

## STATE OF NEW HAMPSHIRE

## PUBLIC UTILITIES COMMISSION

October 17, 2014 - 9:06 a.m.  
Concord, New Hampshire

DAY 4

Morning Session only

NHPUC NOV03'14 PM 4:13

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

**PRESENT:** Commissioner Martin P. Honigberg, Presiding  
Special Commissioner Michael J. Iacopino  
  
F. Anne Ross, Esq., General Counsel  
  
Sandy Deno, Clerk

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

1 CMSR. HONIGBERG: So, what's up?

2 MS. AMIDON: We're going to begin with  
3 Mr. Patch.  
4

5 CMSR. HONIGBERG: Mr. Patch.

6 MR. PATCH: Good morning, Commissioners.  
7 I have a matter that I'd like to bring to the Commission's  
8 attention based on information that came to light and was  
9 entered into the docket during yesterday's hearing. PSNH  
10 introduced Exhibit 73, the 2007 LCIRP document. We had  
11 not reviewed it previously. If you look at Page 160 in  
12 that document, I'll read you the sentence from it -- or,  
13 actually two sentences. It says "For this and other  
14 reasons, PSNH no longer maintains a detailed production  
15 cost simulation model. Instead, PSNH contracts with a  
16 consultant (Energy Ventures Associates, or EVA) to provide  
17 a quarterly long-term forecast of commodity market prices  
18 which PSNH converts into forecasted energy prices." There  
19 are other references to the EVA forecasts later in that  
20 document, I think up through Page 164. And, there may be  
21 others. I haven't read it all word-for-word.

22 But, as the Commission knows, we've been  
23 seeking forecasting information from PSNH for a long time  
24 in this docket. We originally sought it in 2012; PSNH

1 objected. In Order 25,445, the December 24, 2012 order,  
2 PSNH was ordered to produce it. One of the pages that  
3 they produced at that time had a cryptic footnote that  
4 referred to EVA. And, I'm going to ask Ms. Goldwasser to  
5 pass out the response to that data request. It was TC  
6 03-006. And, as you'll see when you look at that  
7 document, there is a reference to "EVA". It's nothing  
8 more than that, but just in the footnote there, and says  
9 that the information provided was based on an EVA  
10 forecast.

11 We tried to follow up on that. We  
12 asked, for example, Mr. Long during his deposition; we got  
13 nothing more. And, then, as a result of the rebuttal  
14 testimony filed, we propounded a data request, TC-038, and  
15 the response has been included as Exhibit 33. I think  
16 it's actually mismarked on the Exhibit List. I think it  
17 says 30 -- I think the exhibit says that it's a different  
18 response, but it's the response to 38, TC-038.

19 MS. AMIDON: And, that's just a typo.  
20 It's not the official service list. It's the service list  
21 for us here today.

22 MR. PATCH: But, if you look at that  
23 response, there's no reference to EVA in there. It says  
24 "The company has subscribed to industry consultants over

1 the period requested; however as part of a record  
2 retention process does not have files prior to 2007."  
3 And, then, they go on to reference "J.D. Energy", "CERA",  
4 and they provided a disk in connection with that. We  
5 looked very carefully through all the documents that were  
6 provided and included on that disk. There's nothing from  
7 EVA. Most of what they provided there are coal forecasts.

8 On Monday, Ms. Goldwasser did an  
9 internet search, which you've already heard about. What  
10 she found has been marked as "Exhibit 37", it's a 2008  
11 document from Yankee Gas, a PSNH affiliate. And, as she  
12 said in the record on that day, Tuesday, I believe,  
13 there's a similar document from Yankee Gas filed in  
14 Connecticut in 2010. Both of those refer to "EVA". And,  
15 then, yesterday, when we reviewed this LCIRP document that  
16 was submitted as an exhibit by PSNH, there was another  
17 clear reference to "EVA", and PSNH contracting with them,  
18 not just Yankee Gas, but PSNH, and "to provide quarterly  
19 long-term forecasts". We haven't seen any of those.  
20 We've asked for them. We haven't seen them.

21 We consider this to be a serious issue.  
22 PSNH, under Rule 203.09, has a continuing obligation to  
23 update data requests. And, it certainly appears that they  
24 have failed to do so. We understand the Commission's

1       desire to proceed with this hearing and to get it done as  
2       soon as possible, and we share that. What we would  
3       recommend is that they be directed to identify and  
4       describe each step that they took in responding to the  
5       data requests; that they produce all EVA forecasts; that  
6       they identify how often PSNH and its affiliates received  
7       forecasts from EVA between 2005 and 2011; that they  
8       produce any and all contracts any affiliate had with EVA;  
9       that they produce all other forecasts any affiliate had;  
10      and that they provide documentation of what their document  
11      retention policy is.

12                                It would be our preference that the  
13      Commission suspend the proceeding at this point until we  
14      get that information. But, understanding the desire to  
15      proceed, we would offer as an alternative that the  
16      Commission continue with the witnesses as scheduled. And,  
17      if Mr. Hachey does testify before we get that information,  
18      that we be given the opportunity to call him back as a  
19      witness, in the event that we get some information that we  
20      think has not been provided to us, should have been, and  
21      that he should be allowed to testify to. And, we also ask  
22      that we have all of the information available before we  
23      are required to do any further cross-examination of any  
24      PSNH witnesses, and that we be given leeway to recall

1 Mr. Smagula for this limited purpose, in the event that  
2 there's something in that information that we think is  
3 important to ask him about.

4 We regret having to do this at this  
5 stage of the proceeding. But, based on the information  
6 we've received, we believe we had no choice. Thank you.

7 CMSR. HONIGBERG: Mr. Bersak, Mr. Glahn?

8 MR. GLAHN: Yes.

9 CMSR. HONIGBERG: Mr. Glahn.

10 MR. GLAHN: I'll respond. I understand  
11 TransCanada's desire -- I understand TransCanada's desire  
12 to turn their own improper behavior around. I'm actually  
13 surprised they can get the words out of their mouth,  
14 having done no research --

15 CMSR. HONIGBERG: Mr. Glahn, let's --

16 MR. GLAHN: All right. Let me address  
17 the --

18 CMSR. HONIGBERG: Why don't you respond  
19 to what they said, rather than --

20 MR. GLAHN: -- let me address the issue.  
21 Okay.

22 CMSR. HONIGBERG: -- rather than the  
23 other things that you would like to say, okay?

24 MR. GLAHN: It's a very simple

1 proposition. We've looked for those documents three  
2 different times. We heard testimony yesterday that the  
3 critical time period in this case is 2008 to 2009. By  
4 2010, the die had been cast. So, the most relevant  
5 documents in the EVA forecast, and I'll get in a moment  
6 whether -- to what was done to obtain them, is 2008.

7 Mr. Hachey had the EVA forecast for  
8 2008. It's attached as Exhibit 8 to his -- Attachment 8  
9 to his testimony. He had it in December of last year. If  
10 they had a concern about this in December, they could have  
11 made all the same arguments then that they're making now.  
12 Mr. Hachey actually did not even consider the EVA forecast  
13 in his analysis of the other forecasts that were available  
14 to PSNH at the time, because he considered it irrelevant.  
15 So, to me, it's a tempest in a teapot.

16 But let's go to what actually happened  
17 here. There have been three different occasions in which  
18 PSNH has sought to obtain the EVA documents. Now, first  
19 of all, there's no evidence in this case that the EVA  
20 documents still exist at PSNH. And, there's no way to  
21 look for them electronically. So, there's no way that we  
22 could do a word search that would pull these up in an  
23 electronic format, which normally, that's my  
24 understanding, if I'm wrong, Mr. Bersak will correct me.

1 Mr. Bersak has gone to three different people, including  
2 the people in charge of Gas Supply, Power Market, and Fuel  
3 Procurement in the Company seeking documents; they have  
4 not been found. We had a conversation this morning, after  
5 Mr. Patch raised the issue, with Chuck Goodwin. He --  
6 Bob, what's his position?

7 MR. BERSAK: Director -- Eric, help me?

8 MR. CHUNG: Director of Rates.

9 MR. BERSAK: Director of Rates.

10 MR. GLAHN: And, they're going to do  
11 another search. If we find these documents, we will  
12 produce them immediately.

13 There is absolutely no evidence, none  
14 presented by Mr. Patch, that our conduct here was  
15 intentional. But what they want is all the assumptions  
16 that come from alleged intentional conduct. As you know,  
17 your Honor, there's lots of times in litigation where you  
18 do a diligent search and you don't find something, and you  
19 get into a dispute over a document.

20 If we find them, and if they are  
21 arguably relevant, we have no problem with calling Mr. --  
22 having them call Mr. Hachey back to address those specific  
23 documents, assuming they are relevant to his testimony.  
24 But the idea that somehow they have been able to identify

1 a document, we should be required to produce all of our  
2 contracts, all of their forecasts, we're continuing, in  
3 light of your Honor's comments the other day, to go back  
4 and look on another diligent search to see what we can  
5 find.

6 But there's no reason to suspend this  
7 docket. There's no reason for all of the proposals that  
8 Mr. Hatch has made -- or, Mr. Patch has made. And, as I  
9 said, this document is specific -- an EVA forecast is  
10 specifically referenced in Hachey's testimony. And, if  
11 there's a big to-do about this, it could have been made  
12 then.

13 CMSR. HONIGBERG: I have a couple of  
14 questions, before I go back to you, Mr. Patch. Does  
15 anybody know if the 2010 LCIRP filing contains a similar  
16 statement or representations? Did the Company stop its --  
17 their subscription?

18 MR. GLAHN: My understanding is that the  
19 subscription was stopped either in 2010 or 2011. I don't  
20 know also, by the way, it might be a relevant question to  
21 ask, whether TransCanada subscribes to EVA.

22 CMSR. HONIGBERG: Well, it may be. But,  
23 remember, as I understand Mr. Hachey's testimony, it's  
24 that looking at the things that PSNH had in its

1 possession, PSNH's decisions didn't make sense. I think  
2 that, if he thought that PSNH had them, and at the time  
3 that he was preparing his testimony, I would say, based on  
4 my general reading of what's been going on, he would say  
5 "I don't think PSNH had that stuff, so, I'm not going to  
6 consider it as part of my analysis." It would change his  
7 analysis if then went "oh, PSNH was subscribing to EVA, I  
8 should be considering those things." Mr. Patch, is that a  
9 fair -- is that a fair statement?

10 MR. PATCH: Well, I think it's important  
11 to look back, first of all, in response to what Mr. Glahn  
12 said, if you look at Attachment 16 to Mr. Hachey's  
13 testimony, and you look at the information provided, I  
14 don't think there's anything there that identifies itself  
15 as being from EVA.

16 CMSR. HONIGBERG: Right. I'm not -- I  
17 think that's right. And, I think you're agreeing with me,  
18 are you not?

19 MR. PATCH: I'm sorry.

20 CMSR. HONIGBERG: Mr. Hachey, the  
21 essence of his testimony is that "I looked at what PSNH  
22 looked at. And, my conclusion, looking at the same things  
23 that they were looking at, was that they made the wrong  
24 call." I mean, that's very general, I know. He said a

1 lot of other things. But --

2 MR. PATCH: Well, it's a little bit more  
3 than that, though. It's what they looked at or they  
4 should have that they had available to them.

5 CMSR. HONIGBERG: Right. And, he didn't  
6 think that they had that.

7 MR. PATCH: Because they did not produce  
8 it.

9 CMSR. HONIGBERG: Right. So, that's why  
10 I'm saying to Mr. Glahn "I'm not sure that that's a  
11 correct characterization of Mr. Hachey's testimony."

12 MR. PATCH: Yes.

13 CMSR. HONIGBERG: So, Mr. Patch and I  
14 agree, roughly, about what Mr. Hachey was saying. So, it  
15 at least seems to me that what I understand Mr. Hachey's  
16 testimony, and Mr. Patch generally agrees, is that, had  
17 they known, had he known that PSNH was subscribing to the  
18 EVA forecast in 2008 and 2009, and probably 2007, he would  
19 have looked at them.

20 So, it doesn't -- I don't think it gets  
21 you where you need to be, Mr. Glahn, to just say that  
22 "there's no indication that he looked at them, even though  
23 he had access to them." I think we all know that Mr.  
24 Hachey had access to a lot of other forecasts, and he

1 purports only to have considered the ones that PSNH had or  
2 should have had.

3 MR. GLAHN: I'm not sure I understand  
4 your point, your Honor. Which is, are you -- are you  
5 asking me whether Mr. Hachey actually had the EVA  
6 forecasts?

7 CMSR. HONIGBERG: No. I'm disagreeing  
8 with one part of what you said. Because you seem to be  
9 saying "you don't have to worry about this, because Mr.  
10 Hachey didn't look at -- didn't consider this stuff  
11 himself." So, I think the reason he wouldn't have or  
12 didn't is that he didn't think PSNH had it. So, if PSNH  
13 was subscribing to the EVA forecast throughout this  
14 process, and there was no reason for people to know that,  
15 although it was in a public filing, it doesn't get you all  
16 the way of where you need to be. But lots of the other  
17 things you said are very helpful to understand, and I  
18 appreciate that you're going back to ask the questions  
19 again that you say you've already asked, to make sure that  
20 you find what you've got.

21 MR. GLAHN: Let me correct an error that  
22 I made in what I said. Which is, I think I referred to  
23 "Exhibit 8", it's Exhibit 16. And, here's what Mr. Hachey  
24 says: "I am aware of four different forecasts available

1 to PSNH on September 2nd, 2008. These four forecasts were  
2 prepared by Energy Ventures Analysis, Inc.", and he refers  
3 to our answer to TC Data Request 01-002, which is the  
4 Energy Ventures forecast. Then, in that same analysis, in  
5 a point in his testimony, he says that he "didn't consider  
6 the Energy Ventures forecast". And, in his chart, which  
7 is Attachment 20, he again repeats, he has the Energy  
8 Ventures forecast charted on the chart of comparative  
9 forecasts, he just doesn't consider it.

10 So, I'm not -- look, I'm trying to make  
11 another point, which is this. If we have the forecasts,  
12 and we didn't produce them, there is nothing intentional  
13 about it.

14 CMSR. HONIGBERG: Uh-huh.

15 MR. GLAHN: And, we will produce them,  
16 if they still exist. But the argument that somehow  
17 TransCanada never knew about this, simply isn't borne out  
18 by the fact that he had an Energy Ventures Analysis that  
19 was produced to him by PSNH, that he looked at. And, had  
20 he wanted to come back and say at that point, "Well, fine.  
21 Give me the ones for 2007, 2009, 2010, because they are  
22 relevant to my testimony", and Mr. Patch may now say  
23 "well, there was a document request that asked for that  
24 very same thing after that date", I don't know that. But

1 there's also no evidence that (a) these documents existed  
2 and we somehow destroyed them or intentionally failed to  
3 produce them. And, there's no evidence that, had we  
4 produced them, they'd be relevant to Mr. Hachey's  
5 testimony.

6 CMSR. HONIGBERG: Mr. Patch.

7 MR. PATCH: Well, we haven't put this in  
8 the record yet, but maybe we should. The response that  
9 they gave to our Data Request 38, which included a disk,  
10 and I can show you, I only have one copy with me, but it's  
11 "Coal & Petcoke Monthly: Delivering the Future." And, it  
12 sort of gives you an example of what we would expect to  
13 see with regard to Energy Ventures Analysis. And, if you  
14 compare that to what Mr. Hachey was provided, that is  
15 marked as Attachment 16 to his testimony, you'll see that  
16 they provided undocumented evidence, has no reference to  
17 "Energy Ventures Analysis". And, so, that's why he didn't  
18 count EVA, because he wasn't provided anything of any  
19 substance about that.

20 And, we now find out yesterday, in  
21 between yesterday and Monday, that they, in fact,  
22 contracted with them quarterly. I mean, if, for some  
23 reason they don't have those documents, I think we need an  
24 explanation why. They say their retention policy, in

1 response to that data request, they didn't keep anything  
2 prior to 2007. Okay. Well, what about 2007 on? I mean,  
3 they never said that to us. They never said "we destroyed  
4 the documents", "we don't have them", "we can't find  
5 them", "we don't have any". They just didn't provide an  
6 answer.

7 MR. GLAHN: How could it --

8 MR. PATCH: I think that's a serious --  
9 I'm not saying it was intentional. I don't know if it was  
10 or wasn't intentional. But it clearly doesn't look very  
11 good. And, it clearly speaks to the fact that we didn't  
12 get the information that we asked for. We have been up  
13 front about what we provided and what we didn't provide.  
14 I'm not sure I can say the same about PSNH.

15 MR. GLAHN: If I may?

16 CMSR. HONIGBERG: Mr. Glahn.

17 MR. GLAHN: The notion that --

18 MR. PATCH: And, if you want this in the  
19 record, I'd be happy to provide it.

20 CMSR. HONIGBERG: Yes, Mr. Patch. We  
21 may want it and we may need it. I understand the offer.  
22 I appreciate that. Thank you. Mr. Glahn.

23 MR. GLAHN: First, let me give you a  
24 fact. Which is that the EVA forecasts are not referred to

1 in the 2010 Plan. It's a question you asked a moment ago.

2 CMSR. HONIGBERG: Thank you for that  
3 answer.

4 MR. GLAHN: The notion, and  
5 Mr. Needleman is going to add something to this, but I'd  
6 just like to say the notion that somehow they didn't think  
7 we had contracted with EVA, when we produced to them an  
8 EVA forecast, --

9 MR. PATCH: He didn't.

10 MR. GLAHN: -- which we only could have  
11 obtained from a contract, is to me just -- well, it simply  
12 is wrong.

13 CMSR. HONIGBERG: Mr. Needleman.

14 MR. NEEDLEMAN: Yes. In PSNH's response  
15 to QC -- Q-TC-01-002 Supplement 01, I'm told that we  
16 provided 2008 EVA forecasts. I have that information  
17 right here. We're happy to have them look at it, but it  
18 was provided to them. I'm also told that there were  
19 supplemental responses to fuel requests, in TC 6-038 and  
20 TC 6-039 that are potentially responsive to this  
21 information as well. And, I haven't completely sorted it  
22 out, but I'm also told that Mr. Hachey referred to these  
23 documents in his testimony.

24 CMSR. HONIGBERG: Ms. Goldwasser.

1 MS. GOLDWASSER: Mr. Chairman, can we  
2 just turn to that Bates Page 159 in Mr. Hachey's  
3 testimony, because I think that might assist you in  
4 understanding --

5 MR. GLAHN: What's the page and line  
6 number?

7 MS. GOLDWASSER: -- the fact that people  
8 are putting words around facts, and maybe it would be  
9 helpful if you just made your -- drew your own  
10 conclusions.

11 MR. GLAHN: What is the page and line  
12 number of the testimony?

13 MS. GOLDWASSER: There's no line. It's  
14 Attachment 16 to Mr. Hachey's testimony, Bates Page 159.  
15 I'll start here with you, because Mr. Needleman has  
16 referenced a number of sources.

17 I believe that this is the first data  
18 request that Mr. Needleman just referenced. It seeks  
19 "fuel price forecasts available to PSNH at the time of its  
20 initial decision to construct the flue gas scrubber at  
21 Merrimack Station." If you turn the page, Page 160  
22 provides "NYMEX Closing Prices".

23 Commissioner Iacopino, are you with us  
24 or would you like me to wait for a second?

1 SP. CMSR. IACOPINO: I'm with you.

2 MS. GOLDWASSER: Okay. Page 161 is an  
3 "ICAP" coal forecast. Page 162 is an unlabeled, undated  
4 "Petroleum Product Prices Forecast", that appears to have  
5 been developed at some point before 2008. My presumption  
6 is only based on the fact that there's a line between 2007  
7 and 2008. But I don't know when in 2007 that forecast  
8 might have been developed, or by whom. The same is true,  
9 although it's for different commodities, for the next  
10 several pages. If you look at Page 163, 164, 165, all the  
11 way through, and I'll give you a moment to look at it,  
12 Page 172. They're unlabeled, undated forecasts.

13 MR. GLAHN: If I may comment, your  
14 Honor?

15 MS. GOLDWASSER: I believe --

16 CMSR. HONIGBERG: Let's let Ms.  
17 Goldwasser finish with what she's got there.

18 MS. GOLDWASSER: I'm just trying to  
19 put -- to give you the pieces of paper that people are  
20 talking about here. I believe, and I'm sure you can ask  
21 Mr. Hachey this when he takes the stand, I believe that  
22 Mr. Hachey presumed that these were EVA forecasts,  
23 although he didn't know the date of them, because of the  
24 document that we just gave you a moment ago, and it is

1 Data Response 03-006, I believe. I don't have it right in  
2 front of me.

3 CMSR. HONIGBERG: Yes. I think it's  
4 03-006.

5 MS. GOLDWASSER: And, if you look on the  
6 back of it, the footnotes and the margin notes on the far  
7 right-hand side of the chart indicate that EVA was used.  
8 So, those two pieces of information put together, I  
9 believe, and this is just a proffer, and, obviously, I'm  
10 sure PSNH will ask Mr. Hachey this, if somebody else  
11 doesn't first, I believe why Mr. Hachey believes that he  
12 had some EVA forecasts when he wrote his testimony at the  
13 end of last year.

14 Then, after that happened, and after  
15 PSNH submitted its rebuttal testimony, TransCanada  
16 submitted additional data requests. And, those data  
17 requests are in the record at Exhibit 33 and 35. And,  
18 those are the ones that sought forecasting information  
19 from a much broader period of time and from the parents  
20 and affiliates, and this Commission compelled responses to  
21 those requests. And, the responses to those requests are  
22 coal forecasts. They don't include any natural gas  
23 forecasts.

24 So, I just wanted, and I know this took

1 a long time, but I think everyone is talking about what is  
2 in the record, and I thought it would be helpful for you  
3 to have that information. The IRP indicates that PSNH  
4 received quarterly gas forecast information from EVA.  
5 TransCanada had no way to know that, what PSNH had in its  
6 own documents. And, so, to say that we either (a) "had  
7 everything" or (b) "knew what we had", is a challenge from  
8 my perspective.

9 MR. GLAHN: Well, as your Honor knows,  
10 there's always a problem in litigation saying that someone  
11 has "everything", define what "everything" is. Let me  
12 just refer to Mr. Hachey's testimony. This is at Page 24  
13 of his testimony, Line 18: "Which forecast did you  
14 eliminate?"

15 "We eliminated the EVA forecast from  
16 consideration because we were only provided forecast  
17 values through 2018 and we lacked any narrative  
18 explanation for how to extrapolate it through 2027."

19 A, it assumes that there was a -- so, I  
20 mean that -- I won't get into that 2018 versus 2027. I'm  
21 told that -- so, there's no question -- and, it might be  
22 helpful, actually, in this if Mr. Hachey produces to us  
23 the EVA forecasts that he had in his possession, so we can  
24 see whether, in fact, somehow he's missing something that

1 we produced. But I am told we produced EVA forecasts in  
2 response to TransCanada's Request 01-02, the supplement,  
3 which was issued on June 4, 2012. Mr. Bersak, do you want  
4 to add to that?

5 MR. BERSAK: I guess, if the underlying  
6 question is "did we make a good faith effort to produce  
7 the information that was requested of us in discovery?"  
8 The answer is "yes".

9 CMSR. HONIGBERG: That's clearly one of  
10 the questions.

11 MR. BERSAK: That's clearly one of the  
12 questions. We have provided hundreds, perhaps thousands  
13 of pages of fuel price forecasts. This morning we heard  
14 that some of the documents were included on a CD because  
15 they were too voluminous to provide any other way. Is it  
16 possible that somewhere in some office in Northeast  
17 Utilities these were overlooked? Yes, of course, that's  
18 possible. But we made a good faith effort to find them.  
19 We will continue to make a good faith effort to find them.  
20 That's all I can -- that's all I can offer to you.

21 CMSR. HONIGBERG: And, I appreciate  
22 that. And, I think the question before us for at least a  
23 few more minutes, because we do want -- need to get Dr.  
24 Stanton on the stand, because I think this is the only day

1 she's here, is what do we do about it now? What needs to  
2 be done, if anything, now?

3 MR. GLAHN: Well, as I said, we're going  
4 to look for the documents. And, we'll look for them  
5 again. And, we'll look through the CD to see what else  
6 might be on there. And, Barry, if you had anything to  
7 add, please add it.

8 I have no problem with the notion that,  
9 if we find something, that they can reserve the right to  
10 call Mr. Hachey back to talk about those specific  
11 documents, assuming for the moment that what we found  
12 might be relevant to Mr. Hachey's testimony, and that's  
13 something that the Commission can decide.

14 CMSR. HONIGBERG: I think Mr. Patch also  
15 mentioned Mr. Smagula as someone he might need to talk to  
16 after seeing those.

17 MR. GLAHN: That's fine. I mean, it  
18 is -- look, we can't measure -- I don't know if there's  
19 been an offer of proof of why these EVA forecasts would be  
20 so critical for years outside 2008. The question they  
21 originally asked was "what were the forecasts that were  
22 available to PSNH when they made the decision to build the  
23 Scrubber?" If we're talking -- let's just take for  
24 example a 2010, 2011, even if they exist, EVA forecast.

1       What would be the relevance of that document to this  
2       proceeding?  It seems to me that the only -- I suppose  
3       there's an argument that a 2007 forecast would be  
4       relevant, and maybe a 2009 one, depending on whether  
5       they're radically different from the 2008 one.  But, you  
6       know, at the moment what we're dealing with is an  
7       assumption that documents exist that would be relevant to  
8       the testimony.

9                       CMSR. HONIGBERG:  It also strikes me,  
10       Mr. Glahn, in light of what you just said, is that we're  
11       really arguing about discovery, rather than the substance  
12       of what is in the documents that might be -- might be  
13       lying somewhere in a file.

14                      MR. GLAHN:  Understood.

15                      CMSR. HONIGBERG:  Mr. Patch, without  
16       getting into too much detail, --

17                      MR. PATCH:  Yes.

18                      CMSR. HONIGBERG:  -- because I think it  
19       may be more appropriate to pick this up later in the day  
20       or in some other way.  Let's assume for a minute that  
21       documents -- that these projections exist, they're  
22       located, and they're provided to you.  I think you may  
23       have some sense of what's likely to be in there.  Have you  
24       ever seen other EVA forecasts from this time period?

1 MR. PATCH: No, I haven't. And, I'm not  
2 sure whether Mr. Hachey has or not. But, obviously,  
3 there's the potential they could be adverse to PSNH.

4 CMSR. HONIGBERG: And, if they are,  
5 let's assume that they are for a moment, there are other  
6 forecasts that are adverse to PSNH's position. This would  
7 be more fuel for the argument that this -- that they  
8 shouldn't have gone forward because there were more  
9 forecasts that were adverse to their position, right?

10 MR. PATCH: And, in light of what was  
11 introduced yesterday, these weren't just affiliates. I  
12 mean, I guess they could have an argument "well, we didn't  
13 really look at them, because it was an affiliate."

14 CMSR. HONIGBERG: Let's assume they  
15 looked at them. Let's assume they looked at them.  
16 Because they looked at a lot of forecasts. I assume that  
17 the Company, in its due diligence, looked at a ton of  
18 forecasts as to what it was doing.

19 MR. PATCH: That's not what their  
20 response is to data requests, though.

21 CMSR. HONIGBERG: I understand that.  
22 But they have also had some back-and-forth about, you  
23 know, "whether, if the price had gone to a billion  
24 dollars, you know, did they ever even consider that?" I

1 mean, at some point, whether they "officially" did or not,  
2 around a conference room they did. So, it's like they had  
3 a forecast that may have been adverse. Did they consider  
4 them officially? Maybe not. Did someone look at them and  
5 say "do we need to think about this further?" Yes, they  
6 probably did. So, "consider" and "consider" may have two  
7 different meanings, depending on the context.

8 So, if they ignored -- let's say they  
9 ignored more forecasts officially. And, they ignored a  
10 bunch of forecasts that would have been adverse to them,  
11 for a variety of reasons, some of which are legal and some  
12 of which are practical. Does this do anything  
13 fundamentally different to your arguments or their  
14 arguments or is this just another straw building on the --  
15 put on the back of their camel?

16 MR. PATCH: Well, to me, it's cumulative  
17 evidence.

18 CMSR. HONIGBERG: Uh-huh.

19 MR. PATCH: You know, it's the more you  
20 see that, and the more that you know that they had it  
21 available to them and they ignored it for whatever reason,  
22 then, to me, it goes to prudence. It sounds like it's  
23 important --

24 CMSR. HONIGBERG: Can somebody --

1 MR. PATCH: -- in that respect.

2 CMSR. HONIGBERG: I'm sorry. Didn't  
3 mean to interrupt.

4 MR. PATCH: And, number two, you know,  
5 and I don't want to sound like I'm whining, but maybe I  
6 am, and that is that, you know, it's a fairness issue. I  
7 mean, my client has been sanctioned for not -- for being  
8 up front about it, but not providing certain information  
9 from non-party affiliates. And, if PSNH had this  
10 information and didn't provide it, they're the regulated  
11 utility, this case is about them. You know, I would think  
12 that there ought to be sanctions, there out to be a full  
13 disclosure of what happened. But, you know, I understand  
14 where we are, and I understand the desire to go forward.

15 SP. CMSR. IACOPINO: Mr. Patch, your  
16 client was sanctioned because you directly chose not to  
17 honor an order of the Commission. That's the reason why  
18 TransCanada was sanctioned.

19 MR. PATCH: I understand.

20 SP. CMSR. IACOPINO: Okay? That's a big  
21 different -- big difference than what we have here today,  
22 okay? Here, today, we don't know what the circumstances  
23 are yet.

24 MR. PATCH: We don't.

1                   SP. CMSR. IACOPINO: And, so, let's not  
2 jump the gun.

3                   MR. PATCH: Okay.

4                   SP. CMSR. IACOPINO: Okay?

5                   MR. PATCH: I appreciate that,  
6 Commissioner. But I think we need to know what happened.  
7 And, we don't know what happened, so maybe you need a  
8 witness to come in and say what was done.

9                   CMSR. HONIGBERG: We might. I'm not  
10 there yet. But I think counsel has represented there's  
11 going to be further inquiry, further questions, and  
12 they're going to figure it out for us, because it's  
13 important that they do.

14                   A new question about the EVA forecast.  
15 Understanding that they are a subscription service, you  
16 have to buy this. Are these forecasts still available  
17 through EVA, their prior forecasts? One would think so.

18                   MR. GLAHN: Let us -- let us take a  
19 look, your Honor, first, to see what we have. And, if we  
20 don't, we can ask EVA whether they are still available.  
21 My suggestion is the following: Let us continue to look  
22 today. If we find things, we will produce them by e-mail  
23 to Mr. Patch, either today, close of business, or as soon  
24 as we find them.

1 CMSR. HONIGBERG: Forthwith.

2 MR. GLAHN: We're not -- we're not --  
3 with all deliberate speed.

4 CMSR. HONIGBERG: Thank you.

5 MR. GLAHN: We're not having a hearing  
6 on Monday.

7 CMSR. HONIGBERG: Right.

8 MR. GLAHN: So, if Mr. Hachey gets them  
9 over the weekend, he'll have plenty time to look at them.  
10 If, at that point, they say "Well, this is such important  
11 stuff that we don't have the adequate time to look at it",  
12 then he can ask Mr. Hachey to come back. And, we can then  
13 decide, rather than having a hearing within the hearing  
14 today on discovery or some subsequent hearing within the  
15 hearing on discovery, we can then decide what the  
16 significance of those documents is or isn't and what  
17 happened.

18 CMSR. HONIGBERG: Does any -- yes,  
19 Ms. Frignoca.

20 MS. FRIGNOCA: I'm anticipating your  
21 question "does any other party have something to add?"  
22 And, yes. These forecasts may also be relevant to  
23 Dr. Stanton's analysis. They may be relevant to our  
24 cross-examination of the witnesses. In large part, we,

1 you know, rely upon other parties' discovery or data  
2 requests, you know, instead of asking the same questions  
3 over and over, we try to do that for efficiency sake. So,  
4 this information is equally important to us. And, again,  
5 don't want to delay the proceeding, but I'd like to  
6 reserve the right to have Dr. Stanton amend her testimony  
7 as needed, if this information changes or strengthens her  
8 results and her opinions in any way, and have it available  
9 before we cross-examine the rebuttal witnesses.

10 CMSR. HONIGBERG: Understood. I mean,  
11 we have Dr. Stanton here today. Certainly, she can be  
12 asked to assume the existence of EVA forecasts that  
13 were -- that showed information contrary to what would  
14 have been a good idea for PSNH, and offer hypothetical  
15 testimony based on the existence of such documents, can't  
16 she?

17 MS. FRIGNOCA: I guess the question is  
18 that it's hypothetical versus in reality what those show,  
19 and I don't even know what to ask her in that regard, I've  
20 never seen these documents.

21 CMSR. HONIGBERG: They're price  
22 forecasts that are going to, presumably, if they're  
23 adverse to PSNH, show gas prices falling precipitously or  
24 dropping due to fracking or something. And, I think she's

1 going to have a pretty good understanding of what  
2 forecasts adverse to PSNH might look like. And, I think,  
3 if you don't ask it, we can. I'm guessing she's going to  
4 be able to answer the question. Maybe she'll need to come  
5 back if the forecasts look radically different or show  
6 something remarkable, and we can address that. But I  
7 would encourage you to address it as a hypothetical with  
8 her today, because it's a perfectly reasonable  
9 hypothetical to ask her, don't you think?

10 MS. FRIGNOCA: It would be great, after  
11 you make a ruling on this or a determination, if we could  
12 have a five-minute recess before we call Dr. Stanton to  
13 the stand?

14 CMSR. HONIGBERG: Fair enough. I think  
15 we're going to need that. Any other -- any other  
16 thoughts? Does Staff have any thoughts on this?

17 MR. SHEEHAN: Just to, as I think has  
18 percolated by now, it's two issues. One is a discovery  
19 issue. It may be a big deal, it may not. And, I think  
20 it's appropriate maybe to put that aside for another time,  
21 if we need it. And, the second is, as you suggest, we'll  
22 see what comes in and do our best to keep the hearing  
23 moving. But I do think it's a process issue, separate  
24 from getting on as best we can. Understanding that the

1 documents may cause some wrinkles in how we present future  
2 witnesses.

3 CMSR. HONIGBERG: I think I agree with  
4 that. I think that's where we -- where I pretty much  
5 settled.

6 Mr. Patch, you opened this up with a  
7 request of a series of things that should happen.  
8 Obviously, they're going to be in the transcript, but that  
9 transcript is not going to be available immediately. I  
10 guess, I wasn't taking detailed enough notes while you  
11 were asking that, I'm wondering if it would be possible  
12 for some time between now and the end of the day for you  
13 to put those things down in a letter or something like  
14 that.

15 MR. PATCH: Okay.

16 CMSR. HONIGBERG: To get it in, so we  
17 have a list of the steps you think should be taken, some  
18 of which we've already dealt with here. But I think what  
19 Mr. Glahn said a moment ago is an appropriate first set of  
20 steps. Which is for the Company to do what it needs to  
21 do, to find what it can find, understand the entire time  
22 line of circumstances regarding its relationship with EVA.  
23 And, if it was still receiving forecasts in 2009, 2010,  
24 but does no -- and no longer has them, whether it can get

1       them in some other way, and let's see if we can recreate  
2       what we can recreate, and then go from there.

3                   MR. GLAHN:   Your Honor?

4                   CMSR. HONIGBERG:  Mr. Glahn, yes.

5                   MR. GLAHN:  I have nothing more to add  
6       to that, your Honor, except to say perhaps could we take a  
7       five-minute break?  So, we can have a discussion about  
8       this, and so that people can be looking while we're --  
9       looking further while we're here today, and then come back  
10      and start with Dr. Stanton?

11                   CMSR. HONIGBERG:  Sure.  When we come  
12      back, we will be ready to start with Dr. Stanton at that  
13      point.  Everybody -- yes, Ms. Amidon?

14                   MS. AMIDON:  Just a minor point.  
15      Yesterday, the Commission made a record request for the  
16      EPA NPDES Permit.  Staff received an electronic link to  
17      that, because it's a voluminous document.  And, we're  
18      going to make that available to all the parties, and Staff  
19      will take it upon itself to make a full paper copy for the  
20      Clerk for the record in this proceeding.

21                   CMSR. HONIGBERG:  Okay.  That sounds  
22      good.

23                   MR. GLAHN:  And, if I could add one more  
24      thing, I apologize.  It would be helpful to see what it

[WITNESS: Stanton]

1 was that Dr. -- or, that Mr. Hachey had in his file that  
2 he was referring to in his testimony in 2012, to compare  
3 it to what we believe we produced.

4 MS. GOLDWASSER: That's Attachment 16  
5 that we just went through.

6 CMSR. HONIGBERG: So, did you hear that,  
7 Mr. Glahn? Yes. Okay. Mr. Bersak did. Good.

8 So, is there anything else we need to  
9 do?

10 (No verbal response)

11 CMSR. HONIGBERG: All right. We'll take  
12 a break. And, we'll be back here at ten minutes before  
13 the hour.

14 (Recess taken at 9:45 a.m. and the  
15 hearing resumed at 9:58 a.m.)

16 CMSR. HONIGBERG: So, are we ready? Are  
17 we ready for Dr. Stanton?

18 MS. FRIGNOCA: Yes.

19 CMSR. HONIGBERG: All right.  
20 Dr. Stanton, would you please come take the stand.

21 (Whereupon **Elizabeth A. Stanton** was duly  
22 sworn by the Court Reporter.)

23 **ELIZABETH A. STANTON, SWORN**

24 **DIRECT EXAMINATION**

[WITNESS: Stanton]

1 BY MS. FRIGNOCA:

2 Q. Dr. Stanton, would you please state your full name for  
3 the record.

4 A. My name is the Elizabeth Ann Stanton.

5 Q. And, Dr. Stanton, would you please summarize your  
6 professional experience.

7 A. I'm a senior economist with Synapse Energy Economics.  
8 We're a consulting firm in Cambridge, Massachusetts,  
9 that specializes in environmental policy issues in the  
10 energy industry.

11 Q. And, can you tell me a little bit more about what you  
12 do in the course of your work at Synapse?

13 A. I analyze environmental policy issues, usually from an  
14 economic point of view. Most of our work is in the  
15 electricity sector. We do some work in other energy  
16 sectors, other energy issues. I do a lot of analysis  
17 and writing regarding emissions issues and other  
18 environmental policy concerns.

19 Q. Thank you. In the course of your work at Synapse, were  
20 you hired by the Conservation Law Foundation to give  
21 testimony in this case?

22 A. Yes, I was.

23 Q. And, Exhibit 21 in this case has been marked as the  
24 "Testimony of Elizabeth A. Stanton". And, it has seven

[WITNESS: Stanton]

1 attachments to it, Exhibits 21-01 through  
2 Exhibit 21-07. Is that the testimony that you provided  
3 in this case?

4 A. I don't have it in front of me. I did submit  
5 testimony. It had seven exhibits, yes.

6 Q. Okay. After you provided your initial testimony in  
7 this case, did you make any revisions or corrections to  
8 your original prefiled testimony?

9 A. Yes. I made a correction.

10 Q. Would you please explain to the Commission the  
11 correction that you made.

12 A. Yes. It was -- came from a question in discovery, and  
13 became apparent that I made an error in one part of my  
14 Exhibit 4, which is the Excel analysis. And, that was  
15 that part of the calculation includes estimating what  
16 SO2 emissions the Merrimack plant would produce each  
17 year. And, that's important to the economic analysis,  
18 because there are allowance prices associated with  
19 that. And, I had not adjusted the SO2 emissions  
20 downward when the Scrubber was planned to come on line.  
21 And, so, I made that correction and resubmitted the  
22 exhibits associated with it.

23 Q. Okay. And, the exhibits that you resubmitted were  
24 Exhibits 4 and 7?

[WITNESS: Stanton]

1 A. I believe so. That sounds -- I mean I don't have the  
2 exhibit numbers memorized. I'm sorry. I resubmitted  
3 the Excel document, I think that's Exhibit 4. I  
4 resubmitted a graph that comes from that, that's a  
5 column graph showing each of five scenarios.

6 Q. Okay. Thank you. Are there any other changes to your  
7 testimony that you -- your prefiled testimony that you  
8 wish to make?

9 A. No.

10 Q. Yesterday you alerted me that perhaps Exhibit 5 might  
11 have a small change in it as well, as a result of the  
12 change that you made in the SO2 emissions calculation,  
13 is that --

14 A. That's right. That's the line graph that also shows  
15 the results of my analysis. So, yes, that would change  
16 as well from the SO2 correction.

17 Q. And, do any of those corrections change the conclusions  
18 of your testimony?

19 A. No, they do not.

20 MS. FRIGNOCA: And, just for the record,  
21 I just learned about the minor correction to Exhibit 5,  
22 and that is being copied and will be brought over and will  
23 be substituted into the record. And, we've alerted  
24 counsel to that before the hearing this morning.

[WITNESS: Stanton]

1 CMSR. HONIGBERG: All right. Thank you  
2 very much.

3 BY MS. FRIGNOCA:

4 Q. With those changes, do you otherwise adopt and affirm  
5 your prefiled testimony?

6 A. Yes, I do.

7 Q. And, would you please, for the Commission, summarize  
8 that testimony.

9 A. Yes. So, I am not a lawyer. I'm not hear to talk  
10 about the Scrubber Law. I'm an economist. And, I was  
11 retained by CLF to do an analysis of the prudence of  
12 PSNH's decision to continue construction on a scrubber  
13 at the Merrimack plant in Spring of 2009. So, my  
14 analysis is from that point of view, from the Spring of  
15 2009.

16 What I did, and I submitted this as an  
17 Excel document, my analysis, is to construct a cash  
18 flow analysis of the Merrimack plant's operations.  
19 And, I did that from the year 2008 out to the year  
20 2027. 2027 would be the final year of the lifetime of  
21 the Scrubber. And, 2008 was chosen as the last full  
22 year for which data would have existed for managers  
23 making a decision in Spring of 2009. So, that's the  
24 extent of the analysis.

[WITNESS: Stanton]

1                   And, what I estimated for each year was  
2                   the costs of running the Merrimack plant, and comparing  
3                   that to the revenues from running the Merrimack plant,  
4                   so that we could see were the costs higher than the  
5                   revenues or the revenues higher than the costs. And,  
6                   the key way that I'm expressing the answer to that  
7                   question is in terms of the present value. And the  
8                   present value is the discounted stream of the sum of  
9                   the costs and the benefits going out into the future,  
10                  and you're nodding, so I'm not going to explain what  
11                  "discounting" is, but that's what it is. And, so, I,  
12                  for five different scenarios, I calculated this present  
13                  value.

14                  And, the reason there are five different  
15                  scenarios is because, from the point of view of any  
16                  time, but certainly the Spring of 2009, we wouldn't  
17                  have any certainty about what circumstances would be in  
18                  the future. And, I looked at two particular variables  
19                  that I considered to be uncertain, and wanted to look  
20                  at what range of possible values they would have in the  
21                  future. One of those was environmental costs. So, I  
22                  looked at low, medium and high environmental costs.  
23                  And, the other was natural gas prices and as they  
24                  affected the wholesale energy price. And, so, I looked

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 at again high, medium and low. And, I looked at  
2 combinations of those, and with that produced five  
3 scenarios.

4 What I concluded from this was that in  
5 four out of those five scenarios, the costs of running  
6 the plant were higher than the revenues that were  
7 received from running the plant. And, in one scenario,  
8 it went the other way around. And, my conclusion from  
9 this was that managers of PSNH, at that time, in the  
10 Spring of 2009, first of all, they had a prudence  
11 obligation to do this kind of analysis at that time.  
12 And, second of all, had they done it, and explored this  
13 range of likely values in the future, they would have  
14 had to make the decision not to go forward. And, so,  
15 my assessment is that it was an imprudent decision that  
16 was made in the Spring of 2009 to continue construction  
17 on the Scrubber.

18 Q. Thank you. Now, in his rebuttal testimony, Mr. Smagula  
19 opines that you made a surprising and inappropriate  
20 assumption in choosing 2008 as your reference year,  
21 because the information from that year was not  
22 available to PSNH when it did its economic analysis in  
23 mid-2008. Would you please explain to the Commission  
24 why you chose 2008 as a reference year?

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[WITNESS: Stanton]

1 A. Yes. As I just said, I chose 2008 because it was the  
2 final -- it was the final complete year for which there  
3 were data from the point of view of my analysis, which  
4 was the Spring of 2009. And, I chose the Spring of  
5 2009 because it was my understanding that PSNH did not  
6 have an air permit from the New Hampshire Department of  
7 Conservation -- New Hampshire Department of  
8 Environmental Conservation until March 2009, and so  
9 could not have begun construction until that time.

10 Q. Also, Mr. Smagula criticizes your choice of 2009,  
11 saying that it was a year that was "atypical, with  
12 extended maintenance outages". What is your response  
13 to that criticism?

14 A. So, his critique was of the use of 2008, correct?

15 Q. Yes.

16 A. I think that any year that we pick as a base year in an  
17 analysis is going to have anomalies to it. There are  
18 different circumstances in each year. I've explained  
19 my reasoning for choosing 2008. My expectation would  
20 be that PSNH's management would have much more  
21 information available to it than I did about running of  
22 the plant and would have examined all of that  
23 information and made the best possible predictions that  
24 they could about what kind of capacity factor and

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 maintenance charges there would be going forward. I  
2 think it's a reasonable decision to use 2008 as a base  
3 year, given the information that I had at hand. And, I  
4 think that, judging from comparing my testimony to the  
5 testimony of Kahal, the testimony of PSNH's economic  
6 experts, all of those came to very similar results.  
7 So, it's not something that I'm too concerned about.

8 Q. Okay. Finally, Mr. Smagula questions your assumption  
9 to include ACI or Activated Carbon Injection to meet  
10 federal mercury regulations in 2015. He claims that  
11 that was an error. Can you explain to the Commission  
12 why you included ACI in your assumption about future  
13 environmental costs?

14 A. Sure. So, from the point of view of 2009 -- of Spring  
15 of 2009, when the Scrubber had not yet been  
16 constructed, by assumption was to include an ACI as  
17 part of those costs. The purpose of the ACI is mercury  
18 reduction. And, the scrubber it seems was put in place  
19 for mercury reduction as well. And, my understanding  
20 is that, it's not my area of expertise, but the  
21 scrubbers can get about an 80 or 90 percent mercury  
22 reduction, wet scrubbers can. ACI gets a 90 percent  
23 mercury reduction. And, that's what most plants, this  
24 is, you know, to the best of my knowledge, are putting

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 in place in order to comply with the MATS rule, the  
2 Merrimack Air Toxics Standard. It seemed like a  
3 reasonable assumption at the time. I'm not sure that I  
4 would make a different assumption today, if I did that  
5 same analysis from the Spring of 2009.

6 I talked to other people at Synapse, at  
7 the consulting agency, that have more expertise in this  
8 area, and this was the advice that I was given, is to  
9 include an ACI.

10 Q. Okay. And, if you took the ACI out of your analysis,  
11 would it change your conclusions?

12 A. No, it wouldn't.

13 Q. Thank you. Doctors Kaufman and Hoffman [sic] also have  
14 a few differences of opinion with the way that you did  
15 your analysis. And, one notable difference is the --  
16 how the two of you differ, NERA's analysis and your  
17 analysis differs in how you look at CO2 price  
18 forecasts. And, I was going to ask you if you could  
19 sort of generally explain what those price forecasts  
20 are and the model that you relied upon.

21 A. Yes. So, yes, the Harrison and Kaufman testimony does  
22 use a different CO2 price or a range of CO2 prices than  
23 the range of CO2 prices that I used in my analysis.  
24 And, I can explain how each of those was come about or,

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[WITNESS: Stanton]

1 you know, at least give an explanation. The CO2 prices  
2 that I used are from the Synapse 2008 Carbon Price  
3 Forecast. We release this report every year or two,  
4 and it gives carbon price forecasts, given the best  
5 state of our knowledge at the moment when we're writing  
6 it. It's widely used throughout the industry. There  
7 are a long list of utilities and PUCs and other  
8 industry groups that use this forecast. This is the  
9 forecast that has been used for years now in the AESC,  
10 which is the Avoided Energy Supply Cost Study. And,  
11 it's the -- the specific price forecast was released  
12 after it, but the latest AESC, before Spring of 2008,  
13 was the 2007 AESC. And, in it the previous Synapse  
14 Price Forecast is used. Stakeholders to the AESC  
15 process include both PSNH and its parent company, and  
16 the New Hampshire PUC. So, it's a widely recognized, a  
17 widely known set of price forecasts, and it's one that  
18 we rely on in our work all the time.

19 The Harrison and Kaufman testimony uses  
20 a different series of assumptions. Do you want me to  
21 explain that as well?

22 Q. Yes. Before you go on, I'm going to show you a  
23 document and ask you to identify if this is the  
24 document that you relied upon.

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[WITNESS: Stanton]

1 (Atty. Irwin distributing documents.)

2 WITNESS STANTON: Thank you.

3 MS. FRIGNOCA: I believe this will be  
4 "Exhibit 80"?

5 CMSR. HONIGBERG: That's what we have as  
6 well.

7 (The document, as described, was  
8 herewith marked as **Exhibit 80** for  
9 identification.)

10 BY MS. FRIGNOCA:

11 Q. Dr. Stanton, is this the CO2 price forecast that you  
12 relied upon?

13 A. Yes, it is.

14 Q. Thank you. Now, you were about to explain, and I will  
15 ask you if you could explain what differed with the  
16 model that NERA chose to rely upon in producing their  
17 CO2 price forecast relating to that same time period?

18 A. They took a different approach. They used two  
19 different CO2 prices. I can explain each one of them,  
20 if that's helpful. They have a low CO2 price, which is  
21 based on the assumption of basically the RGGI price.  
22 And, the way that they did that is they took a  
23 forecasted RGGI price for 2012 at \$4.00, in nominal  
24 terms, and then that nominal price is kept constant

[WITNESS: Stanton]

1 going out into the future. So, all of my analysis is  
2 in real terms. So, if you look at their exhibit, I  
3 don't have that in front of me, but they have an  
4 exhibit comparing all the carbon price forecasts. What  
5 they do is they take my three carbon price forecasts  
6 and they put it in nominal terms. It's not adjusted  
7 for inflation. Mine are all adjusted for inflation.  
8 So, it's nominal terms. And, they have added inflation  
9 then in to mine in order to have them on the same  
10 graph. And, then, you can see their RGGI forecast is a  
11 flat line at the bottom of the graph, \$4.00. If it  
12 were done in real terms, adjusted for inflation, that  
13 \$4.00 would then decrease in real terms over time.

14 The second price that they use is based  
15 on analysis of the Waxman-Markey bill, which was a  
16 climate -- a federal climate bill that was before  
17 Congress around this time, in 2008-2009. They used an  
18 EIA report that did modeling on the Waxman-Markey  
19 climate proposal to determine what sort of prices would  
20 be associated with that. Waxman-Markey, you know,  
21 there have been several of these different federal  
22 bills, and some of them give a price, "we want the  
23 price to be \$25 in this year, \$30 in this year."  
24 Waxman-Markey worked a little bit differently, it's

[WITNESS: Stanton]

1 based on a cap. And, so, what they have is that there  
2 will be a cap on emissions, and allowances for that  
3 will be allocated in one way or another, they change  
4 the allocation over time. And, so, you can't emit  
5 unless you have an allowance, so it keeps the cap at  
6 the level that they were looking for. In the beginning  
7 of the period for Waxman-Markey, they're giving away I  
8 think it's 75 percent of the allowances and selling  
9 25 percent, and then they reduce the number that they  
10 give away over time. The price then that EIA  
11 determines from that is based on modeling. They set a  
12 cap on emissions, and ask in the model "what price  
13 would result in the market from setting that cap?"  
14 And, the price that they come to starts at about \$20,  
15 and it goes up to about \$50 at the end of the analysis  
16 period that we've been discussing.

17 Harrison and Kaufman make an additional  
18 adjustment to that price from EIA. And, the adjustment  
19 that they make is that they lower the price, and it's  
20 by about \$10 in every year if you look at it. They  
21 lower that price, and the explanation that they give in  
22 their testimony is that this price adjustment is  
23 necessary because of the free allowances, the  
24 allowances that are given away. My understanding of

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[WITNESS: Stanton]

1 that circumstance is different. I would not adjust a  
2 price down that way because of free allowances. I  
3 believe that that's already built into the model, and  
4 it doesn't affect the market price of those allowances.  
5 The price and the value of those allowances to PSNH are  
6 what they can sell them for should they not need it to  
7 emit. And, the fact that they were given it or bought  
8 it doesn't affect that. They can still sell it for the  
9 same amount. So, I'm not really clear on why that was  
10 reduced in that way. But that's the forecast that they  
11 are using, it's something lower than the Waxman-Markey  
12 bill.

13 When we do the Synapse Price Forecast  
14 every year, every couple of years, we don't just look  
15 at the various federal bills that are currently before  
16 Congress. We look at a number of different reference  
17 points. We look at what CO2 prices utilities are  
18 using, and we do a lot of research on that and build up  
19 a database of what as many utilities are making it  
20 publicly available that we can look at. We look at  
21 studies of the cost of -- called "marginal weight  
22 abatement cost", the cost of reducing CO2. We look at  
23 it from a bunch of different ways, and then use our  
24 professional judgment to distill from that what we

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[WITNESS: Stanton]

1 think is a reasonable range as a medium, a low and a  
2 high carbon price going forward. And, so, we're  
3 looking at a lot of different resources.

4 Q. Thank you. Another difference between your analysis  
5 and Doctors Kaufman and Harrison's analysis appears to  
6 be with respect to costs PSNH might be expected to  
7 incur to comply with the renewal of its NPDES Permit.  
8 And, your low case is that they should, looking at the  
9 decision-making in the 2009 time frame, have been  
10 inspected to -- expected to, at a minimum, factor in  
11 impingement controls, and then, on the reference or  
12 high end, impingement plus closed cooling. Can you  
13 explain the basis for your opinion?

14 A. I was using a range of the different, I think they're  
15 called "options" in the EPA rules, so it was a proposed  
16 rule, looking at it from the time, it's a proposed  
17 rule, had different options that the EPA might decide  
18 in the final rule. So, I was looking at a range of  
19 those to say they might choose the least stringent,  
20 they might choose a more stringent one, and then  
21 presenting those as the low, medium and high case.

22 Q. Okay. Finally, you, and with respect to Doctors  
23 Kaufman and Harrison, you compared the cost of building  
24 the Scrubber to PSNH buying energy in the market. Can

[WITNESS: Stanton]

1           you explain why you chose that alternative to compare  
2           building the Scrubber to?

3   A.   My analysis compares the cost of running PSNH to the  
4        revenues of PSNH.  And, those revenues come from  
5        wholesale energy prices.  And, so, it's a very similar  
6        concept to one of the two concepts that Harrison and  
7        Kaufman used in their analysis, which was "what if we  
8        didn't have PSNH, what if it wasn't in operation?"  You  
9        know, as an alternative, we would buy energy on the  
10       market.  Two very similar ideas.  Say your question  
11       again.

12  Q.   So, I just wanted to ask you to explain why you chose  
13        to compare the Scrubber in your five scenarios --

14  A.   Uh-huh.

15  Q.   -- to buying energy on the open market?  Was there a  
16        reason in looking at that as the utility manager in  
17        that time frame?

18  A.   That seems like the next alternative.  If you're not  
19        running Merrimack, then you're buying energy in the  
20        market.  I mean, we -- PSNH operates inside of ISO-New  
21        England.  And, if they are not running, then they're  
22        going to purchase it as a utility.

23  Q.   Okay.  Thank you.  Now, you were here this morning when  
24        there was discussion about the EVA gas forecasts.  So,

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 just to address some of those issues. Did you look at  
2 gas forecasts when you were preparing your opinion?  
3 Did you look at gas forecasts that were -- would have  
4 been available to PC -- PSNH at the time that they were  
5 building the Scrubber?

6 A. I did, but my focus was on the wholesale price of  
7 energy. Which, as a part of what the wholesale price  
8 of energy is, it's very much dependent on what the  
9 natural gas price is. So, yes, I looked at forecasts  
10 of both of those things. What I use in my -- in my  
11 analysis is the wholesale price of energy.

12 Q. Okay. So, are you familiar with EVA?

13 A. Do you mean am I familiar with that report? Am I  
14 familiar with --

15 Q. Yes.

16 A. No.

17 Q. Okay. If you had known that PSNH had relied on that  
18 report, would that change your opinion or cause you to  
19 take any additional steps?

20 A. I don't know what their forecasts are. I mean, we were  
21 imagining a little while ago that they were  
22 detrimental. And, if those forecasts were very low, I  
23 would have still used the same wholesale energy prices  
24 that I used. I took them from the AESC that was

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 available at that time and that PSNH's management would  
2 have. In the AESC, there's a series of assumptions  
3 about natural gas prices that they use. I think I  
4 would have continued to use that. If I had found that,  
5 you know, I was told that "here's the price forecast  
6 that PSNH's management is looking at", and I compared  
7 that to the ones used in AESC and found it to be quite  
8 different, I think I would have noted that in my  
9 testimony. I think it becomes interesting if -- if  
10 it's much lower then, you know, I've been talking about  
11 a range of possible futures and making sure that we're  
12 exploring what we think is a likely range. And, I put  
13 forward what seemed like a likely range of wholesale  
14 energy prices from AESC. If PSNH had information in  
15 front of it that they trusted and relied on that showed  
16 something lower than that, then I would have imagined  
17 that, in their analysis for prudence, that they would  
18 have taken that into consideration, though. Is that --

19 MS. FRIGNOCA: Yes. Thank you,  
20 Dr. Stanton. Dr. Stanton is available for  
21 cross-examination.

22 CMSR. HONIGBERG: Who is going to be  
23 questioning Dr. Stanton next?

24 (No verbal response)

[WITNESS: Stanton]

1 CMSR. HONIGBERG: Well, let's just go  
2 around the room then. Mr. Fabish, do you have any  
3 questions for Dr. Stanton?

4 MR. FABISH: No, I do not.

5 CMSR. HONIGBERG: Yes. Ms. Frignoca,  
6 I'm sorry.

7 MS. FRIGNOCA: I'm sorry. Exhibit 5 has  
8 arrived. So, I should probably distribute that as well,  
9 the revised Exhibit 5.

10 CMSR. HONIGBERG: Sure. So, this is a  
11 replacement for the Exhibit 5 that was part of --

12 MS. FRIGNOCA: -- 21-5. So, if you want  
13 to label this --

14 CMSR. HONIGBERG: I'm sorry.

15 MS. FRIGNOCA: -- 21-5A, we could do  
16 that, so there's no confusion.

17 CMSR. HONIGBERG: That would make sense  
18 to me. So, yes, "21-5A" then.

19 (Atty. Frignoca distributing documents.)

20 (The document, as described, was  
21 herewith marked as **Exhibit 21-5A** for  
22 identification.)

23 CMSR. HONIGBERG: Ms. Frignoca, do you  
24 need to ask the witness any questions about this exhibit?

[WITNESS: Stanton]

1 MS. FRIGNOCA: I do not. Thank you.

2 CMSR. HONIGBERG: So, Mr. Fabish, do you  
3 have any questions for Dr. Stanton?

4 MR. FABISH: No, I do not.

5 CMSR. HONIGBERG: Mr. Patch, do you have  
6 any questions?

7 MR. PATCH: No, I don't.

8 CMSR. HONIGBERG: Ms. Chamberlin, do you  
9 have any questions?

10 MS. CHAMBERLIN: No, I don't.

11 CMSR. HONIGBERG: Company, do you have  
12 questions?

13 MR. NEEDLEMAN: Yes.

14 CMSR. HONIGBERG: Who's going to be  
15 asking questions? Mr. Needleman?

16 MR. NEEDLEMAN: I am, yes. Thank you.  
17 Hello, Dr. Stanton. I'm Barry Needleman, from the McLane  
18 law firm. I represent PSNH in this matter.

19 (Court reporter interruption.)

20 **CROSS-EXAMINATION**

21 BY MR. NEEDLEMAN:

22 Q. I want to clear up a couple of things that you said,  
23 first of all. This new Exhibit 21-5A that we have,  
24 it's my understanding that, even though you changed

[WITNESS: Stanton]

1 elements of this, it doesn't in any way change the  
2 outcomes or the conclusions in your report, is that  
3 right?

4 A. It doesn't change the conclusions, no.

5 Q. And, with respect to the issue of gas price forecasts,  
6 let me clear up a few things. There is no line in your  
7 spreadsheet where you actually rely on gas price  
8 forecasts, is that correct?

9 A. That's correct.

10 Q. And, you used, as you said, you used energy price  
11 forecasts, and my understanding is that energy price  
12 forecasts are, in part, reliant on those gas price  
13 forecasts, is that right?

14 A. Yes.

15 Q. And, so, there's no place that you can actually point  
16 to in your testimony where you can say that you relied  
17 on any gas price forecasts that were produced by any  
18 party in this case, is that right?

19 A. That were produced by any party in the case?

20 Q. That's right.

21 A. No.

22 Q. Now, in your summary, you said that -- you said that  
23 your analysis was primarily focusing on the prudence of  
24 PSNH continuing with the construction of the Scrubber

[WITNESS: Stanton]

1 Project in the Spring of 2009, is that right?

2 A. Yes.

3 Q. And, do you have a copy of your testimony in front of  
4 you?

5 A. I do not.

6 Q. Maybe you should get that, because I'm going to ask you  
7 some questions about it.

8 MR. SHEEHAN: I think I can help her.

9 MR. NEEDLEMAN: Okay.

10 (Atty. Amidon handing document to the  
11 witness.)

12 WITNESS STANTON: I have it now.

13 BY MR. NEEDLEMAN:

14 Q. Going back to the issue of these EVA price forecasts  
15 for a moment. I believe you said a moment ago that you  
16 weren't familiar with it, is that right?

17 A. That's right.

18 Q. Are you aware that they're actually referenced in the  
19 AES -- AESC 2007 Report that you relied upon to form  
20 your testimony today?

21 A. Am I aware that the EVA forecasts are mentioned in the  
22 AESC 2007? Is that the question?

23 Q. Yes. They're referenced in several places.

24 A. No, I'm not aware of that.

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 Q. Did you review Mr. Hachey's testimony to prepare for  
2 today?

3 A. Mr. Hachey's testimony? I think I read a few pieces of  
4 it. I certainly didn't read it in its entirety,  
5 though.

6 Q. Okay. Thank you. I want to start on the top of Page 6  
7 of your testimony.

8 A. Yes.

9 Q. Now, am I correct that you've never testified in a  
10 prudence proceeding before?

11 A. That's correct.

12 Q. Is it also correct that you've never assisted a  
13 regulated utility in making any real-time decisions  
14 about prudent behavior?

15 A. That's correct.

16 Q. The first point you make at the very top of Page 6, you  
17 say "a prudent cost is one in which, to the best  
18 understanding of a utility manager at the time when the  
19 cost was incurred, provides a benefit to ratepayers."  
20 Have you actually ever testified to that specific point  
21 anyplace?

22 A. No.

23 Q. Do you have any personal experience in making those  
24 types of decisions?

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 A. In making prudency decisions for a utility?

2 Q. In making specific decisions about prudency as it  
3 relates to "benefit to ratepayers", the first sentence  
4 in your testimony?

5 A. No.

6 Q. You haven't cited to any projects anywhere in your  
7 testimony that would support that statement, have you?

8 A. Cited to any -- I'm sorry, I didn't understand the  
9 question.

10 Q. You haven't cited to any particular projects in your  
11 testimony that would support that statement?

12 A. What do you mean by "projects"?

13 Q. Of particular construction projects, someplace that you  
14 might have had in mind when you wrote that statement?

15 A. No.

16 Q. Okay. You're not relying on any PUC orders or  
17 decisions in support of that statement, are you?

18 A. None that I've cited here. Not specific ones.

19 Q. In fact, you would agree with me that there are prudent  
20 actions that a utility could take that actually don't  
21 benefit ratepayers, isn't that right?

22 A. I don't know, I'd have to think about that. I'm not  
23 sure that I agree with it on the face of it. I think  
24 that you'd have to be more specific.

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 Q. How about paying taxes?

2 A. You're suggesting that paying taxes are not a benefit  
3 to ratepayers?

4 Q. How would ratepayers benefit from the utility paying  
5 taxes, other than avoiding non-compliance penalties?

6 A. The ratepayers are also the citizens of the state, and  
7 benefit from the pool of taxes that's used for public  
8 services.

9 Q. Okay. How about purchase of renewable energy at above  
10 market prices to support public policy, how does that  
11 benefit ratepayers?

12 A. The public policy is based on public interest. The  
13 interests of the citizens of the state is that they  
14 want to have a particular kind of environmental policy.  
15 Those are in the interests of the people that live in  
16 the state.

17 Q. So, in both cases, your testimony is that the  
18 ratepayers benefit broadly the way everybody else would  
19 benefit?

20 A. Can you ask the question a little more specifically?

21 Q. Sure. Sounds to me like you were saying that the  
22 ratepayers don't benefit specifically, they benefit  
23 generally, the way any resident of the state would  
24 benefit?

[WITNESS: Stanton]

1 A. From the utility paying taxes and from the utility  
2 building renewables?

3 Q. Purchasing above-market renewable energy.

4 A. Uh-huh. I'm not sure that I have a conclusion about  
5 that. I think that certainly they benefit in the way  
6 that the rest of the residents of the state do. It's  
7 not something that I've examined to say "is there a  
8 special way that they are benefiting from those  
9 particular actions?" I haven't done analysis on "how  
10 do ratepayers benefit from the utility paying taxes?"  
11 Or, "how do ratepayers benefit from the utility  
12 purchasing renewables at above-market prices?" Was  
13 that the second example?

14 Q. Yes.

15 A. So, I don't have a conclusion for you off the top of my  
16 head.

17 Q. Further down in that paragraph, still on the top of  
18 Page 6, about in the middle, you say "prudent decisions  
19 must be reassessed continually up to the point that all  
20 costs are "sunk"." Do you see that?

21 A. Yes, I do.

22 Q. Did you have any specific example in mind that you were  
23 personally involved with with a large construction  
24 project that supports that statement?

[WITNESS: Stanton]

1 A. I have not been personally involved in any large  
2 construction processes.

3 Q. So, you've never been involved in a reevaluation like  
4 that before?

5 A. No.

6 Q. Ever involved in the cancellation of a project based on  
7 this statement?

8 A. No.

9 Q. So, any particular thing that you have in mind that you  
10 can point to to support that statement in your  
11 testimony or your personal experience?

12 A. A concrete example from my personal experience in  
13 construction? No.

14 Q. So, let's jump to Page 11 of your testimony. In the  
15 middle of that page, you started to talk a few minutes  
16 ago about your Exhibit 4. And, this is your Merrimack  
17 Cash Flow 2008 Analysis, is that correct?

18 A. Yes.

19 Q. Okay. And that, for the record, is "Exhibit 21-4".  
20 And, we actually don't have a complete copy in the  
21 record, because it was so large, we just have an  
22 electronic version, is that right?

23 A. I don't know what you have in the record. I think the  
24 electronic version is the complete copy.

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 Q. Okay. And, --

2 CMSR. HONIGBERG: Ms. Frignoca, you look  
3 like you want to say something?

4 MS. FRIGNOCA: Just to clarify. We  
5 did -- the Excel spreadsheet is like 314 pages long. We  
6 did produce one copy of it. It's very hard to read. And,  
7 so, for everybody else we produced a hyperlink to Dropbox  
8 folder that has it. And, for the Commission, we provided  
9 disks, so you could more easily open it and follow along.  
10 But, to comply with the PUC rules, we did produce one very  
11 unwieldy copy that is up with the other exhibits.

12 CMSR. HONIGBERG: Thank you.

13 MR. NEEDLEMAN: And, I think what we  
14 agreed is, to the extent that anybody wanted to use a page  
15 from that sheet, they would just copy that page, not the  
16 whole document.

17 CMSR. HONIGBERG: All right. Thank you.

18 BY MR. NEEDLEMAN:

19 Q. So, my understanding then is that you created your  
20 Exhibit 4, this spreadsheet, and you did so by  
21 selecting a large range of inputs into the spreadsheet,  
22 which you talk about on Pages 11 and 12, is that right?

23 A. A large range of inputs? Do you mean that the range  
24 for each variable was large or that I'm looking at a

[WITNESS: Stanton]

1 number of different variables?

2 Q. You're looking at a number of different variables?

3 A. Yes, that's right.

4 Q. And, then, you run the spreadsheet, as a result you  
5 generate a series of scenarios, which you talk about in  
6 your Exhibit 5, is that right?

7 A. Yes.

8 Q. Okay. And, Exhibit 5 then would be those five  
9 scenarios, where, in your testimony, you say "four of  
10 them resulted in a negative net benefit to ratepayers",  
11 is that right?

12 A. Yes.

13 Q. So, you agree with me then that the accuracy of  
14 Exhibit 5 is really dependent on how accurate Exhibit 4  
15 is, is that correct?

16 A. Yes. Exhibit 5 was produced in Exhibit 4.

17 Q. Okay. Let me ask --

18 MR. NEEDLEMAN: Well, let me start with  
19 an exhibit. So, I want to pass around one page from your  
20 spreadsheet, which is Stanton Exhibit 4.

21 (Ms. Frazier distributing documents.)

22 CMSR. HONIGBERG: This is "Exhibit 81".

23 (The document, as described, was

24 herewith marked as **Exhibit 81** for

[WITNESS: Stanton]

1 identification.)

2 BY MR. NEEDLEMAN:

3 Q. And, the document we've marked from Exhibit 81, my  
4 understanding is that this is one tab from your  
5 spreadsheet from the environmental tabs. Do you  
6 recognize that?

7 A. This is one small corner of one tab.

8 Q. Right. And, the reason I'm interested in it is because  
9 it's your citation to your sources for environmental  
10 information that went into your Exhibit 4.

11 A. It is.

12 Q. Is that right?

13 A. That's right.

14 Q. And, as I look at your series of sources, they all  
15 appear to me to be generic EPA, EPRI, EEI documents  
16 about coal plants. I don't see anything specific to  
17 Merrimack Station, is that right?

18 A. That's right.

19 Q. So, when you prepared Exhibit 4, you were relying, at  
20 least with respect to the environmental portions of it,  
21 on these generic documents, and not specific  
22 information about Merrimack Station, is that right?

23 A. Some of the information is specific to Merrimack.

24 Q. Where --

[WITNESS: Stanton]

1 A. I mean, are you talking about particularly what I'm  
2 looking here in front of me or the environmental costs  
3 or the document as a whole?

4 Q. I'm looking at Exhibit 81. And, I'm asking whether  
5 there is specific information cited here that pertains  
6 to Merrimack Station?

7 A. So, you're referring to the piece of paper in front of  
8 me, yes?

9 Q. Yes.

10 A. No. There is not information here that pertains  
11 specifically to Merrimack. It's more general than  
12 that, and then applied to Merrimack.

13 Q. Now, going to Page 12 of your testimony, the second  
14 bullet, which you've already spoken to, and I can maybe  
15 truncate this, dealt with "installation of Activated  
16 Carbon Injection". I want you to assume for the  
17 moment, I just want to clarify this, that actually you  
18 were wrong about including that bullet. Is it your  
19 testimony that, even if you were wrong, it would not  
20 change the outputs of your model?

21 A. That's correct. I reran the model, taking out all the  
22 costs for ACI, and came to the same conclusion of there  
23 being four scenarios with net negative benefits. Yes.

24 Q. Okay. Thank you. I won't ask anything further on

[WITNESS: Stanton]

1 that. Let's go down to Bullet 4, "installation of new  
2 controls for coal combustion residuals in 2015 through  
3 2020". Now, were you aware that, as Merrimack Station  
4 is configured, it actually doesn't have any compliance  
5 obligations with respect to this regulation?

6 A. No, I am not aware of that.

7 Q. So, do you have any sense, as you sit here today, if  
8 you were to back that requirement out of your model,  
9 how it would affect your results?

10 A. No, I don't.

11 Q. Okay. Now, you talked a little bit a moment ago about  
12 your CO2 assumptions, and that is bullet number 8 on  
13 Page 12. Do you see that?

14 A. Yes, I do.

15 Q. And, you testified that you used the Synapse 2008 CO2  
16 Price Forecast to develop those assumptions?

17 A. Yes.

18 Q. Okay. And, would you agree with me that the particular  
19 model that you developed here in Exhibit 4 is highly  
20 sensitive to those CO2 assumptions?

21 A. It's certainly sensitive to them. I don't know if I  
22 can characterize it as "highly" or not. I'd have to  
23 take a look at that. It's sensitive.

24 Q. Do you think that it's fair to say that, if you change

[WITNESS: Stanton]

1           some of those assumptions, it could actually, just by  
2           changing the CO2 assumptions, change your outputs in  
3           Exhibit 5?

4   A.    It's possible.  Although, from looking at the testimony  
5           of Harrison and Kaufman, where they used much lower CO2  
6           prices than I did and essentially came to the same  
7           conclusions, I wouldn't jump to the idea that that  
8           would change it in a different direction.

9   Q.    Well, let's look at that for a minute.  Could you  
10          please get out Exhibit 24, which is the Harrison and  
11          Kaufman testimony.

12  A.    Is that over here somewhere?

13                               MS. AMIDON:  Yes.

14                               (Atty. Amidon handing document to the  
15                               Witness.)

16  BY MR. NEEDLEMAN:

17  Q.    And, just to focus people, I'm going to look at  
18          Attachment 15 to their testimony.

19  A.    Thank you.  Can you tell me again what to look at?

20  Q.    Sure.  This is the Harrison and Kaufman testimony.

21          And, I'm looking, in particular, at Attachment 15.

22                               CMSR. HONIGBERG:  Is there a page number  
23          associated with that on your copy?

24                               MR. NEEDLEMAN:  Looks like "000405".

[WITNESS: Stanton]

1 BY MR. NEEDLEMAN:

2 Q. Let me know when you're there. The title of the chart  
3 I'm looking at is "Comparison of Stanton versus NERA  
4 Carbon Dioxide Prices".

5 A. Yes. I'm looking at that now.

6 Q. Okay. So, to start off with this, the range of CO2  
7 prices that you used in your analysis as represented on  
8 this chart is actually quite a bit higher than other  
9 estimates on the chart, isn't it?

10 A. Than other estimates on the chart, yes.

11 Q. Yes. And, you mentioned "EIA" a moment ago. EIA is a  
12 U.S. government agency, is that right?

13 A. Yes.

14 Q. And, EIA actually provides substantial information in  
15 the AESC 2007 Report that you've relied on, haven't  
16 they?

17 A. I'm not an author of that report. I would imagine so.  
18 But I don't have it in front of me, and I'm not an  
19 author of that report.

20 Q. So, you would say EIA is a credible, reliable  
21 information source?

22 A. Certainly.

23 Q. Okay. Now, I want you to look at, and we've talked  
24 about this a little bit already, on the chart, the

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1 "NERA High CO2 Price".

2 A. Yes.

3 Q. Which starts on the left side, is the second lowest,  
4 and ends up sort of in the middle at the end. It's the  
5 prices with the little squares, I think. Now, as he  
6 talked about earlier, that NERA high CO2 price is based  
7 on modeling that EIA did of the 2008 Waxman-Markey  
8 bill, is that right?

9 A. No. It's not right.

10 Q. Well, what do you think it's based on?

11 A. An adjustment to that modeling.

12 Q. Okay. So, let's -- we'll have Mr. Kaufman and Mr.  
13 Harrison clarify that when they testify, but let's  
14 accept that for the moment. You're saying that we can  
15 agree it's based then, in some way, on EIA, is that  
16 correct?

17 A. No. I disagree.

18 Q. Okay.

19 A. Do you want me to explain?

20 Q. No. Let's keep going on. So, again, because we'll  
21 have Mr. Harrison and Mr. Kaufman clarify that. So,  
22 looking then at the numbers that we have on this chart  
23 in all three of your cases, the prices that you have  
24 through 2020 are significantly higher than NERA's High

[WITNESS: Stanton]

1 case is in this chart, isn't that correct?

2 A. They are higher. That's correct.

3 Q. And, your Reference case, which is the second to  
4 highest from the top, the one with the circles, at  
5 least through the first years up to 2020, is actually  
6 double the government estimates on this chart, isn't  
7 it?

8 A. I don't believe those are the government estimates.

9 Q. Well, double the NERA High Price on this chart, is that  
10 correct?

11 A. Looks like it, yes.

12 Q. Okay. Now, you talked a moment ago about this idea of  
13 "free allowances". And, in fact, it's noted at the  
14 bottom of the Harrison/Kaufman chart that Waxman-Markey  
15 was contemplating the distribution of these free  
16 allowances, isn't that right?

17 A. That they were contemplating it? Yes. That's what I  
18 explained earlier.

19 Q. Okay.

20 A. That at the beginning of the period of the -- you know,  
21 what our modeling period is here, that they were  
22 looking at about I think it's 75 percent distribution  
23 of free allowances, and then that dropped down over  
24 time as part of the proposed bill.

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[WITNESS: Stanton]

1 Q. And, do you know if Merrimack Station, under the  
2 Waxman-Markey bill, would have qualified for free  
3 allowances?

4 A. Do I know for a fact? No.

5 Q. Okay. If they were to have qualified for free  
6 allowances, it certainly would have reduced their cost  
7 of carbon, wouldn't it?

8 A. From what perspective?

9 Q. From the perspective they wouldn't have to go into the  
10 marketplace and otherwise buy those allowances, they  
11 would have been given to them, is that correct?

12 A. No. As I explained earlier, that -- I mean, I think  
13 there's two different things here that are getting  
14 conflated. And, one is the total cost and the other is  
15 the price. This is a graph of prices. And, the price  
16 is the market price for buying and selling those CO2  
17 allowances. The price, it's an opportunity cost, it's  
18 what that allowance is worth to PSNH. If they're given  
19 the allowance, they can not emit that unit of SO2 and  
20 sell the allowance at the market price.

21 Q. Instead of having to buy the allowance to comply with  
22 the CO2 requirements, is that right?

23 A. It's not necessarily an either/or. But they can --  
24 there's more than just those two options available

[WITNESS: Stanton]

1 here. So, once they have the allowance, whether they  
2 have been given it or they purchased it, they have it  
3 available to them to sell. I think it's a false  
4 dichotomy that you're expressing. And, that's because  
5 what you want to compare is a scenario in which the CO2  
6 price exists. And, then, you would -- you would  
7 estimate the effect of that CO2 price under each of  
8 the -- I'm forgetting what they call them, I think  
9 "cases" in here, and there is a scrubber case, a  
10 purchase of a natural gas plant case, and a market  
11 purchase case. And, so, what you want to compare is  
12 "how does the existence of the same CO2 price impact on  
13 PSNH in each of those three cases?" And, if they're  
14 not emitting the CO2, then they could sell those  
15 allowances, presumably, though.

16 Q. And, if they are emitting the CO2, then they used the  
17 free allowances to comply with the requirements, is  
18 that right?

19 A. Yes. But I don't understand that to reduce the price.

20 Q. Okay. But it would reduce the compliance obligations,  
21 because they wouldn't have to buy those allowances,  
22 isn't that right?

23 A. Do you mean the cost?

24 Q. The cost to comply?

[WITNESS: Stanton]

1 A. Yes. And, that could have an effect for ratepayers.  
2 That's different from a change in the price, which is  
3 what's shown here.

4 Q. Now, on your, again, looking at Exhibit 15, the Synapse  
5 carbon projections --

6 A. What's Exhibit 15? Sorry. Oh, it's this.

7 Q. Right.

8 A. Yes. Uh-huh.

9 Q. The Synapse carbon projections didn't account for the  
10 allocation of any free allowances, did they?

11 A. The Synapse carbon projections are not based on a  
12 single bill of federal -- about a federal cap and trade  
13 policy. So, no. They are looking broadly at what  
14 utilities are putting into their own planning in IRPs,  
15 and they're also looking at a variety of different  
16 bills and other sources.

17 Q. But, just so we're clear, when you apply Synapse carbon  
18 projections to Merrimack Station in this case, you are  
19 not accounting for the fact in those projections that  
20 Merrimack Station may actually have received free  
21 allowances, is that right?

22 A. I suppose. But I would account -- were I to account  
23 for it, it would be an adjustment of zero. I don't  
24 understand it to change the price.

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 Q. And, you certainly didn't account for the fact that,  
2 under the New Hampshire Clean Power Act, at that time,  
3 PSNH already qualified for free CO2 allowances, isn't  
4 that right?

5 A. Have I accounted for that in some way? No.

6 Q. All right. Back to Page 11 of your testimony please.  
7 In the middle of the page, you're asked a question  
8 "Does Exhibit 4 represent the type of analysis that a  
9 reasonable and prudent utility manager would have  
10 undertaken in 2009 before [constructing] the Scrubber?"

11 And, you say "Yes, it does." Do you see that?

12 A. Yes, I do.

13 Q. Okay. We had a technical session regarding this case  
14 on September 8th, 2014. And, in that technical  
15 session, your attorney, Ms. Frignoca, asked Mr. Kaufman  
16 the following question: She said "Would you agree that  
17 different economists might come to different  
18 conclusions about future CO2 prices?" And, he agreed  
19 and said "Yes". I want to ask you the same question.  
20 Would you agree that different economists might come to  
21 different conclusions about future CO2 prices?

22 A. Yes.

23 Q. Okay. So, having that in mind, I think we can at least  
24 agree that whatever we ultimately decide was the

[WITNESS: Stanton]

1 representation of those EIA prices on that Exhibit 15,  
2 they're different than the Synapse prices, aren't they?

3 A. Yes, they are.

4 Q. Okay. And, again, having in mind that you testified  
5 earlier that EIA is, in fact, a reputable agency, do  
6 you think it's reasonable to say that a prudent utility  
7 manager in 2008 might have relied on those EIA  
8 projections, instead of the Synapse projections?

9 MS. FRIGNOCA: I just wanted to -- an  
10 objection --

11 (Court reporter interruption.)

12 MS. FRIGNOCA: I'm going to object. Her  
13 analysis is not from the perspective of 2008. It's from  
14 the perspective of 2009. If she can answer the  
15 hypothetical, she can, but --

16 MR. NEEDLEMAN: You're right. I'm  
17 sorry. Let me rephrase that, because I'm looking at this  
18 question here again.

19 BY MR. NEEDLEMAN:

20 Q. So, focusing on your question from the perspective of  
21 early 2009, would it have been reasonable for a prudent  
22 utility manager to look at the EIA analysis of the  
23 Waxman-Markey bill, if they wanted to have some sense  
24 of what the future price of carbon might have been?

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 A. To look at it, and then to look at a number of other  
2 things, certainly, to look at that as one thing they  
3 were looking at among many.

4 Q. Okay. But, again, in 2009, if you're trying to get a  
5 sense of where the price of carbon might go, it's not  
6 unreasonable to look at that projection, is it?

7 A. Among other things, yes.

8 Q. Okay. And, so, if we were to take that EIA projection  
9 and plug it into your Exhibit 4, and leave everything  
10 else exactly as you had it, but just plug that EIA  
11 projection in, do you have any idea how it would change  
12 the results?

13 MS. FRIGNOCA: I'm going to object to  
14 the form of the question. I think she said that it's not  
15 an EIA projection that they used. And, if you -- to the  
16 extent that you can answer the hypothetical.

17 MR. NEEDLEMAN: I think we've already  
18 clarified that difference.

19 CMSR. HONIGBERG: Well, actually,  
20 maybe -- maybe not. Are you asking, if you plugged in the  
21 Harrison/Kaufman version or modification of it, because I  
22 think the witness's testimony is "that's not the EIA  
23 projection"?

24 MR. NEEDLEMAN: Well, having in mind

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1 that there's a difference between the two, which I'm sure  
2 we'll have cleared up, that's my question to the witness.

3 BY MR. NEEDLEMAN:

4 Q. Plugging in what Harrison and Kaufman used here to your  
5 model, but leaving everything else exactly as you left  
6 it, do you have any idea of what it would do to change  
7 your results?

8 A. I have not done that analysis.

9 Q. Okay. Harrison and Kaufman have done that analysis,  
10 though. Are you familiar with that?

11 A. I thought they made more changes than that single one  
12 that you're expressing.

13 Q. Okay. Why don't we look at Exhibit 16 that Harrison  
14 and Kaufman did. It's the next page over.

15 A. Oh, I see. Uh-huh.

16 Q. So, in your original run of the model, using the  
17 Synapse prices, you determined that four of your five  
18 scenarios would result in a net negative benefit to  
19 PSNH ratepayers, is that right?

20 A. Yes. That's right.

21 Q. And, then, when Harrison and Kaufman did this analysis  
22 here, substituting their CO2 prices in that above chart  
23 that we've talked about, and leaving everything else  
24 the same in the model, they found that in four or five

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

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1 cases it actually resulted in a net benefit to PSNH  
2 ratepayers, is that right?

3 A. That's what's shown here.

4 Q. Okay. Now, so far, on Pages 11 and 12, what we've  
5 talked about are environmental variables in your model.  
6 There are other variables that you relied on as well,  
7 aren't there?

8 A. Yes.

9 Q. Now, on the bottom of Page 12, near the bottom, the  
10 last bullet that you reference says that you used an  
11 "assumption that Merrimack would maintain its 2008  
12 capacity factor of 72 percent", is that right?

13 A. Yes. That's correct.

14 Q. And, you built that into your model and then you  
15 projected that forward, is that right?

16 A. That it would stay constant?

17 Q. Yes.

18 A. Yes. As a projection, uh-huh.

19 Q. Okay. And, the first bullet, back on Page 11, you said  
20 that you also used "2008 variable costs from Merrimack  
21 from FERC Form 1 data". Can you tell us what "FERC  
22 Form 1" is?

23 A. So, "FERC Form 1" is part of an EIA dataset that they  
24 make publicly available. There's a number of different

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1 forms in it. And, it's reporting from the -- from the  
2 electric generating units, they report it to EIA, and  
3 then EIA processes that some way and produces this data  
4 about their operations.

5 Q. Where did you get this? Is that a public document?

6 A. Yes.

7 Q. Okay. When you prepared this report, I assume that you  
8 worked with other people to do that?

9 A. Yes.

10 Q. And, I assume that you ultimately oversaw the  
11 preparation of this document?

12 A. Yes.

13 Q. Did you select 2008 or did somebody else that you were  
14 working with select 2008?

15 A. Do you mean, did I select it as the base year?

16 Q. Yes.

17 A. I selected it.

18 Q. Okay. Now, let's talk about the capacity factor for a  
19 moment. Do you agree with me that, with respect to the  
20 model that you used, the lower the capacity factor you  
21 use, the worse the results will look for PSNH?

22 A. Yes, I would say so. Uh-huh.

23 Q. And, conversely, if you use a higher capacity factor,  
24 the results will look better for PSNH, wouldn't they?

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 A. Yes.

2 MR. NEEDLEMAN: I want to mark another  
3 exhibit.

4 (Ms. Frazier distributing documents.)

5 MR. NEEDLEMAN: Is this 75?

6 CMSR. HONIGBERG: We blew past 75 a long  
7 time ago.

8 MR. NEEDLEMAN: Okay.

9 CMSR. HONIGBERG: Eighty-two (82).

10 (The document, as described, was  
11 herewith marked as **Exhibit 82** for  
12 identification.)

13 MR. NEEDLEMAN: Eighty-two. Thank you.

14 MR. GLAHN: Seventy-five (75) to 81  
15 weren't important. So, we're just skipping over them.

16 MR. NEEDLEMAN: I can't keep track.

17 BY MR. NEEDLEMAN:

18 Q. So, this is a chart that's titled "Merrimack Station -  
19 Annual Generation and Capacity Factor".

20 A. Uh-huh.

21 Q. And, it has information for the years 2004 through  
22 2008. And, you'll note at the bottom that all of the  
23 data was obtained from FERC Form 1 Reports. So, all  
24 publicly available information that you could have had

[WITNESS: Stanton]

1 available to you, is that right?

2 A. Yes.

3 Q. Okay. Now, in 2008, you'll note that that blue line  
4 represents the capacity factor. And, in 2008, you'll  
5 note that the capacity factor, as you reported in your  
6 report, was 73 percent, is that right?

7 A. Sorry. Say it again. I'm trying to read this. So,  
8 I'm seeing "72 percent", no?

9 Q. Seventy-two. Well, let's look at your report. I'm  
10 sure you had it right there. "Seventy-two percent".  
11 Yes.

12 A. Uh-huh.

13 Q. And, the capacity factor, in fact, in the previous  
14 years, was quite a bit higher, wasn't it?

15 A. Yes.

16 Q. And, if we look at that dotted, sort of purple-dotted  
17 line at the top, that represents the average capacity  
18 factor from the years 2005 through 2007. Do you see  
19 that?

20 A. No. Sorry.

21 Q. It's that top dotted line. It looks sort of magenta  
22 colored.

23 A. The 3-year average?

24 Q. Yes.

[WITNESS: Stanton]

1 A. The one that's labeled "3-year average"?

2 Q. Three-year average.

3 A. Okay.

4 Q. Based 2005 to 2007 data. And, we also have the  
5 five-year average on here, which is that dotted green  
6 line, 2004 to 2008 data, which includes the year that  
7 you used. Do you see that?

8 A. Yes. I'm trying to understand how the dotted red line  
9 at the top could be correct.

10 Q. It's an average of three years, from 2005 to 2007.

11 A. So, the average of --

12 Q. The capacity factor.

13 A. But the average of, I'm trying to figure this out here,  
14 of something like 77, 79, and 81 is -- or, 79 and 82 is  
15 81? That's the average of those three numbers?

16 Q. That's what it is on the chart, yes.

17 A. Okay. I don't have a calculator in front of me. That  
18 seems like an unlikely average for those three numbers.

19 Q. All right. Well, I'm sure your counsel will question  
20 us about that, if that's the case. My point, though,  
21 is that you certainly had FERC Form 1 data for those  
22 preceding years available to you, isn't that right?

23 A. Yes.

24 Q. And, you certainly could have accessed that data in

[WITNESS: Stanton]

1 order to generate your report, couldn't you?

2 A. Sure.

3 Q. Were you aware, when you prepared your report, that  
4 2008 had actually been a year at Merrimack Station when  
5 they experienced a major outage?

6 A. I don't recall. I mean, this was quite a while ago  
7 when I was preparing what you're referring to as my  
8 "report", the analysis that I did. I'm not -- I mean,  
9 it seems like it's going on a year ago now. So, I  
10 can't say what I had in my head at that moment.

11 Q. So, you didn't know at the time you prepared your  
12 report that they had replaced the turbine that year and  
13 also done major boiler work?

14 A. I don't believe that's what I said.

15 MS. FRIGNOCA: That's --

16 BY MR. NEEDLEMAN:

17 Q. Did you know it?

18 A. I think I just answered that. Do you want me to answer  
19 it again?

20 Q. I'm not sure I -- if you answered it, I guess it will  
21 be in the record. I'm not sure I quite got your  
22 answer, but --

23 CMSR. HONIGBERG: And, in all honesty,  
24 I'm not sure I did either. So, just --

[WITNESS: Stanton]

1 WITNESS STANTON: I'm happy to answer it  
2 again.

3 CMSR. HONIGBERG: Thank you.

4 WITNESS STANTON: Oh.

5 **BY THE WITNESS:**

6 A. I think the question was, at the moment, when I was  
7 preparing my Exhibit 4, did I know about the outages in  
8 2008? And, I can't say what I knew at that moment. I  
9 prepared that exhibit a year ago. This data was  
10 available to me. I looked at capacity factors. And,  
11 the judgment that I used is that it would be a good  
12 assumption to use 72 percent going out into  
13 the forward. And, I haven't seen anything to change my  
14 mind about that.

15 **BY MR. NEEDLEMAN:**

16 Q. Well, you'd certainly agree with me that, based upon  
17 looking at this chart, 2008 was an aberrant year with  
18 respect to a capacity factor, wasn't it?

19 A. It's lower than the other years on the chart.

20 Q. Were you aware, when you came to testify today, that  
21 2008 had been a year when Merrimack Station experienced  
22 a significant outage?

23 A. Yes, I was. And, I'm not recalling why that -- that  
24 came up quite recently. But, yes, I was aware of that.

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 Q. So, looking at this chart, and having in mind that this  
2 was all publicly available data to you at the time,  
3 would you agree with me that using a three-year average  
4 or even a five-year average might have produced a more  
5 representative result of what the capacity factor is  
6 than selecting a single year, like 2008?

7 A. I'm not sure what you mean by "is". What I was trying  
8 to do was to project capacity factors going out into  
9 the future.

10 Q. I understand.

11 A. Uh-huh.

12 Q. And, if some reasonable person were trying to make a  
13 decision about how to project capacity factors going  
14 out into the future, --

15 A. Uh-huh.

16 Q. -- wouldn't it be more representative to select a  
17 three- or five-year average, rather than to choose a  
18 single year?

19 A. I think that, to look at a three- to five-year average,  
20 and to weigh that against other contributions.

21 Q. Like what?

22 A. Migration rates, the capacity factors of similar plants  
23 in the area, in New Hampshire and New England, or maybe  
24 in the U.S. generally. So, to look at the trend in

[WITNESS: Stanton]

1 capacity factors in coal plants. To look at PSNH's  
2 trend in migration rates of customers. You want to  
3 consider all those things together.

4 Q. But you didn't do any of that in your analysis when you  
5 picked 2008, did you? You didn't look at migration  
6 rates, you just picked a capacity factor?

7 A. I don't recall saying that. And, I don't recall  
8 writing that down here. That's the capacity factor  
9 that, in my judgment, I used as keeping steady into the  
10 future. I viewed it as being kind of a conservative  
11 assumption. I'm trying to do an analysis from the  
12 point of view of March 2009, and not take into  
13 consideration anything that I know about what would  
14 happen after that. So, not take into consideration  
15 what I think we all know about capacity factors, if you  
16 extended this chart going outwards, right, to stop  
17 there. But what we did know at that time were some  
18 information about migration rates. And, we did know at  
19 that time some information about other coal plants.  
20 So, I think that it's reasonable to use this one year,  
21 which was lower than the other years, certainly, but  
22 there are other factors that are pushing towards the  
23 idea that in the future it would be lower still. It  
24 seems like a conservative assumption to me.

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 Q. That bullet at the bottom of Page 12, where you say the  
2 assumption that "Merrimack would maintain its 2008  
3 capacity factor of 72 percent", --

4 A. Uh-huh.

5 Q. -- is there any place else in your report or anywhere  
6 in any of your attachments where you elaborate on why  
7 you chose that capacity factor the way you just did on  
8 the stand?

9 A. Not that I know of. I think that some of these  
10 questions were asked in discovery. But, I mean, there  
11 were questions about -- there were certainly questions  
12 about migration rate in discovery. But, like I said, I  
13 don't have all of it in my head, though.

14 Q. So, knowing what we know now, and now having had this  
15 conversation, would you agree with me that it really  
16 would have been more representative in Exhibit 4 to  
17 have used an average of three or five years for a  
18 capacity factor, rather than a single aberrant year,  
19 like 2008?

20 A. No, I disagree.

21 CMSR. HONIGBERG: Mr. Needleman, before  
22 you put away Exhibit 82, can I ask a question? Because  
23 I'm a little confused by how it's labeled --

24 MR. NEEDLEMAN: Sure.

[WITNESS: Stanton]

1 CMSR. HONIGBERG: -- and what the lines  
2 mean. The three-year average, I think you said is a  
3 "three-year average of '05, '06 and '07", is that right?

4 MR. NEEDLEMAN: That's my understanding.

5 CMSR. HONIGBERG: Okay. So, it's not  
6 labeled that way, but --

7 MR. NEEDLEMAN: I think it is at the  
8 bottom.

9 CMSR. HONIGBERG: Oh, I see. It's not  
10 labeled next to the red-dotted line.

11 MR. NEEDLEMAN: Right.

12 CMSR. HONIGBERG: So, its placement  
13 along the way to include 2004 and 2008 is mostly to give  
14 us a visual of where it would be?

15 MR. NEEDLEMAN: Yes. Probably shouldn't  
16 have included those years.

17 CMSR. HONIGBERG: Okay. And, then, the  
18 green-dotted line, which is the five-year average, that  
19 includes all five years, '04, '05, '06, '07, and '08, is  
20 that right?

21 MR. NEEDLEMAN: That's correct.

22 CMSR. HONIGBERG: Okay. Thank you.

23 MR. NEEDLEMAN: I'm going to take a  
24 moment to mark another exhibit.

[WITNESS: Stanton]

1 (Ms. Frazier distributing documents.)

2 SP. CMSR. IACOPINO: Thanks.

3 CMSR. HONIGBERG: And, this will be  
4 "83".

5 (The document, as described, was  
6 herewith marked as **Exhibit 83** for  
7 identification.)

8 BY MR. NEEDLEMAN:

9 Q. So, this exhibit that we just marked is the FERC Form  
10 1. It's a tab in your spreadsheet, Exhibit 4. It's  
11 the FERC Form 1 for the year 2008. And, it's my  
12 understanding it's the document that you have produced  
13 and relied upon in support of your report, is that  
14 right?

15 A. I believe so. I mean, I'd have to compare it to the  
16 spreadsheet, unless this is coming directly out of my  
17 spreadsheet. But, yes, I relied on FERC Form 1.

18 Q. Yes. It came straight out of your spreadsheet.

19 A. Okay.

20 Q. So, let's look at Page 2 of this document. And, in  
21 your testimony again, you also cited to this FERC Form  
22 1 for "variable costs for Merrimack Station", is that  
23 right?

24 A. Can you repeat the question?

[WITNESS: Stanton]

1 Q. Yes. I'm sorry. In your testimony, on Page 11, the  
2 bottom first bullet, you say that one of the things you  
3 relied on to create Exhibit 4 were "2008 variable costs  
4 for Merrimack from FERC Form 1 data".

5 A. Yes.

6 Q. All right. And, when we talk about "variable costs",  
7 when we looked at your spreadsheet, we see that you  
8 plugged in as variable costs that last number in the  
9 column on Page 2 of "15.4", do you see that?

10 A. Yes, I do.

11 Q. Okay. That's the -- I guess the operating costs in  
12 dollars per thousand megawatt-hours for Merrimack  
13 Station for 2008, is that right?

14 A. I believe so, yes.

15 Q. And, then, you took that number, and just like with  
16 capacity factor, you projected that forward as well,  
17 right?

18 A. Yes.

19 Q. Okay. And, that, in part, forms the basis of  
20 Exhibit 5, which are those five scenarios that you  
21 generated, is that right?

22 A. Yes.

23 (Ms. Frazier distributing documents.)

24 CMSR. HONIGBERG: This is "84".

[WITNESS: Stanton]

1 MR. NEEDLEMAN: Eighty-four.

2 (The document, as described, was  
3 herewith marked as **Exhibit 84** for  
4 identification.)

5 BY MR. NEEDLEMAN:

6 Q. Now, again, with respect to these annual Merrimack  
7 operating costs, it's true that the higher the cost you  
8 use, the less economical Merrimack Station appears in  
9 your analysis, is that right?

10 A. Yes.

11 Q. And, conversely, the lower the cost you use, the more  
12 economical Merrimack Station appears in your analysis,  
13 is that correct?

14 A. Yes.

15 Q. Okay. So, let's look at this exhibit. This again is  
16 derived all from FERC Form 1 data. And you'll see, if  
17 we correlate this to the FERC Form 1 that you looked at  
18 with that 15.4 number, we can find the 2008 operating  
19 costs represented on this chart. It's the peak of that  
20 blue line, which is the number that you used. Do you  
21 see that?

22 A. Yes, I do.

23 Q. And, it's sort of represented across the top by that  
24 orange dash line. Do you see that?

[WITNESS: Stanton]

1 A. Yes.

2 Q. And, then, that blue line also plots that same data  
3 point, the annual operating costs for Merrimack  
4 Station, for the preceding four years, do you see that?

5 A. Yes.

6 Q. And, in every one of those cases, that operating number  
7 was quite a bit lower, wasn't it?

8 A. Can you restate the question? I didn't quite  
9 understand what you mean.

10 Q. Sure. In the four preceding years to 2008, those  
11 annual operating costs were a fair bit lower than the  
12 number that you used, isn't that correct?

13 A. Yes.

14 Q. And, in fact, again, what we did is we put three- and  
15 five-year averages for those numbers on, and we made  
16 the same mistake by making that three-year average too  
17 long. But we represented what those three and  
18 five-year averages would have looked like. Do you see  
19 that?

20 A. Yes.

21 Q. And, again, in both cases, those three- and five-year  
22 averages are considerably lower than the number you  
23 used, aren't they?

24 A. Yes.

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 Q. So, let's ask the same question we asked before. Don't  
2 you think it's fair to say that somebody doing this  
3 sort of analysis you were doing might more  
4 appropriately have relied on three- and five-year  
5 averages for this type of number, rather than selecting  
6 a single year as you did?

7 A. No, I don't agree.

8 Q. And, why is that?

9 A. The operational costs here are proportional to the  
10 capacity factor. It's the same issue that we were  
11 discussing a few minutes ago, though. If there is a --  
12 not directly proportional, they are in relation to  
13 that. Where, if it's operating more than we expect to  
14 see, that there are greater operational costs. In this  
15 particular year, there were additional outages and  
16 maintenance that seem relevant to it. I chose, as a  
17 simplifying assumption, a 2008 base year. It was a  
18 simple assumption to be able to conduct the analysis.

19 I think that an alternate way, yes,  
20 would have been to use an average of several years.  
21 But this was the way in which I conducted the analysis,  
22 and I think different people would approach it  
23 differently.

24 Q. Now, you began your statement by rejecting my notion

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 and saying that "the operating costs and the capacity  
2 factor were proportional". So, you were dismissive of  
3 this. But, in your own report, you have separate  
4 bullet points for capacity factor and variable costs,  
5 just like I just used. So, why would you have two  
6 separate bullets, if they're related and you could have  
7 only used one?

8 A. That isn't the way that we model things. But I did  
9 backtrack and say that "they're not directly  
10 proportional". But, certainly, just because -- let's  
11 say they were, that doesn't mean we only include one of  
12 them in the spreadsheet. That's not how we construct a  
13 model.

14 Q. So, do you have any idea, as you sit here today, how  
15 the output of your model would change, if we used  
16 three- and five-year averages for operating costs and  
17 capacity factors, instead of selecting a single year  
18 the way you did?

19 A. No. I haven't done that analysis.

20 Q. Bates Page 16 of your testimony please. The second to  
21 last point that you make, talking about "prudent  
22 costs", and you say that you "believe 23 million spent  
23 by PSNH prior to 2009, together with the penalties for  
24 cancellation set out in the major Scrubber contracts,

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 are prudent costs." Now, this was also built into your  
2 Exhibit 4 analysis in some way, wasn't it?

3 A. What was?

4 Q. The cancellation costs.

5 A. I think you know that it isn't. And, I've been pretty  
6 specific that it wasn't.

7 Q. Should it have been?

8 A. If I had that information at my disposal, then I would  
9 have included it, yes.

10 Q. We have that information now, don't we? Mr. Smagula  
11 provided it.

12 A. After I submitted my testimony.

13 Q. Do you have any idea how inserting that information  
14 into your model would change its output?

15 A. I haven't done that analysis.

16 Q. I'm going to refer to Ms. Shapiro's testimony for a  
17 minute. I'm not sure we need to turn to it, but if we  
18 can -- we can, if you want to. I don't want to deprive  
19 you with a chance to look at it. Do you review  
20 Ms. Shapiro's testimony for this proceeding?

21 A. Which testimony?

22 Q. Lisa Shapiro, for PSNH.

23 A. I don't think so.

24 Q. Okay.

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 A. It's in the book.

2 Q. Why don't you take a moment to find it.

3 MR. NEEDLEMAN: Well, actually, maybe I  
4 can make it easier, if you want. Pass this one around.  
5 I'm going to pass around CLF's response to PSNH Data  
6 Request Number 10, and we can deal with it that way.

7 WITNESS STANTON: Okay.

8 CMSR. HONIGBERG: Mr. Needleman, while  
9 we're doing that, where are you in your outline?

10 MR. NEEDLEMAN: I'm actually getting  
11 pretty close. Maybe fifteen minutes, a little bit more.

12 CMSR. HONIGBERG: Okay.

13 (Ms. Frazier distributing documents.)

14 MR. NEEDLEMAN: Do we want to take a  
15 break when I'm done with this line?

16 CMSR. HONIGBERG: Yes. We'll take a  
17 five-minute break after you finish with this line.

18 MR. NEEDLEMAN: All right. Let me just  
19 finish this one up.

20 (The document, as described, was  
21 herewith marked as **Exhibit 85** for  
22 identification.)

23 BY MR. NEEDLEMAN:

24 Q. So, the question we asked here is, in your analysis,

[WITNESS: Stanton]

1 did you "take into account the public interest goals  
2 that the New Hampshire Legislature identified as  
3 critical components [of the] Scrubber Law?" Things  
4 like jobs and so forth, which is what Ms. Shapiro  
5 talked about. And, it's my understanding you did not  
6 account for any of those in your analysis, is that  
7 correct?

8 A. Can you ask the question a little more directly?

9 Q. Yes. There are various public interest goals that were  
10 identified by the New Hampshire Legislature, aside  
11 purely from an economics analysis.

12 A. Uh-huh.

13 Q. For example, the importance of jobs, the importance of  
14 electric reliability, things like that. It's my  
15 understanding that your analysis did not account for  
16 any of those, is that correct?

17 A. My analysis did not account for changes in jobs or --  
18 what was the second one?

19 Q. Any of the public interest goals identified in the  
20 statute. It was purely an economic analysis measured  
21 from March 2009?

22 A. It was purely a cash flow analysis. I mean, there are  
23 other kinds of economic analyses that you could do.  
24 But this is a cash flow of the plant itself, yes.

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 MR. NEEDLEMAN: Okay. Thank you.

2 CMSR. HONIGBERG: All right. So, why  
3 don't we take a break. We'll come back at 25 after.

4 (Recess taken at 11:15 a.m. and the  
5 hearing resumed at 11:31 a.m.)

6 (Ms. Frazier distributing documents.)

7 CMSR. HONIGBERG: Mr. Needleman, I see  
8 we are marking another exhibit?

9 MR. NEEDLEMAN: Yes.

10 CMSR. HONIGBERG: This will be "86".

11 (The document, as described, was  
12 herewith marked as **Exhibit 86** for  
13 identification.)

14 MR. NEEDLEMAN: Are we ready?

15 CMSR. HONIGBERG: I believe we are.

16 MR. NEEDLEMAN: Okay.

17 BY MR. NEEDLEMAN:

18 Q. Dr. Stanton, would you please go to Page -- the bottom  
19 of Page 15 of your testimony.

20 A. Yes.

21 Q. And, you're asked that question at the bottom of 15  
22 about your opinion concerning divestiture and  
23 retirement of Merrimack Station. Do you see that?

24 A. Yes, I do.

[WITNESS: Stanton]

1 Q. And, again, referring to your 2000 [sic] analysis,  
2 asked whether it's "prudent for the Company to have  
3 considered that?" And, you answer with one word,  
4 "yes". And, that's the only testimony you've got about  
5 that issue. We asked you a data question about that,  
6 which is now marked as "Exhibit 86", when we were  
7 looking for the basis of that opinion. And, the  
8 answer, after an objection, was that the basis of that  
9 opinion is "set forth in [your] prefiled testimony".  
10 Do you see that?

11 A. Yes.

12 Q. And, I would note that the response only refers to  
13 "retirement", it actually doesn't refer to  
14 "divestiture". But am I correct in concluding that  
15 anything at all that you might have to say about  
16 retirement or divestiture is encapsulated in your  
17 Exhibit 4, and then the scenarios that follow in  
18 Exhibit 5, is that correct?

19 A. All of the analysis that I did on this topic is there.

20 Q. And, that's what you're relying on for that one answer  
21 and there's nothing else, is that right?

22 A. I'm not sure what you're asking. Yes, I'm confused by  
23 the question. I did analysis, I provided it as  
24 exhibits. That's the analysis that I relied on in my

[WITNESS: Stanton]

1 testimony.

2 Q. And, I am just trying to be clear that, with respect to  
3 this issue of divestiture and retirement, other than  
4 the exhibits that you've provided here, and what you've  
5 said in the prefiled testimony, there's nothing else  
6 that you're relying on to support that one statement?

7 A. No.

8 Q. Okay. Did you read Mr. Kahal's testimony?

9 A. I read a few parts of it. I didn't read it in its  
10 entirety.

11 Q. Do you remember anything that Mr. Kahal had to say  
12 about capacity factors and migration?

13 A. No.

14 Q. Do you understand that, in fact, capacity factor and  
15 migration have nothing to do with each other, because  
16 Merrimack Station is going to be dispatched in the  
17 wholesale market, predicated purely on economics, and  
18 not on the number of customers PSNH is serving? Isn't  
19 that right?

20 A. There's an exception to that. And, this is not my area  
21 of expertise, in particular. But it's my understanding  
22 that Merrimack does not always dispatch economically,  
23 but that it's able to, and I don't recall what the term  
24 is for it, but to declare that it is dispatching or

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1           that it needs to dispatch off of economic order, and  
2           that at times Merrimack does that.

3                         MR. NEEDLEMAN: Okay. I'm going to hand  
4           out another exhibit. Denise, before you hand that out.

5 BY MR. NEEDLEMAN:

6 Q.    Let me just ask you a couple of questions. I don't  
7           think we've looked yet at Page 7 of your testimony.  
8           But I think we've covered this topic. At the bottom of  
9           Page 7, you're asked the question "What's the critical  
10          time frame here?" And, after going through some  
11          preliminaries, you say that "Certainly, a thorough cash  
12          flow analysis conducted in March 2009, before beginning  
13          construction, was required for prudence." So, March  
14          2009 really seems to be your critical time frame here,  
15          is that right?

16 A.    Yes.

17 Q.    Okay. And, again, it's your opinion that, if PSNH had  
18          conducted the sort of cash flow analysis that you  
19          conducted here in March 2009, it would have led them to  
20          the conclusion that the plant -- that it was uneconomic  
21          to proceed, is that right?

22 A.    Yes.

23                         MR. NEEDLEMAN: Okay. I'm going to pass  
24           out another exhibit.

[WITNESS: Stanton]

1 (Ms. Frazier distributing documents.)

2 MR. BERSAK: And, what number is this?

3 CMSR. HONIGBERG: Eighty-seven?

4 "Eighty-seven".

5 (The document, as described, was  
6 herewith marked as **Exhibit 87** for  
7 identification.)

8 BY MR. NEEDLEMAN:

9 Q. So, this is a letter from Conservation Law Foundation  
10 to PSNH. You see at the top of Page 1 it's dated  
11 "February 26, 2009". So, pretty much in the heart of  
12 that critical period that you were just talking about,  
13 isn't that right?

14 A. Yes. That's the date.

15 Q. All right. And, if you look at the last page of the  
16 letter on that cc list, --

17 A. I haven't found that yet. Is that --

18 Q. Page 7 of the letter.

19 A. Yes.

20 Q. CLF not only sent this letter to PSNH, but they copied  
21 the head of the U.S. Environmental Protection Agency in  
22 Washington, they copied the Regional EPA Administrator  
23 in Boston, New Hampshire Governor, Commissioner of the  
24 Department of Environmental Services, the head of the

[WITNESS: Stanton]

1 State Air Resources Division. You see all that?

2 A. Yes.

3 Q. All right. Can you go to the top of Page 2? That page  
4 titled "background"?

5 A. Yes.

6 Q. And, the second paragraph.

7 A. Yes.

8 Q. And, that paragraph reads "PSNH is required under New  
9 Hampshire law to install by 2013", and it goes on, but  
10 essentially talks about the Scrubber. Do you see that?

11 A. Yes.

12 Q. Have you ever seen this letter before today?

13 A. No.

14 Q. So, can you explain to me then how it is that, in this  
15 time period, your client is representing to all of  
16 these public officials that PSNH is "required" to  
17 construct this Project, at the same time that you are  
18 offering the opinion, in that exact same time period,  
19 that they should not have gone forward with the  
20 Project?

21 MS. FRIGNOCA: Objection. I'm going to  
22 object to that question. First off, it's asking her to  
23 interpret a legal document, and it's interpreting her to  
24 speak on behalf of CLF in what was intended in this

[WITNESS: Stanton]

1 letter. And, she can't speak to the state of mind of the  
2 person who drafted this letter. And, she is not here as  
3 a -- to testify about legal matters.

4 CMSR. HONIGBERG: Mr. Needleman.

5 MR. NEEDLEMAN: I don't think there's  
6 anything legal about this letter. This is a letter to the  
7 president of PSNH, copying all of these public officials,  
8 recounting what the law says. And, it's CLF representing  
9 to all these officials at that time that PSNH is required  
10 to do it. And, it directly contradicts this witness's  
11 testimony. And, I'm curious to know if this witness has  
12 an explanation for it or if they considered this when they  
13 wrote their testimony.

14 CMSR. HONIGBERG: Ms. Frignoca.

15 MS. FRIGNOCA: To clarify, it is indeed  
16 a legal document. It is a "Notice to Intent to File Clean  
17 Air Act Citizen Suit", which is why all of those people  
18 are copied on the letter. And, it is intended as a legal  
19 document of -- it's a "Notice of Intent" letter. It is  
20 not something that would be used as an admission by a  
21 party in any legal proceeding. And, I don't believe that  
22 this witness should be questioned about a Notice of Intent  
23 letter in a separate docket or separate matter.

24 CMSR. HONIGBERG: Mr. Needleman.

[WITNESS: Stanton]

1 MR. NEEDLEMAN: The language to me could  
2 not be more plain here. And, even though the purpose of  
3 the letter is a Notice of Intent, I don't think there's  
4 any legalese involved in that. This is a clear position  
5 stated by CLF at the time that directly contradicts this  
6 witness's testimony. And, I think we're entitled to know  
7 whether she considered it and whether she has an  
8 explanation for it.

9 CMSR. HONIGBERG: I don't recall the  
10 question being what you just finished your last statement  
11 with. I think the question started with "how could you".  
12 So, can you -- do you have the question written down in  
13 front of you?

14 MR. NEEDLEMAN: No. But I can re-ask  
15 it.

16 CMSR. HONIGBERG: Okay. Why don't you  
17 re-ask it. And, Ms. Frignoca, you can, if you need to  
18 object to the question, I'll understand the grounds. Go  
19 ahead.

20 BY MR. NEEDLEMAN:

21 Q. Did you consider this at the time you prepared your  
22 testimony?

23 CMSR. HONIGBERG: Looks like there's no  
24 objection to that question.

[WITNESS: Stanton]

1 WITNESS STANTON: Okay.

2 **BY THE WITNESS:**

3 A. No.

4 BY MR. NEEDLEMAN:

5 Q. Now that you have this in front of you, can you explain  
6 the apparent contradiction between what CLF said in  
7 this letter and the conclusions that you reached in  
8 your testimony?

9 MS. FRIGNOCA: Objection.

10 CMSR. HONIGBERG: Sustained.

11 MS. FRIGNOCA: I move to not have that  
12 exhibit admitted into evidence.

13 CMSR. HONIGBERG: None of the exhibits  
14 that have been marked for identification at this point  
15 have been made full exhibits, as I think we've discussed a  
16 couple of times. When we circle back to do that would be  
17 a time to raise that objection.

18 MS. FRIGNOCA: Thank you. I apologize.

19 CMSR. HONIGBERG: No need to. It's  
20 confusing to me, too, sometimes.

21 MS. FRIGNOCA: Thank you.

22 (Ms. Frazier distributing documents.)

23 CMSR. HONIGBERG: So, this is "88".

24 (The document, as described, was

[WITNESS: Stanton]

1 herewith marked as **Exhibit 88** for  
2 identification.)

3 MR. NEEDLEMAN: Ready to continue?

4 CMSR. HONIGBERG: Go ahead.

5 MS. FRIGNOCA: Before -- I'm sorry,  
6 before we begin questions on this, I just want to note  
7 that this is a letter dated "February 28, 2012". And, I  
8 guess I would like an offer of proof as to how a letter by  
9 us on a completely unrelated matter, three years after the  
10 time frame within which Dr. Stanton did her testimony, is  
11 something that this witness should be expected to ask  
12 questions -- answer questions about.

13 CMSR. HONIGBERG: I have no idea what  
14 he's going to do with this document. I think we're going  
15 to at least have to let him start. I don't really know.  
16 So, go ahead, Mr. Needleman.

17 BY MR. NEEDLEMAN:

18 Q. So, we've passed out --

19 MR. NEEDLEMAN: What exhibit is this?

20 SP. CMSR. IACOPINO: Eighty-eight.

21 CMSR. HONIGBERG: Eighty-eight.

22 BY MR. NEEDLEMAN:

23 Q. So, we've passed out Exhibit 88. This is a  
24 February 28, 2012 letter from CLF to EPA. Have you

[WITNESS: Stanton]

1           seen this document before?

2   A.    No.

3   Q.    And, the re: line notes that these are CLF's "Comments  
4           to the Draft NPDES Permit for Merrimack Station", is  
5           that right?

6   A.    That's what it reads, yes.

7   Q.    And, you testified earlier that one of the things you  
8           considered was the Draft NPDES Permit for Merrimack  
9           Station in your analysis, is that right?

10  A.    I don't believe so.  When did I testify that?

11  Q.    I thought in your opening comments you talked about one  
12           of the inputs to your model was water pollution  
13           control?

14  A.    I don't think I mentioned that in the opening, my  
15           opening statement, and I don't think I ever mentioned a  
16           "Draft Permit".

17  Q.    Okay.  My apologies.  Can you turn to Page 11 of this  
18           document.  Now, in the middle, in that bold lettering,  
19           CLF is saying "EPA correctly determined that closed  
20           cycle cooling using wet or wet-dry hybrid mechanical  
21           draft cooling towers, operating on a year-round basis  
22           is the Best Available Technology to control Merrimack  
23           Station's thermal discharges."  Do you see that?

24  A.    Yes.  That's what it reads.

[WITNESS: Stanton]

1 Q. Okay. And, if you go over to Page 13, under "Cost", it  
2 says "EPA concluded that installing closed cycle  
3 cooling technology at Merrimack Station is economically  
4 feasible and that PSNH has not demonstrated otherwise."  
5 And, at the very bottom, "EPA still correctly  
6 concluded" as such. So, this letter is CLF agreeing  
7 with those conclusions about the installation of that  
8 cooling, is that right?

9 MS. FRIGNOCA: Is there a question  
10 pending?

11 CMSR. HONIGBERG: Yes.

12 MS. FRIGNOCA: I'm going to object to  
13 that question. First off, this is from 2012, and you're  
14 asking her to comment on something CLF said in a letter  
15 three years after, which is not relevant to this  
16 Commission's determination of what was reasonable for a  
17 prudent utility to be considering in early Spring of 2009.

18 CMSR. HONIGBERG: Mr. Needleman.

19 MR. NEEDLEMAN: I think it is relevant.  
20 Bear with me, and I'll show you the next exhibit. Her  
21 analysis is an economic analysis. And, this is going to  
22 speak to an economic issue.

23 CMSR. HONIGBERG: Okay. So, the  
24 question that was asked, do you want an answer to it now

[WITNESS: Stanton]

1 or do you want the -- or, are you having the exhibit  
2 marked?

3 MR. NEEDLEMAN: We'll have the exhibit  
4 marked.

5 (Ms. Frazier distributing documents.)

6 CMSR. HONIGBERG: Okay. So, I think the  
7 question has been withdrawn for now. And, this is  
8 "Exhibit 89".

9 (The document, as described, was  
10 herewith marked as **Exhibit 89** for  
11 identification.)

12 BY MR. NEEDLEMAN:

13 Q. Exhibit 89 is the Fact Sheet that the U.S. EPA  
14 originally released with the Draft NPDES Permit. And,  
15 if you turn to Page ix, small ix of the Fact Sheet,  
16 that's where I want to ask the question.

17 A. I'm on that page.

18 Q. Okay. And, there's a large paragraph two-thirds of the  
19 way down that begins "In particular". And, in the  
20 middle of that paragraph, we have the number that EPA  
21 has determined is the cost of this closed cycle  
22 cooling. It's "a total after-tax cash flow cost to  
23 PSNH (present value at 5.3 percent) of 111.8 million".  
24 And, further down, actually, is the actual capital

[WITNESS: Stanton]

1 costs of "52.9 million" for the closed cycle cooling,  
2 which I guess answers one of the questions we were  
3 wrestling with yesterday about that number, but that's  
4 not what I'm focusing on. So, do you see that "\$111.8  
5 million" number?

6 A. Yes.

7 Q. Okay. So, my question then is, if today it cost  
8 \$111.8 million to install closed cycle cooling, and  
9 today CLF is saying that is economic to do so at  
10 Merrimack Station, how is it that it was uneconomic in  
11 2009 for PSNH to proceed with the Scrubber Project?  
12 Don't those contradict each other?

13 MS. FRIGNOCA: Objection. First off,  
14 again, we're talking about something that is well after  
15 the fact. This is from 2011, not 2014. The costs of  
16 building a cooling water tower has gone up tremendously.  
17 And, this is not relevant to the Commission's  
18 decision-making in 2009. He can ask her opinions about  
19 what she assumed about those costs in 2009, and that's  
20 relevant, but not something after-the-fact.

21 CMSR. HONIGBERG: Mr. Needleman.

22 MR. NEEDLEMAN: This docket is full of  
23 after-the-fact information at this point. I can't imagine  
24 why this particular after-the-fact information is not

[WITNESS: Stanton]

1 relevant. Again, this is her client taking a position  
2 that significant additional expenditures are economic at  
3 Merrimack Station, yet the initial expenditure apparently  
4 wasn't. And, I think we're entitled to understand how  
5 those two positions reconcile.

6 CMSR. HONIGBERG: I'm not sure I'm  
7 understanding that that's how these documents do that. It  
8 seems to me that you could ask her some hypotheticals  
9 about circumstances that you believe reflect reality, and  
10 see if that would change her opinions. I'm not sure,  
11 though, that asking her -- you're asking her to accept  
12 what's written here as true, essentially. It's not a  
13 document she wrote. She said she has never seen it  
14 before. I think you're going to have to ask her to assume  
15 certain things if you want to go in the direction of  
16 asking her a hypothetical, if that would change her  
17 opinion about how the Company should have acted in 2009.  
18 And, I don't see that that's where you were.

19 MR. NEEDLEMAN: Okay. I can try that.

20 BY MR. NEEDLEMAN:

21 Q. So, hypothetically, if you were to be doing your  
22 analysis in 2009, and you were to add a cost to that  
23 analysis of \$111 million to install a closed cycle  
24 cooling system, would that change your analysis at all?

[WITNESS: Stanton]

1 A. I'd need to review it. I mean, I already include costs  
2 associated with cooling water per the ELG guidelines.  
3 So, I think that you wouldn't wag one on top of the  
4 other. You would replace one for the other as a  
5 different assumption.

6 Q. Right. Except you understand that the ELG guidelines  
7 are separate from this issue, is that right?

8 A. They're related to it. I'm just saying I'd want to  
9 know what was being replaced, so you were getting a  
10 full picture and not doubling up on something. But,  
11 yes, you could, let's say that this is completely  
12 additional to it, you could add it on top? Is that the  
13 question?

14 Q. Yes. And, that would probably make Merrimack even more  
15 uneconomical in your analysis, isn't that correct?  
16 Added costs?

17 A. I would think so.

18 MR. NEEDLEMAN: Okay. Nothing further.

19 CMSR. HONIGBERG: Okay. Does Staff have  
20 any questions for Dr. Stanton?

21 MS. AMIDON: No. We have no questions  
22 for this witness. Thank you.

23 CMSR. HONIGBERG: Commissioner Iacopino?

24 SP. CMSR. IACOPINO: No questions.

[WITNESS: Stanton]

1 CMSR. HONIGBERG: I think I do.

2 BY CMSR. HONIGBERG:

3 Q. I'm definitely over my head on pricing and costing  
4 carbon allowances, but both phrases were talked about.  
5 Largely, what you were talking about with Mr. Needleman  
6 had to do with price, and the charts that you were  
7 talking about were price of carbon allowances and how  
8 the free allowances did or did not change the price?

9 A. Yes.

10 Q. Is it fair to conclude, though, that if there are free  
11 allowances given to a company, that the cost of  
12 complying with the requirements is lower?

13 A. Yes.

14 Q. Than it would be if they weren't given? I mean, --

15 A. Yes.

16 Q. Okay. And, so, that's how price and cost relate to  
17 each other in this context?

18 A. It's a little complicated here, but, yes, that's true.  
19 I think there's just a couple of different things that  
20 we want to keep track of. And, so, --

21 Q. Help me. Give me a brief, a brief, if you can,  
22 explanation of how the two relate.

23 A. Okay. So, if we're imagining a cap and trade policy,  
24 it could be, or, you know, there's a bunch of different

[WITNESS: Stanton]

1 names that people use around similar policies, like  
2 they're allowances. We could imagine that being set in  
3 two main ways. And, one is to set the price. To say  
4 "Here's what the price is going to be. In this year,  
5 it will be \$25, in this year 26", and so on. Or, we  
6 could come at it from the other direction and set an  
7 amount of allowable emissions, and those are two  
8 different things. And, if we set the price, we are  
9 trying to find a price that we think will achieve a  
10 certain level of emissions. And, if we set the  
11 emissions, then the market is going to set the price,  
12 right? And, so, that's one consideration here, is  
13 where did the price come from? Was it a price that was  
14 set or was it a price that we expect the market to set?  
15 Okay? And, then, there's the issue of "how do you  
16 distribute the allowances?" So, in a lot of different  
17 kinds of mechanisms like this, you could choose  
18 different ways to distribute the allowances. And, you  
19 could give them away, to whomever you think it was a  
20 good idea to give them away to. You could sell them at  
21 an auction.

22 Q. That's the RGGI model, right?

23 A. The RGGI model is a third thing, which I could go into.  
24 It's kind of a -- it's not quite either of those. So,

[WITNESS: Stanton]

1 the second one that I was talking about is that --  
2 where it's a federal policy, right? So, you, the  
3 federal government, chooses to sell these. And, so,  
4 what's different about the distribution is who gets the  
5 money from that in the end, right? The allowances went  
6 out, and the entities that wanted or needed allowances  
7 have allowances. But, if you sell them, then, you, the  
8 federal government, now have a pile of money. And, if  
9 you gave them away, then you don't, but somebody else  
10 has that value, though. And, the value of the  
11 allowance, to a generator or to some other emitter, is  
12 it has two sides to it. One, you may want to use it to  
13 emit, that it's important to you to emit that ton of  
14 carbon dioxide. And, so, you're going to use your  
15 allowance for that. Or, you could do something else so  
16 that you don't emit that, create a cleaner operation,  
17 whatever it is, and then you could sell that allowance.  
18 And, so, it's got a value to you in two ways. And,  
19 you're going to make your decision about which one of  
20 those you're going to do, based on which is -- which  
21 makes you better off, right? Can you -- is it more of  
22 a benefit to you to keep it and use it or to sell it?  
23 And, so, here, the price of the carbon allowance is  
24 what you can get from selling it, regardless of whether

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1           you were given it or not.

2   Q.    That is helpful.  Thank you.

3   A.    Uh-huh.

4   Q.    You also had a discussion with -- or, two separate  
5           discussions with Mr. Needleman about "capacity factor"  
6           and "operating costs".

7   A.    Uh-huh.

8   Q.    And, there was a back-and-forth about how they  
9           correlate.

10  A.    Uh-huh.

11  Q.    Without getting into great detail, it's fair to say  
12           they're not independent of each other, is that right?  
13           They are not independent?

14  A.    They're not independent of each other.  But it's true  
15           that they're not directly proportional, because there  
16           are other kinds of costs that are not a cost per unit  
17           of fuel that you burned, right.

18  Q.    Within your analysis, they're both there as inputs into  
19           your spreadsheet, correct?

20  A.    Yes.  That's right.

21  Q.    And, if one changed in the direction that Mr. Needleman  
22           was asking you about, if the capacity factor had been  
23           higher, costs likely would have been lower, is that  
24           correct?

{DE 11-250} [Day 4/Morning Session ONLY] {10-17-14}

[WITNESS: Stanton]

1 A. If the capacity factor had been higher, I would expect  
2 that the costs were higher as well. It costs you more  
3 to run the plant more.

4 Q. But the cost per unit, I think they were going in  
5 opposite directions, weren't they, on those two charts?  
6 That the -- let's pull out the two exhibits.

7 A. It's here somewhere.

8 Q. Yes. I guess I would use Exhibits 82 and 84, they're  
9 the two line charts with the magenta-dotted line. So,  
10 in the year that the capacity factor was lower than the  
11 others, 2008, --

12 A. Uh-huh.

13 Q. -- was the same year when the operating costs per unit  
14 were higher.

15 A. That's right. And, I think that Mr. Needleman's  
16 argument is that -- that that comes from particular  
17 maintenance expenses in that year.

18 Q. Yes. I understand.

19 A. Yes.

20 Q. He says that's an aberrational year, you should have  
21 used averages.

22 A. Uh-huh.

23 Q. But, in general, if one changes, the other is likely to  
24 be different as well?

[WITNESS: Stanton]

1 A. Yes.

2 Q. And, both would have an effect within your spreadsheet,  
3 is that right?

4 A. Yes. That's right. Uh-huh.

5 Q. At one point during your testimony, someone asked you  
6 about the "sensitivity" of your analysis to a  
7 particular input. I think it had to do with the carbon  
8 allowances. Do you have an understanding of how  
9 sensitive your analysis is to capacity factor or  
10 operating costs?

11 A. It is sensitive to them. I mean, it's sensitive to all  
12 of the inputs. And, I have not done an analysis that  
13 would tell me which one is more sensitive than the  
14 other. Or, you could certainly do that analysis, a  
15 sensitivity analysis, to say "at what capacity factor  
16 would these results change?" Or, something along those  
17 lines, but I haven't conducted an analysis like that.

18 Q. No one has asked you to do that?

19 A. No.

20 CMSR. HONIGBERG: I think that's all I  
21 have. Ms. Frignoca, do you have any redirect?

22 MS. FRIGNOCA: I have a few questions,  
23 yes.

24 CMSR. HONIGBERG: Could you move a

[WITNESS: Stanton]

1 little closer to your microphone, because I think  
2 everybody is having a little trouble hearing you.

3 MS. FRIGNOCA: My apologies. Can you  
4 hear me better now?

5 CMSR. HONIGBERG: It's much better, yes.  
6 Thank you.

7 **REDIRECT EXAMINATION**

8 BY MS. FRIGNOCA:

9 Q. Early on in your cross-examination, you were asked a  
10 series of questions about NERA's High CO2 Price  
11 assumptions, and the fact that it was based on EIA  
12 government model. And, you disagreed with the  
13 statement by Attorney Needleman that "the high CO2  
14 price assumption that NERA used was based on the EIA  
15 government model." I wanted to give you a chance to  
16 explain to the Commission why you disagree with that  
17 statement.

18 A. I guess I was quibbling with the term "based on". So,  
19 it is not the EIA forecast that was used. And, I don't  
20 want it to be mistaken for that. And, I think the  
21 shorthand of calling it "EIA" was being used, and it  
22 wasn't the EIA forecast. It's very explicitly adjusted  
23 or changed from the EIA forecast. So, I mean, I think,  
24 if you read Harrison and Kaufman's testimony, they're

[WITNESS: Stanton]

1 saying "it's not the EIA forecast", I verified that  
2 it's not the EIA forecast. So, we're agreeing with  
3 each other.

4 Q. Okay. So, what they rely upon then is a manipulation  
5 that they did to the EIA forecast?

6 A. Yes. And, I would also back up a little bit and say  
7 that -- that there's another issue with referring to  
8 that as the "EIA forecast", because it sounds, when you  
9 say that, like this is a forecast that the EIA has put  
10 out of what the EIA believes will be carbon prices in  
11 the future. And, that's not the case at all. What  
12 this was was an EIA report about Waxman and Markey.  
13 Where they're taking -- they've been given the task of  
14 "look at Waxman and Markey and tell us what kind of  
15 prices would result from this bill?" It's very  
16 different from the EIA saying "we think carbon prices  
17 will be this in the future." And, I just don't want  
18 the two things to get confused.

19 Q. And, do you have an idea of when that EIA report on the  
20 Waxman-Markey bill came out?

21 A. I have it in my mind that it was in -- later in 2009,  
22 but I don't have that in front of me.

23 Q. So, if I said "in August of 2009", does that seem about  
24 right to you?

[WITNESS: Stanton]

1 A. As far as my recollection goes, yes.

2 Q. And, so, that was not information that would have been  
3 available to a prudent utility maker [sic] in the early  
4 winter of 2009, was it?

5 A. Not if it was released in August of 2009.

6 MS. FRIGNOCA: I'm not marking this  
7 document as an exhibit, but I'm using it to refresh the  
8 witness's testimony.

9 (Atty. Frignoca showing document to the  
10 Witness.)

11 BY MS. FRIGNOCA:

12 Q. Would you please tell me what this document is?

13 CMSR. HONIGBERG: Can you hang on for  
14 just a second? Have you established that she doesn't  
15 remember something?

16 MS. FRIGNOCA: She said she didn't  
17 remember the date that the EIA forecast came out.

18 CMSR. HONIGBERG: Oh, okay. All right.

19 **BY THE WITNESS:**

20 A. Yes. This is the EIA -- it's not an EIA forecast, this  
21 is the EIA's report on the expected carbon price that  
22 would occur if the Waxman-Markey bill were put into  
23 place. And, it says "August 2009".

24 MS. FRIGNOCA: Thank you.

[WITNESS: Stanton]

1 BY MS. FRIGNOCA:

2 Q. Now, there's been a lot of discussion about the  
3 Waxman-Markey bill. Was that the only federal  
4 legislation pending in early 2009 regarding CO2?

5 A. I don't believe so. I think that, if you consult the  
6 Synapse Carbon Price Forecast that was available at  
7 that time, which was released in 2008, that one of the  
8 things that we generally compare, that we look at when  
9 determining what our carbon price forecasts would be,  
10 are federal legislation. And, so, -- it's here  
11 somewhere in all of this. That I believe there's a  
12 figure in here that compares our forecast to a number  
13 of different proposals. But I don't know what was  
14 actually in front of Congress at that moment.

15 Q. In your opinion, in doing a cash flow analysis and  
16 considering factors, is it more prudent to just rely on  
17 extrapolations from one potential bill before the  
18 Legislature or on a variety of factor in arriving at  
19 CO2 price assumptions in forecasts?

20 A. I would certainly recommend a thorough investigation of  
21 a variety of sources, which is what our Synapse  
22 methodology is in making our forecast.

23 Q. And, there's also been discussion of these Exhibits 82  
24 and 84 that were marked during your testimony. And, a

[WITNESS: Stanton]

1 lot of questions about why you made an assumption of a  
2 72 percent capacity factor going forward. Can you  
3 explain to the Commission why you did a forward look  
4 and used 72 percent, rather than doing an historic look  
5 to make your assumption of capacity factor going  
6 forward?

7 A. Yes. I didn't think that looking backwards at the  
8 historical period, the short-term historical period,  
9 was a good estimation in that moment, from the point of  
10 view of March 29 [sic] of what was coming in the  
11 future. I think that the prudent manager, in March of  
12 2009, would have been aware of the decline in the use  
13 of coal for generation at that time, and of other  
14 factors that were different than just looking at the  
15 past five years and taking an average of that. So, I  
16 didn't think that an historical assessment was the best  
17 way for that prudent manager to make an assessment  
18 about the future.

19 Q. And, finally, you were asked some questions about  
20 Exhibit 16 to the Harrison/Kaufman testimony. I don't  
21 know if you want to get that out to refer to it.

22 A. Fifteen (15) or 16?

23 Q. I believe it was 16.

24 A. Oh, yes. I've got it now.

[WITNESS: Stanton]

1 Q. And, I just want to ask you the reverse question. If  
2 you were to take the Synapse model, the carbon price  
3 forecast that Synapse developed, and substitute that  
4 into the Harrison/Kaufman analysis, what result would  
5 you expect?

6 A. I would expect that their various scenarios would look  
7 less favorable to the continued operations of  
8 Merrimack.

9 Q. And, would you expect that it would show that it would  
10 not be prudent to continue with the installation of the  
11 Scrubber as of the time frame of March of 2009?

12 A. Yes. Certainly. And, I think that Harrison and  
13 Kaufman testimony already shows that. So, if you were  
14 to add onto it a higher carbon price, it would continue  
15 to show that, and perhaps even in the couple of  
16 scenarios that make it -- in which it is beneficial to  
17 construct the Scrubber, that those would, too. I  
18 couldn't say if those would flip. But my reading of  
19 their testimony is that it's not beneficial to take the  
20 Scrubber case.

21 MS. FRIGNOCA: Thank you. No further  
22 questions.

23 CMSR. HONIGBERG: Anything else?

24 SP. CMSR. IACOPINO: I actually just

[WITNESS: Stanton]

1 have one clarification.

2 BY SP. CMSR. IACOPINO:

3 Q. You referenced Exhibit 80, the Synapse report.

4 CMSR. HONIGBERG: Turn your mike on.

5 SP. CMSR. IACOPINO: I'm sorry.

6 BY SP. CMSR. IACOPINO:

7 Q. You referenced Exhibit 80, the Synapse report. And, if  
8 I could just ask you to turn to the table listing the  
9 environmental laws that were pending.

10 A. Can you tell me the page?

11 Q. I'm looking for it. I just had it. It's on Page 8.  
12 And, the only point I want to get to is, when you talk  
13 about "Waxman-Markey", is that the same bill that's  
14 listed as "Markey House Resolution 6186" at the bottom  
15 of the table?

16 A. I don't know that it is. I think that that was a  
17 predecessor to it. This, the Synapse Price Forecast,  
18 is our one from July 2008. The document that  
19 Ms. Frignoca just showed me had the HR number on it for  
20 Waxman-Markey. So, this HR number from Markey is  
21 "6186".

22 MS. FRIGNOCA: And, the Waxman-Markey is  
23 "HR 2454".

24 BY SP. CMSR. IACOPINO:

[WITNESS: Stanton]

1 Q. So, the legislation considered in the Synapse report is  
2 not the same that has been considered by Harrison and  
3 Kaufman, or adjusted by Harrison and Kaufman?

4 A. That's right. So, this is a list, as I understand, and  
5 I'm not an author of this report, this is a list of the  
6 federal bills that were being considered. There's also  
7 a graph on a further page that shows this. It does not  
8 include on this list the Waxman-Markey. And, I would  
9 imagine that that's either because it hadn't been  
10 released yet, or -- and our practice is to look at all  
11 of the bills that are currently in play. And, this is  
12 from July 2008. So, I think it's just a timing issue.

13 Q. And, my confusion is just by the use of Senator  
14 Markey's name.

15 A. I think so. Yes, I think it was a predecessor bill.

16 SP. CMSR. IACOPINO: Thank you.

17 CMSR. HONIGBERG: All right. Thank you  
18 very much, Dr. Stanton. I think we're done with you. So,  
19 you can step down.

20 Let's go off the record for a minute,  
21 talk schedule.

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

24 CMSR. HONIGBERG: Let's go back on. So,

1 we're going to break now, come back as 1:15. And, at that  
2 time, we'll start with Mr. Hachey. Thank you, all.

3 **(Whereupon the Morning Session of Day 4**  
4 **recessed at 12:08 p.m. The Afternoon**  
5 **Session of Day 4 is contained under**  
6 **separate cover so designated.)**

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