

3 Q. That's fine for at least my purposes.

4 And this is in the '06 time frame?

5 A. (Mr. Large) '05, '06. Pardon me.

6 Q. Did PSNH continue to monitor the SO2 prices
7 as we went into what's more relevant in this
8 docket, the '07, '08, '09 period?

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

10 Q. And what did you see happen to the SO2 prices
11 from the passage of the bill in '06 until,
12 say, the first of '08? And again,
13 approximations are fine.

14 A. (Mr. Large) I hope it will be okay if I give
15 directional.

16 Q. Sure.

17 A. (Mr. Large) From the time that we produced
18 charts that showed what economic benefit
19 could be realized from the sale of SO2
20 allowances to offset the cost of the
21 Scrubber, SO2 allowances actually increased
22 in cost for a period of time, and then they
23 subsequently fell. By the time we were
24 conducting the analysis, the SO2 allowance

1 prices were in the several-hundred-dollar
2 range, and I believe we used \$500 as the
3 starting point in our analysis.

4 Q. And that is spring of 2008, roughly?

5 A. (Mr. Large) Spring/summer 2008.

6 Q. Because those were the analyses you were
7 presenting to Staff and others, your
8 committees, which I think were June and July
9 of 2008?

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

11 Q. And at that time, you say you recall your
12 assumption being around \$500?

13 A. (Mr. Vancho) That's right. About \$500.

14 Q. And I think that actually appears in some of
15 the PowerPoints we've all seen.

16 A. (Mr. Vancho) That's right.

17 Q. Do you know what happened -- did you monitor
18 the SO2 price from the summer of '08 forward?

19 A. (Mr. Large) We "continually" -- maybe too
20 strong a word -- but "regularly" monitored
21 SO2 prices as part of our compliance
22 obligations. We need to know that we have
23 enough on hand and what it is we need to pay
24 in order to obtain them if needed.

1 Q. And what's happened to the price since the
2 summer of 2008?

3 A. (Mr. Large) It's dropped even substantially
4 further to very small dollars.

5 Q. Meaning what?

6 A. (Mr. Large) Less than 10.

7 Q. How long has it been, let's say, under \$100,
8 roughly?

9 A. (Mr. Large) Roughly two or three years.
10 Might be longer than that.

11 Q. You said your assumptions, roughly in the
12 summer of 2008, that your assumption was
13 \$500. Do you know when the price went under
14 \$500?

15 A. (Mr. Large) Not as I sit here right now, but
16 I could research that.

17 Q. Okay. There's a reference in the statute to
18 "economic incentives" that are available to
19 the Company. Are those incentives largely
20 the SO2 credits, to your understanding?

21 A. (Mr. Large) At the time of the passage of the
22 bill, that would have been the largest dollar
23 volume incentive, yes.

24 Q. And is it fair to say, if the SO2 price, when

1 it falls as it has to under \$100, those
2 incentives have largely evaporated as well?

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

4 Q. Has PSNH obtained any incentives under the
5 statute?

6 A. (Mr. Large) Yes.

7 Q. On the order of magnitude of what? And I
8 understand I'm getting -- hitting you with
9 this from left field. So your
10 approximations, or at least an idea --

11 A. (Mr. Large) As a result of all the
12 incentives, quote, unquote, if you will, with
13 regard to bonus CO2 allowances, SO2
14 allowances, you know, there are tens of
15 millions of bonus CO2 allowances that have
16 been attributable to the Company. So --

17 Q. Any SO2?

18 A. (Mr. Large) Yes.

19 Q. Okay. And how has that -- or has that
20 affected, if you will, the customer -- the
21 ratepayer's cost of the Scrubber? Is it --

22 A. (Mr. Large) Well, it's reduced it, but
23 miniscule amounts.

24 Q. Can you translate that into, you know,

1 kilowatt-hour savings or dollar savings?

2 A. (Mr. Large) It would be in a decimal place
3 far to the right of something that would
4 appear in a bus bar cost number. I hope that
5 math language makes sense to...

6 Q. I'm looking at an article that has not been
7 introduced yet, and it says that the SO2
8 price was about \$55 in March of '09. Is that
9 consistent with your recollection of how far
10 the price had gone by then?

11 A. (Mr. Large) I could research that. I don't
12 have that recollection.

13 MR. SHEEHAN: Okay. When we
14 close for the day, I will introduce a
15 document that shows the chart, and we can
16 pick up with that to close this loop on the
17 prices and what's happened to them.

18 I'd like to turn to, unless
19 you want to stop, a new topic. I've got 20
20 minutes or so. So I'm not sure if we can
21 finish today.

22 CMSR. HONIGBERG: Yeah, why
23 don't we break now and you can pick it up
24 tomorrow morning.

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MR. SHEEHAN: Okay.

CMSR. HONIGBERG: So we'll
close the hearing and pick up again tomorrow
morning at 9:00. I know you'll all probably
be here earlier than that. So, we're done.

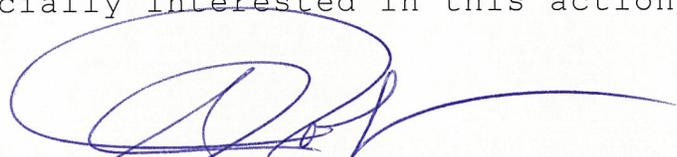
(Whereupon the hearing was adjourned at
4:36 p.m. and will resume on Wednesday,
October 22, 2014, at 9:00 a.m.)

[WITNESS PANEL: LARGE|VANCHO]

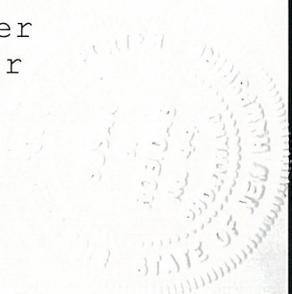
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24**C E R T I F I C A T E**

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

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



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



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