1	STATE OF NEW HAMPSHIRE		
2		PUBLIC UTILITIES COMMISSION	
3			
4		2016 - 1:49 p.m. DAY 1	
5	Concord, New	Hampshire AFTERNOON SESSION ONLY	
6			
7	RE:	NEW HAMPSHIRE: Determination regarding	
8		PSNH's Generation Assets.	
9		DE 11-250 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE: Investigation of	
10	s v	Scrubber Costs and Cost Recovery.	
11	PRESENT:		
12		Commissioner Kathryn M. Bailey Special Commissioner Michael J. Iacopino	
13		Jody Carmody, Clerk	
14	,		
15	APPEARANCES:	Reptg. Public Service Co. of New Hampshire:	
16	11 7 1- 1	Matthew J. Fossum, Esq. Robert A. Bersak, Esq.	
17	en e	Reptg. the City of Berlin and the Town of	
18		<pre>Gorham, New Hampshire: Christopher L. Boldt, Esq. (Donahue, Tucker)</pre>	
19	-	Reptg. the Conservation Law Foundation:	
20		Thomas F. Irwin, Esq.	
21		Reptg. the Sierra Club: Zachary M. Fabish, Esq.	
22	,		
23	COURT F	REPORTER: STEVEN E. PATNAUDE, LCR NO. 52	
2.4			

1		
2	APPEARANCES:	(continued)
3		Reptg. the Office of Energy & Planning:
4		Christopher G. Aslin, Esq., Dept. of Justice Meredith A. Hatfield, Director
5		Reptg. Granite State Hydropower Assn.: Susan S. Geiger, Esq. (Orr & Reno)
7		Reptg. New England Power Generators Assn.: Carol Holahan, Esq.
9		Reptg. Retail Energy Supply Association: Melissa Lauderdale, Esq. (Exelon)
10		Reptg. Sen. Jeb Bradley & Sen. Dan Feltes: Senator Dan Feltes
11 12		Pentti Aalto, pro se
13		Reptg. Terry Cronin: Arthur B. Cunningham, Esq.
14		Reptg. the PUC Staff Advocates: F. Anne Ross, Esq.
15		Thomas C. Frantz, Dir./Electric Division
16		Reptg. Residential Ratepayers: Susan Chamberlin, Esq., Consumer Advocate
17		James Brennan, Finance Director Office of Consumer Advocate
18		Reptg. PUC Non-Advocate Staff:
19 20		Alexander F. Speidel, Esq. Suzanne G. Amidon, Esq. Leszek Stachow, Asst. Dir./Electric Division
21		Jay Dudley, Electric Division Richard Chagnon, Electric Division
22		Dean Murphy (The Brattle Group)
23		
24		

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 9
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                         DEAN M. MURPHY
10
                         ERIC H. CHUNG
                         JOHN ANTONUK
11
                         JAMES J. BRENNAN
                         THOMAS C. FRANTZ
12
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2		EXHIBITS	
3	EXHIBIT ID	DESCRIPTION P	AGE NO.
4	UU	Federal Energy Regulatory Commission Order 145 FERC 61057, issued	6
5		October 17, 2013 in Docket No. EL 13-43-000 regarding the Council	
6		of the City of New Orleans, Louisian	a
7	VV	ISO New England "Generator Asset Registration Options Checklist:	6
8		Settlement Only or Modeled Generator Asset" (October 2014)	
9	WW	RECORD REQUEST (To describe the	112
10	VV VV	degree to which the Settlement Agreement does or does not address	112
11		what happens with respect to the clauses concerning property taxes	
12		in the event of a failed auction)	
13			
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1	PROCEEDING
2	(Hearing resumed at 1:49 p.m.)
3	MS. AMIDON: Excuse me, Mr. Chairman?
4	CHAIRMAN HONIGBERG: Ms. Amidon.
5	MS. AMIDON: There is one administrative
6	issue. The attorney representing RESA was not here this
7	morning, and she's here this afternoon. So, I wanted to
8	give an opportunity for her to make an appearance.
9	CHAIRMAN HONIGBERG: Ah.
10	MS. LAUDERDALE: Good afternoon,
11	Commissioners. I'm Melissa Lauderdale, with Exelon,
12	representing RESA.
13	CHAIRMAN HONIGBERG: Mr. Bersak, I
14	believe you have the conn.
15	MR. BERSAK: Thank you, Mr. Chairman. I
16	have two documents I would like to mark as exhibits at
17	this time. One, I think the next exhibit is UU?
18	CHAIRMAN HONIGBERG: Yes.
19	MS. CARMODY: Yes.
20	MR. BERSAK: So, that's double U, but
21	that would be confusing. So, it's just UU. That will be
22	a FERC decision, that's found at 145 FERC 61057, and it's
23	a case involving the City of New Orleans.
24	And, the second document is an ISO New

```
1
       England "Generator Asset Registration Options Checklist:
 2
       Settlement Only or Modeled Generator Asset". And, that
       will be "VV".
 3
 4
                         And, here is VV, make sure you have UU.
 5
                         MS. CARMODY: Thank you.
 6
                         (Atty. Bersak distributing documents.)
 7
                         (The documents, as described, were
                         herewith marked as Exhibit UU and
 8
 9
                         Exhibit VV, respectively, for
10
                         identification.)
11
                         MR. BERSAK: Thank you. Good afternoon,
       Mr. Shuckerow.
12
13
                         WITNESS SHUCKEROW: Good afternoon.
14
                         REDIRECT EXAMINATION
15
     BY MR. BERSAK:
16
          Do you recall during your direct examination being
17
          asked about Exhibit CC, which is a FERC decision in
18
          Exelon Wind 1?
19
          Yes, I do.
     Α.
20
                         CHAIRMAN HONIGBERG: Just to be clear,
21
       that was during his questioning by Attorney Geiger, right?
                         MR. BERSAK: Ms. Geiger, that's correct.
22
23
                         CHAIRMAN HONIGBERG: Okay. I wouldn't
24
       have called that his "direct examination". But we're all
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7 [WITNESS: Shuckerow] 1 in the same place. 2 MR. BERSAK: I'm sorry. 3 CHAIRMAN HONIGBERG: That's okay. 4 BY MR. BERSAK: 5 Q. Somebody asked you some questions about this document, 6 correct? 7 Yes. Thank you. Α. 8 Okay. Got you. And, you were asked to read from some Q. 9 highlighted sections of the document, back around 10 Paragraph 57, I believe -- or, 52. Do you recall that? 11 Yes. Α. 12 In that Paragraph 52, FERC stated that "The problem Q. 13 with the methodology proposed by SPS", that's Southwestern Power Service, "and adopted by the Texas 14 15 Commission is that it is based on the price that a QF 16 would have been paid had it sold its energy directly to 17 the EIS market, instead of using a methodology of 18 calculating what the costs to the utility would have 19 been for self-supplied, or purchased, energy "but for"

> required by the Commission regulations." So, the question to you is, what is the cost to PSNH for energy that would have to be self-supplied or purchased, but for the presence of

the presence of the QF or QFs in the markets, as

20

21

22

23

1 QFs?

- 2 A. The cost to PSNH would be the real-time cost of power.
- 3 Q. Could you please turn to Page 20 of your testimony, and
- 4 that's Bates Page 251. Let me know when you have that.
- 5 A. I have Page 20.
- 6 Q. Okay. In response to the questioning at Line 25, you
- 7 referred to a FERC decision that's docketed as "EL
- 8 13-43", "City of New Orleans". Do you see that?
- 9 A. Yes, I do.
- 10 Q. Is that the New Orleans decision that you briefly
- referred to during your cross-examination?
- 12 A. Yes, I did.
- 13 Q. And, is what has now been marked as "Exhibit UU" for
- identification that FERC decision?
- 15 A. Yes.
- 16 Q. Did FERC issue the City of New Orleans decision before
- or after the Exelon Wind 1 decision?
- 18 A. Yes, it did. The Exhibit UU, the FERC decision, was
- issued on October 17th, 2013. The Exelon decision we
- were discussing earlier was in August of 2012.
- 21 Q. So, the New Orleans decision is more recent, correct?
- 22 A. Correct.
- 23 Q. Okay. Does the FERC include a reference to the Exelon
- Wind decision, what's been marked as "Exhibit CC" here,

in its order regarding the City of New Orleans, Exhibit

- 2 UU?
- 3 A. Yes, it does. That reference is within their Section
- 4 II, called "Petition for Declaratory Order". And, it
- 5 would be Paragraph 8.
- 6 Q. So, when FERC issued the City of New Orleans decision,
- 7 it was aware of and actually commented on the Exelon
- 8 Wind 1 decision?
- 9 A. Yes, it did.
- 10 Q. In the New Orleans order, did the FERC discuss the use
- of "as available sales" in the City of New Orleans
- 12 order?
- 13 A. Yes, it does.
- 14 Q. And, where in their order does it do that?
- 15 A. That would be on Page 7. And, also, it's referred to
- in the "Background" section. So, it would be Section
- 17 I, "Background", Paragraph 3.
- 18 Q. Is an "as available" sale in the Midwest ISO equivalent
- to a real-time sale in ISO New England?
- 20 A. That's what the order implies.
- 21 Q. And, where does it imply that?
- 22 A. Under the Section I, "Background", Paragraph 3.
- 23 Q. Can you read the sentence that you're referring to?
- 24 A. Yes. The sentence is "For QFs electing the

behind-the-meter option, their sales of "as variable"

- energy will not be part of the utility's day-ahead
- 3 schedules, because by definition such QFs do not have
- 4 to schedule their energy to the utilities; they simply
- 5 sell to the utilities with no notice, in real-time.
- Instead, "as available" QF sales will be shown in the
- 7 real-time market and will be treated as reduced load to
- 8 the utility."
- 9 Q. In the City of New Orleans order, you testified that
- "FERC was aware of the use of LMPs to set avoided
- 11 cost", is that correct?
- 12 A. Yes.
- 13 Q. Can you refer the Commission to where that particular
- reference is in this order?
- 15 A. Yes. That would be in the order actually through a
- footnote. It's Footnote 64.
- 17 Q. In Footnote 64, did the Commission say that the use of
- 18 LMPs is improper as a standard for setting PURPA
- 19 avoided costs?
- 20 A. What it says is "It appears that various states have
- 21 opted to use LMPs in calculating avoided costs. See
- 22 Entergy February 21st, 2013 Answer at 19-20. The
- record in this proceeding does not contain extensive
- evidence on the particular methodologies that are being

[WITNESS: Shuckerow]

- 1 used by these states, and these methodologies have not
- 2 otherwise been the subject of Commission proceedings."
- 3 Q. So, from that, it appears that FERC is aware of the use
- of LMPs, but is stating that it has not had a
- 5 Commission proceeding to opine on the proper use of
- 6 LMPs as avoided cost methodologies?
- 7 A. Correct.
- 8 Q. Commissioner Bailey asked you some questions regarding
- 9 the current status of QFs in New Hampshire, and the
- 10 significance of the 20-megawatt capacity limitation.
- 11 Do you recall that?
- 12 A. Yes.
- 13 Q. And, to try to provide a little bit more information in
- that area, in New Hampshire, are there QFs that are
- 15 greater than 1 megawatt in size?
- 16 A. Yes.
- 17 Q. And, are there some that are greater than 20 megawatts
- 18 in size?
- 19 A. Yes.
- 20 Q. Do you have a copy of Exhibit GG -- what's been marked
- as "Exhibit GG" available? This is a FERC order issued
- 22 in April 2010.
- 23 A. Yes. I have it.
- 24 Q. And, this order is an order granting in part and

[WITNESS: Shuckerow]

- denying in part the Application to Terminate Mandatory
- 2 Purchase Obligations filed by the Public Service
- 3 Company of New Hampshire with FERC, is that correct?
- 4 A. That's correct.
- 5 Q. In this order, did FERC grant PSNH's request to
- 6 terminate the mandatory buy obligation under PURPA from
- 7 QFs that have capacities greater than 20 megawatts?
- 8 A. Yes, it did.
- 9 Q. And, did it deny the Company's request to terminate the
- 10 mandatory buy obligation from QFs with capacities of 20
- 11 megawatts or less?
- 12 A. That's correct.
- 13 Q. And, had FERC granted PSNH in total, we wouldn't be
- here today arguing about this, would we?
- 15 A. Yes.
- 16 Q. Are you aware of whether that 20-megawatt cut-off that
- the FERC put into the PSNH order has been consistently
- 18 applied by FERC for similar requests to terminate PURPA
- buys from utilities across the country?
- 20 A. Yes. That's my understanding.
- 21 Q. Are there QFs or generators that could qualify as QFs
- in New Hampshire that are greater than 20 megawatts?
- 23 A. Yes, there are.
- Q. Do you know whether PSNH has any purchases from any

[WITNESS: Shuckerow]

1 such entities?

- A. Yes. We have two, in fact. One is located in northern

 New Hampshire, it's called "Burgess". It's

 approximately 60 megawatts in size, give or take. The

 other is a wind facility, called "Lempster", located in
- the western part of the state. It's in the 20 to 25
- 7 megawatt range.
- 8 Q. So, both Burgess Biomass and Lempster are qualifying
 9 facilities under PURPA?
- 10 A. Yes.

19

- Q. And, do we pay avoided cost prices to either of those OFs?
- 13 A. We do not. We have long-term contracts with each of those.
- Q. And, who reviewed and approved those long-term contracts?
- MS. GEIGER: Excuse me, Mr. Chairman.
- I'm going to interpose an objection here. I'm not sure

how this is relevant to the issues that Mr. Shuckerow has

- testified to on direct and on cross.
- 21 CHAIRMAN HONIGBERG: Mr. Bersak.
- MR. BERSAK: What I'm trying to do is I
- 23 think that Commissioner Bailey had some questions about
- 24 "what is the state of QFs in this state?" I'm just trying

[WITNESS: Shuckerow]

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to make sure she understands where we are, and how this
fits into the greater scheme. But, if it's something that
the Commissioners don't want to hear about, I can
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4 certainly move on.

5 CHAIRMAN HONIGBERG: I'm sympathetic to
6 Ms. Geiger's point. If you can bring it to a close fairly
7 quickly, that will be helpful.

8 MR. BERSAK: Sure. I'll just let it lay 9 where it is then.

10 BY MR. BERSAK:

- Q. Commissioner Bailey also asked you about "settlement only generators", or what you referred to as "SOGs".

 Do you recall that?
- 14 A. Yes.
- Q. Are you aware of an ISO New England Operating Procedure

 Number 14, titled "Technical Requirements for

 Generators, Demand Resources, Asset Related Demands,

 and Alternative Technology Regulation Resources"?
- 19 A. Yes, I am.
- Q. In that operating procedure, the ISO New England says
 that "A generating facility less than 1 megawatt that
 is interconnected below 115 kV (1) may register as a
 settlement only generator, or (2) may elect to not
 register, if not participating in any wholesale

[WITNESS: Shuckerow]

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1 electric markets other than as a load reducer." Are
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- 2 you aware of that provision?
- 3 A. Yes, I am.
- 4 Q. I'd like you to take a look at what's been marked as
- 5 "VV" as an exhibit, the "Generator Asset Registration
- 6 Options Checklist" from ISO New England. Do you have
- 7 that document?
- 8 A. Yes. I have that in front of me.
- 9 Q. Are you familiar with that document?
- 10 A. Yes, I am.
- 11 Q. Does this Checklist reflect what you just stated? That
- is that "generators less than 1 megawatt, when
- connected at 115 kV or below, shall be registered as
- settlement only generators within ISO New England"?
- 15 A. Yes.
- 16 Q. Are settlement only generators modeled in the day-ahead
- market?
- 18 A. They are not.
- 19 Q. Are generators that do not register at ISO modeled in
- the day-ahead market?
- 21 A. They are not.
- 22 Q. Under this ISO rule, isn't it true that resources that
- are -- that fit the definition, that is 1 megawatt or
- less, connected to the grid at voltages of 115 kV or

```
1 below, cannot be in the day-ahead market?
```

- 2 A. Yes. That's correct.
- Q. So, conversely, those small generators must be accounted for in the real-time market, is that correct?
- 5 A. Correct.
- Q. Now, is there a workaround to this restriction, if several smaller QFs desired to voluntarily join together to create a virtual day-ahead entity?
- 9 A. Yes. That opportunity is before them. They could do that.
- 11 Q. So, in your direct testimony, where you said, if a QF

 12 wanted to participate in the day-ahead market, it could

 13 do so?
- 14 A. Through a combination of arrangements with others.
- Q. Do PSNH's owned generating assets, the ones we are talking about divesting, do they participate in the day-ahead market?
- 18 A. Yes, they do.
- Q. So, they are bid into that day-ahead market at ISO New England every day of the year before ISO's 10:00 a.m.
- 21 deadline?
- 22 A. Correct.
- Q. And, is that somebody from your staff that does that every day of the week?

{DE 11-250/DE 14-238} [Day 1 PM Session only] {02-02-16}

[WITNESS: Shuckerow]

```
1 A. Correct.
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- 2 Q. Saturdays and Sundays?
- 3 A. Yes, Saturdays and Sundays.
- 4 Q. Got it. You were asked by Attorney Geiger about the
- 5 avoided cost standard for utilities in Virginia. Do
- 6 you recall that?
- 7 A. Yes, I do.
- 8 Q. Do you know whether Virginia is part of ISO New
- 9 England?
- 10 A. They are not.
- 11 Q. Okay. So, do ISO New England restrictions on
- 12 participation in the day-ahead market apply to Virginia
- 13 utilities?
- 14 A. They would not.
- 15 Q. If PSNH was required to compensate QFs that cannot be
- modeled in the day-ahead market day-ahead prices, would
- there be a mismatch between what was paid and the value
- of that output?
- 19 A. The answer is "yes".
- 20 Q. PSNH purchases the output from nearly all of GSHA's
- 21 members' facilities. Do those facilities occasionally
- stop generating, due to mechanical issues or lack of
- 23 water or other reasons?
- 24 A. Yes. Of course.

[WITNESS: Shuckerow]

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Q. When that happens, how does PSNH replace the generation that would otherwise have been produced by the QFs?
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- A. We would basically purchase it from the real-time energy market.
- Do any of GSHA's members' generation allow PSNH to avoid day-ahead energy market purchases?
- 7 A. They do not.

3

- Q. Does the output from GSHA members' generation allow
 PSNH to avoid real-time energy market purchases?
- 10 A. Yes, they do.
- 11 Q. Does PSNH, under the provision in the Settlement
 12 Agreement, which has been in place since 2000, pay
 13 these resources the rate which PSNH avoids making?
- 14 A. Yes.
- 15 Q. Do you have -- let me just make sure I've got the right

 16 reference here. It is. What has been marked as

 17 "Exhibit Z", the response by PSNH to Granite State

 18 Hydro Association, Data Request 1-025?
- 19 A. I believe I do.
- Q. Here. So, you don't go searching, I'll just give you mine.
- 22 (Atty. Bersak handing document to the witness.)
- 24 WITNESS SHUCKEROW: Thank you.

sentence in the response?

[WITNESS: Shuckerow]

1 BY MR. BERSAK:

5

6

7

8

- Q. You were asked by Attorney Geiger about that exhibit,
 about that response. She asked you about the first
 sentence in that response. Can you read the second
 - A. I will. Again, this is a data response, GSHA 1-025.

 "However, at the margin 100 percent of the time there was some amount transacted in the real-time energy market."
- 10 Q. Does that response mean that the real-time market sets
 11 the marginal price for PSNH?
- 12 A. Yes, it does.
- Q. In your testimony, at Page 5, Line 17, you refer to a
 decision of this Commission that "found that
 calculations of the proper avoided cost rate is
 dependent upon the identification of generating units
 operating on the margin." That's the Industrial
 Cogenerators Group case that Attorney Geiger asked you
 about. Do you recall that?
- 20 A. Yes.
- Q. At the margin, in today's market, is PSNH's cost of energy the real-time market price?
- 23 A. Yes, it is.
- 24 Q. Do you have in front of you Exhibit II, which you were

1 questioned about by Attorney Geiger? That's a table

- 2 showing self-supplied energy costs. It's in my book
- 3 there, if you need it.
- 4 A. I have it.
- 5 Q. You have it. The second line of that table, captioned
- 6 "F/H", or "Fossil/Hydro", "O&M,", that's "Operations &
- 7 Maintenance", "depreciation and taxes". Do you see
- 8 that?
- 9 A. Yes, I do.
- 10 Q. Do QF purchases allow PSNH to avoid payment of O&M,
- 11 depreciation or taxes?
- 12 A. They do not. Those are fixed costs.
- 13 Q. Should those costs be included in the value of
- qeneration that could be avoided by purchases from QFs?
- 15 A. They should not.
- 16 Q. The third line in that table is captioned "Return on
- 17 Rate Base". Do you see that?
- 18 A. Yes, I do.
- 19 Q. Do purchases from QFs allow PSNH to avoid the cost of
- 20 return on rate base?
- 21 A. They do not.
- 22 Q. So, should those costs be included in costs that the
- 23 purchase of generation from QFs would allow the Company
- 24 to avoid?

1 Α. They should not. So, based upon those two questions, if you look at that 2 Q. 3 table, would that mean that the self-generation costs from PSNH are actually the number in that first line, 4 5 under "Final", which is "3.24 cents" in this, for the 6 January through June 2015 time period? 7 That's correct. Α. 8 MR. BERSAK: That's it. No further 9 questions. Thank you, Mr. Shuckerow. 10 CHAIRMAN HONIGBERG: Thank you, Mr. 11 Bersak. I think you can return to your seat then, 12 Mr. Shuckerow. 13 WITNESS SHUCKEROW: Okay. Thank you 14 very much, sir. 15 CHAIRMAN HONIGBERG: Am I correct that 16 the next up is the panel? 17 MS. AMIDON: That is correct. 18 CHAIRMAN HONIGBERG: We'll go off the 19 record while the panel sets up. 20 (Off the record.) 21 (Whereupon Leszek Stachow, 22 Dean M. Murphy, Eric H. Chung 23 John Antonuk, James J. Brennan, and

Thomas C. Frantz were duly sworn by the

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1
                         Court Reporter.)
 2
                         CHAIRMAN HONIGBERG: Who's going to
 3
       start?
 4
                         MS. AMIDON: A change of plans for
 5
       staff. Attorney Speidel will conduct the direct. I will
 6
       have a couple of questions in the course of the subsequent
 7
       period. But he's going to be doing the -- we'll start
 8
       off.
 9
                         MR. SPEIDEL: Oh, wait. We will start
10
       off?
11
                         MS. AMIDON: Sure.
12
                         MR. SPEIDEL: I was wondering that, with
       the Company being the moving party, would be next?
13
14
                         CHAIRMAN HONIGBERG: It really doesn't
15
       matter. I think all we're doing is getting these
16
       witnesses qualified. So, Mr. Speidel, if you're ready to
17
       go, if you don't mind taking the conn, go ahead.
18
                         MR. SPEIDEL: Sure. Thank you, Mr.
19
       Chairman. I would direct my first question to Mr.
20
       Stachow. Mr. Stachow, good afternoon.
21
                         WITNESS STACHOW: Good afternoon.
22
                         MR. SPEIDEL: Could you please make sure
23
       you have the microphone turned on.
                         WITNESS STACHOW:
24
                                          It's on.
```

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

1	LESZEK STACHOW, SWORN
2	DEAN MURPHY, SWORN
3	ERIC H. CHUNG, SWORN
4	JOHN ANTONUK, SWORN
5	JAMES BRENNAN, SWORN
6	THOMAS C. FRANTZ, SWORN
7	DIRECT EXAMINATION
8	BY MR. SPEIDEL:
9	Q. And, could you please state your full name for the
10	record.
11	A. (Stachow) Leszek Stachow.
12	Q. And, what is your position and title?
13	A. (Stachow) I'm the Assistant Director in the Electrical
14	Division.
15	CHAIRMAN HONIGBERG: Off the record.
16	[Brief off-the-record discussion
17	ensued.]
18	CHAIRMAN HONIGBERG: All right. We're
19	back on the record.
20	BY THE WITNESS:
21	A. (Stachow) All right. Assistant Director in the
22	Electrical Division of the New Hampshire PUC.
23	BY MR. SPEIDEL:
24	Q. And, Mr. Stachow, are you familiar with the testimony

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- 1 that has been marked as Item "D"?
- 2 A. (Stachow) I am.
- 3 Q. "Exhibit D?
- 4 A. (Stachow) I am.
- 5 Q. Do you have any corrections that you would like to make
- 6 to that supplemental testimony?
- 7 A. (Stachow) No.
- 8 Q. Thank you. Mr. Murphy, could you please state your
- 9 full name for the record.
- 10 A. (Murphy) Dean Murphy.
- 11 Q. And, with whom are you affiliated?
- 12 A. (Murphy) I'm a Principal with The Brattle Group.
- 13 Q. And, as a Principal with The Brattle Group, did you
- serve as a consultant for Non-Advocate Staff during
- 15 this proceeding?
- 16 A. (Murphy) Yes. Brattle was engaged by Non-Advocate
- 17 Staff.
- 18 Q. Are you familiar with the material that has been
- 19 submitted and marked as "Exhibit E"?
- 20 A. (Murphy) Yes, I am.
- 21 | Q. Do you have any corrections that you'd like to make to
- 22 that material at the present time?
- 23 A. (Murphy) No corrections.
- Q. Would you be able to summarize, for the benefit of the

Commission and the people in this hearing room, in about 3 or 4 minutes or less, what the matters pertaining to your testimonial elements are?

A. (Murphy) Yes, I'd be happy to. I was asked by Staff to analyze the customer savings, to redo the analysis of customer savings due to the divestiture. The approach I took was to look at the total cost in dollars, rather than rates, for reasons that I'll explain in a moment. But, primarily, because, in order to understand the effect on rates, you first need to understand the effect on cost. And, of course, I was comparing the case with no divestiture versus the case with divestiture.

In the case without divestiture, the costs include the fixed costs of operating and owning the plants. That's the depreciation and return and the fixed operating costs. And, those are offset by the market revenues that the plants can earn, primarily energy and capacity revenues.

Of course, there's also the cost of serving load from the market. That is included for completeness, although it subtracts out when you do the comparison of the cost with divestiture -- with no divestiture versus divestiture. The cost of serving

load is the same in both of those cases. So, I put less emphasis on that cost, because I knew it would subtract out.

In the divestiture case, the only relevant costs that remain are the securitized stranded costs, the rate reduction bond costs. And, this is evidenced in the figure on I believe it's Page 5 of my testimony, which shows the conceptual structure of the analysis. There's another figure later, which looks very similar, that shows the actual numbers on this.

But you can see from this figure that the total cost of serving load is common across the two cases, and, therefore, doesn't affect the difference between them. On the left, in the "no divestiture" case, I'm comparing the depreciation, return, and fixed O&M costs net of the market revenues of those generators, versus, on the right, the RRB costs, the securitized stranded costs.

So, in order to actually perform this analysis, I worked with Eversource, with representatives from Eversource, who provided those fixed costs for the generation, the depreciation, and the return, based on their financial projections, and their fixed O&M cost, based on their operating budgets

for, I believe, the next five years. And, these assume full Scrubber recovery, these costs assume full Scrubber recovery.

And, I, myself, calculated the market revenues that would offset those fixed costs in two components. The capacity component is simply the capacity of the plants, their seasonal capacity rating of each of the plants over the year, times the capacity price. Now, the capacity prices are known for delivery through May 2019, because those auctions have already occurred. And, we used a projection from SNL Financial of the future capacity costs beyond that. They were similar to the current capacity costs, not exactly the same, but similar.

For the energy revenues, in order to understand the energy revenues from the plants, I needed to take that in a couple of steps. And, the first is to make a projection of future prices. And, I did this at an hourly level, by starting with historical hourly day-ahead prices, and adjusting them for projected future prices, by using the expected future gas and CO2 prices on the -- on the understanding that, in the vast majority of hours in New England, it is a gas plant that is setting the

marginal price. And, it is the cost of fuel and CO2 that are driving that price. So, if gas prices go up, electricity prices tend to go up. And, this allows me to capture that. It is -- and, it allows me a way to capture that with an hourly -- at an hourly level of detail.

Once I've got that projection of hourly prices into the future, I can do a virtual dispatch of the plants. So, simulate the dispatch of the plants, taking into account not only their operating parameters, their fuel costs, their heat rate, etcetera, but also their operating constraints, their minimum operating time, the minimum downtime, etcetera, to get a more realistic measure of their energy revenues. And, this is for the dispatchable fossil plants. For the hydro, and also the Schiller biomass plant, those are essentially baseload plants that run all the time, when they are able to. And, so, they get the average energy price for the amount of energy that they produce, which we looked at monthly, on a monthly level.

So, putting that into the framework that I've illustrated on Page 5 of my testimony, I find that in the -- in a base case that reflects current market

information, the current expectation for gas price and CO2 prices. In the "no divestiture" case, you can see, at the top of -- I'd turn you to the second figure, which is on Page 11 of my testimony, the operating and ownership costs in the top left of that figure, that's the depreciation, the return, and the fixed O&M, total about 213 million. Again, this is information primarily from Eversource.

When -- we can put aside the market cost of serving load, because that's the same in both cases. If I take that 213 million of fixed costs and offset it with the market revenues that these plants may be able to earn, those market revenues are estimated at 132 million, which leaves about 82 million in costs. And, that's the average over the first five years after assumed divestiture. So, from the beginning of 2017 through the end of 2021, those -- there would be about an \$82 million net cost of owning the generation.

In the divestiture case, the comparable costs, the costs that should be compared to this, are the \$49 million average RRB cost, the securitized stranded costs. This analysis was taken from the -- this was taken from the original Eversource analysis that looked at the net plant, ultimately, the rate

base, and securitizing the remaining rate base, after being offset by the sale price of the plants, at approximately a 3 percent rate, and recovering that over a 15-year period.

So, when I compare the "no divestiture" case, that 82 million in cost, versus the 49 million in the "divestiture" case, that gives me a difference of 33 million per year over the first five years following assumed divestiture.

I also did some sensitivity analyses around the key inputs to this. The key inputs being the energy price, the capacity price, and the sale price of the assets at auction. And, I conclude that the -- under expected conditions, the divestiture will result in about \$33 million per year in customer savings over the first five years. Divestiture also eliminates the natural hedge that's provided by owned generation, and results in greater exposure to markets prices for customers.

MR. SPEIDEL: Thank you, Dr. Murphy.

Staff would like to reserve the right to ask, through

Attorney Amidon, some very limited friendly cross

questions of these two witnesses and the other panelists

during the cross phase of the proceeding. And, --

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[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]
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- MS. AMIDON: The questions that I have
- 2 relate to whether the panelists understand the Scrubber --
- 3 the settlement of the Scrubber issue in the Settlement
- 4 Agreement to be an appropriate and resolution of those
- 5 issues and in the public interest. That's all I have to
- 6 ask of these individuals.
- 7 CHAIRMAN HONIGBERG: Why don't you ask
- 8 those questions now. And, we'll get that questioning out
- 9 of the way.
- MS. AMIDON: I could. I could. That's
- 11 what we were trying to figure out what you would like.
- 12 BY MS. AMIDON:
- 13 Q. Mr. Stachow, are you familiar with the Settlement
- 14 Agreement?
- 15 A. (Stachow) I am.
- 16 Q. And, you understand the terms with respect to the
- disposition of the -- the proposed disposition of the
- 18 Scrubber proceeding?
- 19 A. (Stachow) I do.
- 20 Q. Do you believe that that resolution is reasonable and
- in the public interest?
- 22 A. (Stachow) Yes, I do.
- 23 Q. Thank you. Mr. Antonuk, do you have any opinion on
- 24 that issue?

32 [WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz] 1 CHAIRMAN HONIGBERG: Ms. Amidon, I may 2 have misunderstood. I thought your questions were just 3 going to be directed to the two witnesses who had just been questioned. I'm sorry. I misunderstood. 4 5 MS. AMIDON: Okay. 6 CHAIRMAN HONIGBERG: Why don't we get 7 all of the witnesses up front. I misunderstood what you 8 said. MS. AMIDON: I apologize. I probably 9 10 should have made note of that earlier myself. Thank you.

CHAIRMAN HONIGBERG: So, apologize,

12 Mr. Antonuk. We're just going to have to hang on that 13 answer for a while.

14 All right. Mr. Bersak, why don't you go

15 next.

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16 MR. BERSAK: Yes, Mr. Chairman.

- 17 BY MR. BERSAK:
- 18 Q. Mr. Chung, could you please state your name.
- 19 (Chung) Eric Chung. Α.
- 20 Q. And, by whom are you employed and what is your
- 21 position?
- 22 (Chung) I'm Director of Revenue Requirements and 23 Regulatory Projects for Eversource Energy.
- 24 And, you're testifying here on behalf of Eversource Q.

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1 Energy?
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- 2 A. (Chung) Yes, I am.
- 3 Q. Your prefiled testimony, as redacted in support of the
- 4 Litigation Settlement Agreement, has been marked as
- 5 "Exhibit G". And, there's also attachments that have
- 6 been marked to your redacted testimony. Do you have
- 7 any updates or corrections to either your testimony or
- 8 the attachments thereto?
- 9 A. (Chung) No, I do not.
- MR. BERSAK: Thank you. That's all I
- 11 have.
- 12 CHAIRMAN HONIGBERG: Mr. Aslin.
- MR. ASLIN: Thank you, Mr. Chairman.
- 14 BY MR. ASLIN:
- 15 Q. Mr. Antonuk, good afternoon. If you could please state
- 16 your name for the record.
- 17 A. (Antonuk) John Antonuk.
- 18 Q. And, what company do you work for?
- 19 A. (Antonuk) I'm the President of the Liberty Consulting
- 20 Group.
- 21 Q. And, in what -- or, on whose behalf are you
- 22 participating in this docket?
- 23 A. (Antonuk) I'm working on behalf of the Governor's
- Energy Office.

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1 Q. The Office of Energy & Planning?
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- 2 A. (Antonuk) Sorry.
- 3 Q. Thank you. Mr. Antonuk, you, I believe, have what's
- been marked as "Exhibit Q" in front of you. Is that
- 5 the testimony that you prefiled in this docket on
- 6 July 17th?
- 7 A. (Antonuk) It is.
- 8 Q. And, was that joint testimony?
- 9 A. (Antonuk) Yes. It was joint with Jim Letzelter, who's with us today.
- 11 Q. Okay. Have you previously testified before the Commission?
- 13 A. (Antonuk) I have. I testified, you know, I think I'm
- qoing to miss one or two. Most material here, I
- 15 testified in the Seabrook divestiture proceedings. I
- was part of the State Team that produced that
- 17 settlement. And, then, following that, the Commission,
- 18 which managed the audit -- or, the divestiture of
- 19 Seabrook, also went through a process of vetting and
- selecting and then actively managing the auction
- 21 manager. And, I was part of the team that was assigned
- 22 to support the Commission in that effort, acting under
- 23 the Commission's General Counsel. And, I'm sure there
- 24 was public testimony. I know there were quite a number

- of private sessions with the commissioners to brief them on that process as it unfolded.
- Q. Thank you. Do you have any additions or corrections to the testimony, Exhibit Q?
 - A. (Antonuk) I do not.

- Q. If you could give us a very brief summary of why you support the Settlement Agreement and believe it's in the public interest?
 - A. (Antonuk) Yes. And, it's a fairly direct and simple message. We've just heard a discussion of one analysis, which I think is entitled to due respect.

 But I think the overarching point is that, for a period that's now approaching three years, analysis after analysis has shown essentially the same thing. And, what it has shown is that the difference between what PSNH default service customers pay and the market is attributable to the high capital fixed operating and variable costs of PSNH's power plants. What that means is that the Settlement is worth, following divestiture and securitization, an amount that's in the range of \$100,000 a day.

There's no reasonable scenario on the horizon that we believe threatens the continuing validity of that conclusion, which has been reinforced

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

1 under a series of market changes over the past two and

a half years. That means it truly is time. It's time to finish what was started back when I was here first talking about Seabrook. And, time lost is customer savings lost. And, those are real savings, and they're savings that are shared equitably by customers all across the state.

8 MR. ASLIN: Thank you. I have no 9 further questions. Mr. Antonuk is available for cross.

CHAIRMAN HONIGBERG: Ms. Chamberlin.

MS. CHAMBERLIN: Thank you.

12 BY MS. CHAMBERLIN:

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- 13 Q. Mr. Brennan, could you state your name please.
- 14 A. (Brennan) Jim Brennan.
- 15 Q. And, what's your position?
- 16 A. (Brennan) Finance Director at the office of Consumer
 17 Advocate.
- 18 Q. And, could you summarize your credentials please.
- A. (Brennan) Yes. I have an MBA in Finance. My
 professional background includes ten years as an
 officer at a commercial bank, Chemical Bank, now JP
 Morgan Chase, where I performed commercial lending,
 making lending decisions and recommendations on
 commercial loans, based on analysis, I have performed

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

1		loan financial statements, cash flow analysis, cash
2		flow projections.
3		On assignments at the PUC, and now at
4		the OCA, I have completed courses in utility analysis
5		from the Center for Public Utilities,
6		PricewaterhouseCoopers, and University of Michigan's
7		Grid School.
8	Q.	Thank you. Did you file testimony in this proceeding,
9		which has been premarked as "Exhibit N"?
10	Α.	(Brennan) Yes, I did.
11	Q.	And, do you have any corrections to that testimony?
12	Α.	(Brennan) No, I don't.
13	Q.	Please summarize the OCA's position on the Settlement
14		Agreement filed, as I believe it's "Exhibit A"?
15	Α.	(Brennan) The OCA supports the Settlement Agreement
16		because of the combined benefits of divestiture of
17		generation assets, coupled with the benefits of
18		securitization, as a benefit to the residential PSNH
19		default service ratepayers, which creates reductions in
20		risk and reductions in cost. PSNH has roughly 500,000
21		customers. The majority of those customers are
22		residential. And, most of those residential customers
23		take PSNH's default service for their energy service.

PSNH's Default Energy Service rate is

higher than the competitive market rate. And, in my testimony, I have reviewed the three fundamental facts that cause their rate to be higher than the competitive market rate. And, I'll just list them briefly.

The first one is that PSNH, their

Generation Division, is a capital-intensive industry,
as is normal for a generation company. They have high
levels of fixed cost, maintenance cost, depreciation
cost, and return cost. These costs are fixed,
relatively fixed, and they do not vary or go down with
sales volume.

The second fact is that PSNH's

Generation Division has become increasingly less

competitive in the deregulated wholesale electric

market. And, to a significant extent, those heavy

capital-intensive assets remain idle for portions of

the year.

The third fact is that, under statute,
PSNH is what's referred to as a "hybrid" situation.
And, what that means is that all of those, those fixed
costs and return costs associated with their
generation, are flowing automatically into the Default
Service rate, regardless of the competitive situation.
So, if PSNH is running at full capacity factor, or if

their plants are sitting idle, those fixed costs and return costs are being paid for by the default service customers. And, essentially, what this means is that the competitive risk of PSNH's generation plant is borne by the default service ratepayer.

So, under Settlement, divestiture will bring -- will eliminate this "hybrid" model. It eliminates these fixed costs, the depreciation costs, and return costs that flow into default service. They remove the competition risk that is squarely on the shoulders of the default service ratepayers. And, broadly speaking, going forward, the risk of owning and operating a legacy coal-fired generation fleet is removed.

So, when you take into account the securitization, which is part of this deal, it is better for default service customers to pay that low fixed interest rate on a capped level of stranded cost, which will amortize and decline to zero over a 15-year period. It's better for them to pay that known certain amount, than it is to pay unknown costs, future costs, associated with owning and running a relatively uncompetitive, non-economic generation fleet. Thank you.

- MS. CHAMBERLIN: Thank you. That's all
- 2 I have.
- 3 CHAIRMAN HONIGBERG: Ms. Ross.
- 4 MS. ROSS: Thank you.
- 5 BY MS. ROSS:
- 6 Q. Mr. Frantz. Could you state your name for the record
- 7 please.
- 8 A. (Frantz) Thomas Frantz, F-r-a-n-t-z.
- 9 Q. And, what is your current position?
- 10 A. (Frantz) Director, Electric Division, here at the
- 11 Commission.
- 12 Q. And, I'm turning your attention to Exhibit M, which is
- your prefiled direct testimony. Was this actually
- 14 prepared by you or under your supervision?
- 15 A. (Frantz) Yes.
- 16 Q. And, is this, in fact, the testimony that you adopt
- 17 today?
- 18 A. (Frantz) Yes.
- 19 Q. Would you mind just explaining to the Commission why
- 20 you have supported the Settlement, the Litigation
- 21 Settlement today?
- 22 A. (Frantz) Yes. I provided testimony that indicated the
- role of Designated Staff, which is Attorney Ross and
- 24 myself, played in reaching the Settlement Agreement. I

also provide some historical context to electric restructuring in New Hampshire, and how the Settlement Agreement will complete that.

I also want to state that I believe this is the best opportunity to complete that process. And, I urge the Commission to approve the Settlement Agreement as filed.

Some of the history I'll give, I won't go through the whole history of the twenty years of electric restructuring. But, recently, the Commission, in IR 13-020, directed Staff to investigate PSNH's Default Service rates. With the gentleman to my right, and the one sitting back there, we hired Liberty Consulting to help us in the first report. That report was followed by a report with LaCapra Associates. And, our conclusions from that report were that PSNH's rates will continue to have a disparity between the Default Service rates for its customers versus those market prices going forward, and questioned whether or not that was sustainable over the long term.

In my opinion, this Settlement Agreement will lower costs to customers, benefit the New Hampshire economy, reduce risk of continued ownership of generating assets, and move New Hampshire's largest

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

electric utility into the same position for securing default service for its customers, as Liberty Utilities and Unitil do for their default service customers.

I and Anne Ross both support the Settlement Agreement, and urge the Commission to approve it as filed. Thank you.

- Q. Mr. Frantz, I just have one additional question. Were you directly involved in the sale of the Seabrook

 Nuclear Power Plant?
- 10 A. (Frantz) Yes, I was.

- 11 Q. And, what was your role?
 - A. (Frantz) I led a team that worked on the sale, put together the bids, interviewed potential auction advisors, helped the Commission hire an auction advisor, oversaw the auction advisor, with some help from others. And, then, we also, as part of our team, accompanied potential bidders to Seabrook. Virtually every aspect of the auction was either under my direction, or our team worked on the auction, every aspect.

21 MS. ROSS: Thank you. I have nothing further.

23 CHAIRMAN HONIGBERG: All right. I know
24 Ms. Amidon has questions for other witnesses on this

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      panel. Do any of the other Settling Parties have
       questions they wish to ask other members of the panel than
 2
       their own witnesses?
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                         [Show of hands.]
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                         CHAIRMAN HONIGBERG: I see Ms. Ross's
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       hand. Mr. Boldt, we'll get to you. But I'm talking about
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       the lawyers who have witnesses up there, if they're going
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       to circle back to other witnesses, I'm going to deal with
 9
       them, and then call on the other parties to ask their
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       questions.
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                         So, Ms. Amidon and Ms. Ross, are they
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       the only two?
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                         [No verbal response.]
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                         CHAIRMAN HONIGBERG: Okay. Ms. Ross,
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       proceed.
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                         MS. ROSS: Thank you. Is this working?
                         CHAIRMAN HONIGBERG: It's working
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18
       beautifully.
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                         MS. ROSS: Okay. I have a follow-up
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       question for Mr. Chung.
21
                          CROSS-EXAMINATION
22
    BY MS. ROSS:
23
         Mr. Chung, earlier, when Mr. Smagula was testifying,
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          Commissioner Bailey questioned him concerning the Level
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1 Environmental Assessments and the results. And, I believe Mr. Smagula indicated that the Level 1s have been completed, and that there was no material remediation required.

What I would like to ask you to do is to refine that a little further. And, my question is, although nothing is required of the sites at this time, is it possible that down the road, in working with an auction advisor, the Company might determine that some additional environmental work would be beneficial on the Schiller site, in order to make it ready to convert to another use or to be sold to a buyer that might want to convert it to another use?

A. (Chung) The short answer is "yes", and I'll elaborate a little bit. I concur with Mr. Smagula, in terms of the ESAs did not produce any new compliance obligations or things of that matter. As we prepare for a potential auction, we've retained John Reed of Concentric Energy Advisors. And, one of his recommendations is that we consider, at the Schiller Station, removing the mercury lead, and asbestos that is associated with the retired mercury boilers that are — as a legacy from the purchase, as I understand it.

{DE 11-250/DE 14-238} [Day 1 PM Session only] {02-02-16}

And, as I understand it, there is no

Stachow~Murphy~Chung~Antonuk~Brennan~Frantz] 1 compliance obligation with this material. However, 2 Mr. Reed's advice to us has been that, from a buyer's 3 perspective, we may maximize the sales proceeds, which 4 would benefit New Hampshire customers, if we 5 proactively remove the -- remove the units, and thereby 6 remove the mercury, lead, and asbestos. And, so, 7 that's a possibility. 8 We can't pursue that unilaterally. 9 is something that we would need to have a Commission 10 order that would enable us to pursue that. We can 11 certainly do prework. We've done a competitive RFP to examine the costs. But we, you know, certainly would 12 13 need to have a Commission blessing, if you will, in 14 order to proceed. 15 MS. ROSS: Thank you. I have no further 16 questions. CHAIRMAN HONIGBERG: Now, Ms. Amidon, 17 18 circling back. 19 MS. AMIDON: Thank you. 20 BY MS. AMIDON: 21 Mr. Antonuk, the Office of Energy & Planning is a party 22 to the 2015 Settlement Agreement, is that right? 23 (Antonuk) Yes. Α.

Do you have any position with respect to the

disposition of the Scrubber docket, as it is contained in the Settlement Agreement?

A. (Antonuk) I do. First, I want to say, I was not a participant in that docket, as an advisor or a witness. So, I come to it, I don't know if it's fortunately or unfortunately, much later and to a much lesser extent than most of you. And, I do not propose to substitute my judgment for the judgment of the folks who've heard the record, are prepared or were prepared to make a decision. So, I don't think I'm competent to tell you all what I thought you were going to decide.

But here's my thinking about it. I spent a far amount of time talking to the other people who were on the Settlement Team who were engaged in the process. I've looked at some of the documents. And, looking at the Settlement as a whole, I think it is reasonable to conclude that docket in the context of this Settlement.

And, it's predominantly for this reason.

Because, again, I don't propose to tell you what I

think you should have decided or would have decided.

But it's simply this: A litigated outcome is really

just, at the Commission, is just stage one. There will

be -- there will be blood, known as appeals. For every

year it takes following a disallowance order to become final through the court process, the \$30 million that share owners contribute to this Settlement will have to grow by another 30 million.

The annual savings in that level -- of that level, pardon me, mean that, if it takes a year to decide the case through the courts, then 30 million will have to be 60. If it takes two years, 30 will have to be 90.

On top of that, you have to remember this, that, once you reach the end of the court struggle, you still have not divested. Whatever value is still left in the plants is still earning a return, in the range of 10 to 11 percent, versus the 3, that I'm going to really refer to it in terms of a "gap", not raw percentages, we save 7 percent by securitizing.

So, at the end of litigation, we still have whatever's left on the books after disallowance, if there is any, if it's sustained, earning 10 percent. And, we still have to deal with securitization. We still have to go through the process that gets us there, which is going to mean more litigation or another settlement. So, for however long it takes after the litigation finally wends its way through the

courts, you have to recall that, until you get to securitization following that, we're still, as customers, financing those plants at a rate that's 7 percent higher than is available through securitization.

So, when you look at that, it tells you that the win, a disallowance win at the Commission not only has to be very large, but it has to be sustained, in order to come close to the benefits that we can get today by putting this behind us and moving to divestiture and securitization.

Q. Thank you. That's why I asked if you had a position, because I know you didn't participate in the docket.

But I appreciate that explanation.

Mr. Frantz, you participated in the 11-250, which is the proceeding concerning the costs and cost recovery for the Scrubber installation at Merrimack Station, didn't you?

A. (Frantz) Yes, I did.

Q. And, so, you're familiar with the subject. In your review of the 2015 Settlement Agreement, did you conclude that the proposed resolution of the issues related to the Scrubber are reasonable and in the public interest?

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

1	Α.	(Frantz) I thought it was a fair resolution of all the
2		issues. The Scrubber was one of the most challenging
3		and difficult and, really, to use a non-regulatory
4		term, "ugly" proceedings I've ever actually
5		participated in in 26-27 years here at the Commission.
6		It wasn't easy. There was many days of hearings. And,
7		I don't know how the Commission would have come out.
8		I do know that the Electric Division
9		hired a consultant to look at the prudence of the costs
10		that PSNH incurred in building the Scrubber and
11		managing the Project. They stated that the costs were
12		prudently incurred. They were available for
13		cross-examination during the proceeding and the
14		hearing.
15		I think, based on many of the things Mr.
16		Antonuk said just before me, that this is a fair
17		resolution. We could argue for a long time, preferably
18		over beers, how that proceeding would have turned out.
19		But I think this resolves all those issues in a fair

and equitable manner for everybody.

Q. And, that is keeping in mind that the 2015 Settlement

Agreement is a global agreement resolving several

issues, one of them being the cost recovery of the

24 Scrubber?

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1 A. (Frantz) Correct.

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- Q. Okay. Thank you. Mr. Brennan, you participated in the 11-250, the Scrubber proceeding, correct?
- 4 A. (Brennan) That's correct.
- Do you have any opinion on whether the Settlement

 Agreement is a fair and reasonable resolution of the

 issues related to the Scrubber and in the public

 interest?
- 9 A. (Brennan) I feel that, all things considered, with the
 10 Settlement Agreement leading to a divestiture and the
 11 benefits of securitization, that it is, it fairly does
 12 resolve the issues of that case, yes.
 - Q. Thank you. And, finally, Mr. Chung, could you please address the same issue, whether you think the resolution is in the public interest?
 - A. (Chung) I do. I think, in the context of the comprehensive Settlement that's encapsulated in the term sheets from March of 2015, as well as the Settlement Agreement itself, I think there are a lot of issues resolved. The Scrubber issue is one of them. I was a witness in that docket, and I feel very strongly about the Company's position in that proceeding. And, I think the record stands for itself.

However, you know, looking at the big

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picture, and all the pieces of the Settlement, I do
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- 2 think this is a good resolution to a number of issues.
- 3 Q. Including resolution of 11-250?
- 4 A. (Chung) Yes.
- 5 MS. AMIDON: Okay. Thank you. I have
- 6 no further questions.
- 7 CHAIRMAN HONIGBERG: All right. Let's
- 8 see who else has questions for these witnesses.
- 9 Mr. Irwin?
- MR. IRWIN: Thank you, Mr. Chairman.
- 11 BY MR. IRWIN:
- 12 Q. I'd like to direct my first question to Mr. Frantz. Do
- you have your testimony in front of you?
- 14 A. (Frantz) I do.
- 15 Q. Great. If you could please turn to Page 5, Line 131.
- And, starting at Line 131, you can read the first two
- 17 sentences there please.
- 18 A. (Frantz) "My opinion is that many factors make this the
- right time to complete restructuring. The pressure on
- 20 PSNH's energy service rate from low natural gas prices
- and significant migration of load to CEPS, as well as
- the constant risk of increased environmental compliance
- costs, make continued ownership of PSNH's generating
- 24 assets challenging."

- Q. So, your reference to "the constant risk of increased environmental compliance costs", would that include the risks of potential further capital investments, higher fixed cost associated with compliance with the Clean Water Act and the Clean Air Act?
- 6 A. (Frantz) Yes.
- Q. And, with specific regard to the Clean Water Act, are
 you familiar with the permitting process? Were you in
 here earlier today when we discussed the document
 marked as "OO", NPDES Fact Sheet for Merrimack Station?
- 11 A. (Frantz) I was in the room.
- 12 Q. Okay.
- 13 A. (Frantz) I wouldn't say I was carefully listening.
- 14 Q. Okay.
- 15 A. (Frantz) But I was in the room.
- Q. Are you generally familiar with that process, that

 NPDES permitting process at EPA?
- 18 A. (Frantz) I'm aware that there's a permitting process.
- 19 I'm not an expert in environmental compliance.
- Q. Do you have a sense of the potential scale of investment that could be required as a result of that process?
- A. (Frantz) I think it depends on who you ask. But, to some, it could be significant. And, in my testimony, I

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

wasn't addressing any one particular environmental I was addressing lots of environmental risks. Whether it's greenhouse gases, whether it's cooling towers. There's a number of them out there. And, we looked at those in both reports to some degree. So, this was a general statement. But they're out there and they need to be recognized. They're risks and they're potentially costly.

Q. And, would you say that one of the benefits of divestiture is relieving ratepayers of those risks?

- A. (Frantz) Well, it shifts the risks to the competitive wholesale market, which is one of the reasons for moving to an electric industry that was restructured in the first place.
- Q. Thank you. I have a question for -- or, potentially a few questions for Mr. Brennan. Mr. Brennan, if you could turn to Page 15 of your testimony. Starting on Line 2, if you could just recite that sentence there about "fixed O&M and capital components".
- A. (Brennan) "The fixed O&M and capital components of PSNH Energy Service place rising costs onto a declining base of mostly residential ratepayers who now subsidize PSNH profits on uneconomic assets."
- Q. Mr. Brennan, if we were in a No Divestiture scenario,

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

if there were no divestiture, and PSNH were required to
make capital expenditures to comply with the Clean
Water Act or the Clean Air Act, or other environmental
regulations, would it exacerbate the concern that
you've laid out here?

- A. (Brennan) Yes, it would.
- Q. My next question is directed to Dr. Murphy. And, if I could direct your attention to Page 6 of your testimony. And, there you basically state what you stated a few minutes ago, about fixed costs being a factor in your consideration for the non-divestiture scenario, is that correct?
 - A. (Murphy) Yes. The fixed costs of owning and operating the generation. Is that what you're referring to?
- 15 Q. Yes.

6

13

- 16 A. (Murphy) Yes.
- Q. So, I assume you would include in those fixed costs
 additional costs that may be incurred to comply with
 environmental regulations?
- A. (Murphy) I did not explicitly include those costs. I

 am not aware of the extent to which the operating costs

 and the capital expenditures that Eversource provided

 to me may include some environmental costs. Anything,

 of course, that is any new environmental requirements

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- were presumably not included in those numbers and would be additional.
- Q. So, if you could turn your attention to Figure 2 of your testimony, on Page 11.
- 5 A. (Murphy) Yes.

- Q. If you -- if they were additional costs, and if you were to factor them into your figure, where would they -- where would they go?
 - A. (Murphy) Well, it depends a little bit on the type of cost. If future environmental requirements were to increase operating costs, they would go into the "Fixed O&M" category, which is -- happens to be 98 million on this.

If it required additional capital cost, those would go into the rate base, which would depreciate over time, it would add to the depreciation element initially, and then over time, and would also increase the required return on the rate base, because it increases the rate base itself.

If you've got specific and detailed questions on what's in the numbers that I use, I might refer you to Mr. Chung, who provided those on behalf of Eversource.

Q. Okay. Thank you. So, I guess I'd like to just direct

a question to the panel generally, and pose a question

whether the panelists consider it to be in the public

interest and a benefit of divestiture to allow

ratepayers, current Eversource ratepayers, the ability

to avoid potential fixed -- additional fixed costs

associated with environmental compliance, such as under

the Clean Water Act or Clean Air Act?

- A. (Antonuk) I didn't do Round 1, so maybe I'll start Round 2.
- 10 Q. Okay. Please.

A. (Antonuk) Absolutely. I think, if you look at the environmental costs, you have to also consider variable costs as well, because a number of environmental activities that have been taken also rob — basically use station power. So, they can affect variable costs as well, depending on what their precise nature is.

As Mr. Frantz mentioned, we looked into the issues you mentioned. In fact, I recall meeting with state environmental officials with respect to each of the issues I think you went through earlier today. And, my view of those is that, given the value that we put on the plants, those environmental issues have the ability to wipe out more than the remaining value in the plants.

1	I suppose there is a chance that
2	environmental pressure will lessen. I think it's
3	vanishingly only vanishingly possible that we'll
4	have an easing of environmental constraints that will
5	make the coal the fossil plants look better in the
6	future than they look now.
7	You know, now there are some "big
8	picture" environmental issues, which I think have been
9	termed a "war on coal". I don't use that term, but it
LO	doesn't really bother me when I hear it. It doesn't
L1	seem inaccurate to me.
L2	And, I think, even with respect to
L3	current conditions, you were having a discussion today
L 4	about how the EPA is approaching very specific
L5	already-on-the-table problems. And, I guess my view of
L6	the EPA is that, if they've got you on the mat, and
L7	it's a legal hold, you can expect a pin, not mercy.
L8	So, I think those risks are very high.
L9	And, they're why, whatever you assume about changing
20	fuel markets, I don't think they can arise anywhere
21	near to the extent or the probability of the
22	environmental risks that these plants face.
23	CHAIRMAN HONIGBERG: Does Mr. Antonuk
24	speak for all of you or does anybody else want to provide

[WITNESSES:

Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

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1
       an answer to Mr. Irwin's question?
                         [No verbal response from the witnesses]
 2
 3
                         CHAIRMAN HONIGBERG: I think that's
 4
       good. You're all set, Mr. Irwin?
 5
                         MR. IRWIN: Yes. Thank you.
 6
                         CHAIRMAN HONIGBERG: Mr. Fabish, do you
 7
       have any questions?
 8
                         MR. FABISH: I do, yes.
 9
    BY MR. FABISH:
10
          So, this first question or set of questions is to Mr.
11
          Stachow. And, so, I guess Page 9 of your testimony.
12
          And, we've heard a little bit about this already today,
13
          but I just have a couple of questions, and you
14
          mentioned it, so I thought I'd ask you. Page 9 of your
15
          testimony refers to "legacy mercury residue in certain
16
          facilities at Schiller Station". Is that correct?
17
          (Stachow) Correct.
     Α.
18
     Q.
          Could you explain the nature of this "legacy mercury
19
          residue"?
20
                         MR. SPEIDEL: I would object to that
21
       question, because Mr. Stachow does not have direct
22
       knowledge. I would suggest that the question be
       redirected to Mr. Chung of the Company, if at all.
23
24
                         CHAIRMAN HONIGBERG: Mr. Fabish?
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1 MR. FABISH: I'm struggling a little bit

2 here with having a panel of six witnesses to begin with.

I mean, it is in his testimony. I want to know what he's

4 talking about in his testimony. I'm not sure that an

5 objection is warranted. I think he can answer to the best

6 of his ability, but --

7 CHAIRMAN HONIGBERG: Mr. Stachow, you

8 can answer the question. It is in your testimony, you can

9 answer.

14

16

10 WITNESS STACHOW: I will answer to the

11 best of my ability.

12 **BY THE WITNESS:**

13 A. (Stachow) That is to say, I'm not an environmental

specialist. I looked at the results of the Haley and

15 Aldrich --

[Court reporter interruption.]

17 | CONTINUED BY THE WITNESS:

- 18 A. (Stachow) I'm not an environmental specialist. I
- 19 looked at the results of the Haley and Aldrich
- analysis. And, I understand that there is a potential
- 21 concern with mercury, residual mercury at that site, at
- 22 the Schiller site.
- 23 BY MR. FABISH:
- 24 Q. Okay. Thank you. I guess I'll kind of move my way

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

1 down the line then.

Dr. Murphy, next question or set of questions for you. So, I think, on Page 14 of your testimony, you characterize, and I know that, you know, you can cut the math different ways, but it says the benefits to ratepayers, based on your analysis, roughly 33 million per year over the first five years post divestiture, is that correct?

- A. (Murphy) Yes. That's correct. In expectations, based on current expectations of the future.
- Q. Understood. Understood. And, one of those expectations is an assumed price that the generating assets would receive at auction, is that correct?
 - A. (Murphy) Yes, that's right. For this analysis and these numbers, I used the 225 million sale price that had been used in the original Eversource analysis.
- Q. And, then, I think on the previous page, Page 13, and I just want to make sure I understand, you say "Each additional 100 million of sale price would decrease RRB costs and increase customer savings by 9.2 million per year." Is that correct?
- 22 A. (Murphy) Yes.
- 23 Q. Okay. And, that's over that same five year --
- 24 A. (Murphy) That's, on average, over the first same five

```
1 years, yes.
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- Q. Okay. Does the same follow for a \$100 million decrease in the sale price?
- 4 A. (Murphy) Yes, it would.
- 5 Q. Okay.
- 6 A. (Murphy) It would.
- Q. So, and, again, bear with me, I'm a lawyer, I don't do
 math very well. If the auction returned 125 million,
 instead of 225 million, you'd suggest the customers
 would still likely benefit roughly about 24 million a
 year?
- 12 A. (Murphy) It would be the 33 million, less the 9.2. So, yes, roughly.
- Q. Okay. Good. Good. I'm glad that arithmetic, I can do that. What if it was \$200 million less?
- 16 A. (Murphy) And, so, if the plants sold for only 17 \$25 million in aggregate?
- 18 Q. Sure. Sure.

24

A. (Murphy) Then, it would be linear, because you'd be -I'm assuming that the cost of securitization won't
change with changes in the amount that is securitized.
But each additional 100 million, or a fraction or
multiple thereof, would result in a change of about 9.2

million, over that first five years, in the cost to

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- 1 customers.
- Q. Okay. So, then, even getting a very small amount at auction, under your analysis, divestiture still makes sense, for ratepayers?
- 5 A. (Murphy) Again, on an expectation with a current view of the world, --
- 7 Q. Sure.
- A. (Murphy) -- I would say that, yes. If the plants were divested for zero, then, I'd say "well, you've got two and a quarter times the 100 million." So, two and a quarter times 9.2 is, ballpark, 20 million. It would reduce the savings to customers over those first five years by about 20 million per year. So, your 33 would drop down to about 13 million per year.
- 15 Q. Okay.
- 16 A. (Frantz) May I jump in?
- 17 CHAIRMAN HONIGBERG: Sure. That's one
 18 of the things about a panel. If someone else feels like
 19 they need to provide an answer, you can do that.
- 20 WITNESS FRANTZ: Thank you.

21 **BY THE WITNESS:**

A. (Frantz) The only thing I want to point out on that is, there's a lot of assumptions that go into that decrease of 100 million or increase of 100 million, which

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1
          essentially means that there's some fairly significant
 2
          changes in market conditions that may be going on, that
 3
         would either reduce that $225 million sales price from
          -- in the La Capra report, to 125 or to $25 million.
 4
 5
                         And, I just wanted to make that point.
 6
          That's all. Thank you.
 7
                         CHAIRMAN HONIGBERG: Mr. Fabish, you may
       continue.
 8
 9
                         MR. FABISH: Okay. Well, I actually
10
       think I'm done at this point. So, thank you very much.
11
                         CHAIRMAN HONIGBERG: I saw Senator
       Feltes come in the room. How you are a party to all of
12
13
       this, do you have any questions for the witnesses who are
14
       up there?
15
                         SENATOR FELTES: I do not. Good
16
       afternoon, Mr. Chairman and members of the Commission.
       Just for the record, Dan Feltes. I'm State Senator,
17
18
       District 15. I don't have any questions. But thank you
19
       for the opportunity. Thank you.
20
                         CHAIRMAN HONIGBERG: Mr. Boldt.
21
                         MR. BOLDT: Two very minor housekeeping
22
       questions.
23
     BY MR. BOLDT:
24
         Mr. Frantz, when you refer to your leadership of the
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{DE 11-250/DE 14-238} [Day 1 PM Session only] {02-02-16}

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[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]
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- 1 "team" concerning Seabrook divestiture, that was a team
- 2 within the Office of the Public Utilities Commission,
- 3 correct?
- 4 A. (Frantz) Absolutely.
- 5 Q. And, for the panel as a whole, and for Mr. Frantz and
- 6 Mr. Stachow, when you are referring to your support for
- 7 the Settlement Agreement, that is not only Exhibit A,
- 8 but it is Exhibit B that amends Exhibit A, correct?
- 9 A. (Frantz) Yes.
- 10 A. (Stachow) Let me just catch up with that. Yes.
- 11 Q. Any objections --
- 12 A. (Antonuk) Yes.
- 13 Q. -- from the other members of the panel?
- 14 A. (Antonuk) I said "yes" to "I agree", not "yes" to "I
- object".
- MR. BOLDT: Hearing none, that's the
- 17 last question.
- 18 CHAIRMAN HONIGBERG: Mr. Aalto.
- MR. AALTO: Thank you.
- 20 BY MR. AALTO:
- 21 Q. For Dr. Murphy, --
- 22 CHAIRMAN HONIGBERG: Hold on. You're
- going to need to find a microphone. Because unlike
- 24 Mr. Boldt, you don't project quite strong enough.

- 1 MR. AALTO: I don't yell enough?
- 2 CHAIRMAN HONIGBERG: No, you don't yell
- 3 enough.
- 4 MR. AALTO: Thank you very much. I
- 5 should have gotten here earlier. Are we on? Okay. Thank
- 6 you.
- 7 BY MR. AALTO:
- 8 Q. Dr. Murphy, when you were doing your analysis, what did
- 9 you, for looking at the five-year stream, what did you
- see as the average net income from the facilities
- operating as they do now? And, by that, I mean all of
- 12 their operating -- income, minus operating costs, not
- including any capital servicing costs, return on
- 14 equity, or anything like that?
- 15 A. (Murphy) Well, I was not looking at net income from,
- for instance, a shareholder perspective, --
- 17 Q. That's correct.
- 18 A. (Murphy) -- taking into account taxes, etcetera.
- 19 Q. Well, taxes would be continuous. But, by "taxes", I
- don't mean "income taxes", but local taxes, as an
- 21 operating -- as part of the normal ongoing cost, not
- 22 servicing the ratepayer -- the stockholders, or banks.
- MR. SPEIDEL: I would raise an objection
- 24 to Mr. Aalto's question on vagueness. Could he please be

- 1 more specific about what metric he is seeking Dr. Murphy
- 2 to respond to.
- 3 BY MR. AALTO:
- 4 Q. What I'm trying to find out is what the income is, not
- 5 including any income that goes to support PSNH's
- 6 revenue requirements for profit, or for servicing
- 7 loans?
- 8 A. (Murphy) And not including depreciation as well?
- 9 Q. Exactly.
- 10 A. (Murphy) If you'll look at Figure 2, which is on Page
- 11 of my testimony, if I understand your question
- correctly, you're asking about the market revenues that
- the plants would earn, offset by their fixed operating
- 14 costs?
- 15 Q. Exactly.
- 16 A. (Murphy) And, I'm finding, over this first five years,
- 17 | 132 million in market revenues, 98 million in fixed
- 18 operating costs. And, so, if you're just looking at
- the net between those two, that's about \$34 million.
- 20 Q. So, that is the source of the 34 million and roughly
- 21 that you see as a savings?
- 22 A. (Murphy) No. That's not actually where I get that
- 23 33 million in savings.
- 24 Q. Okay.

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1
    Α.
          (Murphy) The 33 million in savings comes from the total
          fixed cost, which include the return of -- or, the
 2
 3
          return on rate base and depreciation. So, that's
          213 million, consisting of depreciation, return, and
 4
 5
          fixed O&M. That is offset by the 132 million of market
          revenues, leaving a net of approximately 82 million.
 6
 7
          I'm comparing that against the 49 million a year of the
 8
          RRB costs. That difference there is the 33 million in
 9
          customer savings.
10
                         MR. AALTO: Thank you.
11
                         CHAIRMAN HONIGBERG: Mr. Cunningham.
12
                         MR. CUNNINGHAM: Just a quick question.
13
       Has Mr. Chung given his direct yet?
14
                         CHAIRMAN HONIGBERG: Did we skip Mr.
15
       Chung?
16
                         MS. AMIDON:
                                      No.
17
                         MR. BERSAK:
                                     No.
18
                         CHAIRMAN HONIGBERG: No.
                                                   I think Mr.
19
       Chung identified Exhibit G as his testimony and adopted
20
       it. Did you do that, Mr. Chung?
21
                         WITNESS CHUNG: Yes, I did.
                         MR. CUNNINGHAM: And, he did not
22
23
       elaborate? Okay. Fair enough.
24
     BY MR. CUNNINGHAM:
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[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- Q. Mr. Stachow, are you, in connection with this question
 about the reasonableness of the Scrubber expense, can
 you tell us what part of the stranded cost proposal is
 the Scrubber expense?
- A. (Stachow) Well, first of all, I was not part of 11-250.

 So, my comment on the reasonableness is based on the reasonableness of the whole Agreement.
- 8 Q. I'm sorry?

19

20

21

22

23

- 9 A. (Stachow) My comment on the reasonableness is based
 10 upon the whole Agreement, the Settlement Agreement.
- 11 Q. So, you have no specific knowledge of the number 12 involved in --
- 13 A. (Stachow) I may have some knowledge, but I wasn't a party to that docket.
- 15 Q. And, I'll ask that same question of Dr. Murphy. I

 16 think, in your testimony, you assume the Scrubber costs

 17 in your calculation. And, could you tell us what

 18 number you used please?
 - A. (Murphy) Well, in my calculation, I wasn't making any assumption about the potential resolution of the Scrubber docket. I was comparing the cost of no divestiture, if there were no disallowance, and I'll refer to my colleague, Mr. Chung, here to confirm that there is no disallowance in the cost numbers that he

```
1
          provided to me. But, yes, for this comparison, my
 2
          understanding is the cost numbers that I was including
 3
          did not -- did not reflect a disallowance.
 4
          So, your testimony based -- that states that the
     Q.
 5
          Scrubber costs are "reasonable", is based not on your
 6
          own knowledge, but on the information provided by Mr.
 7
          Chung?
 8
                         MR. SPEIDEL: I object. That's leading
 9
       the witness. I would challenge Mr. Cunningham to identify
10
       where there is a finding by Mr. -- I'm sorry, by Dr.
11
      Murphy that the Scrubber costs are reasonable.
12
                         CHAIRMAN HONIGBERG: Mr. Cunningham may
13
       lead, although he may not mislead. I don't think Dr.
14
       Murphy did testify to the reasonableness of those costs.
15
       It may be somewhere in his documentation, but he hasn't
16
       done it orally.
17
                         MR. CUNNINGHAM: Okay. I just took it
18
       from his answer that he used that as a premise, that must
19
       have been the Chung number that he used as a premise for
20
       your calculation and projections.
21
                         CHAIRMAN HONIGBERG: I think he's just
       testified to that.
22
23
                         MR. CUNNINGHAM:
                                          Okay.
24
                         CHAIRMAN HONIGBERG:
                                              That he used
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Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

[WITNESSES:

1 Mr. Chung's numbers in his work.

2 | WITNESS MURPHY: That's correct.

BY MR. CUNNINGHAM:

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Q. And, I'll direct these questions to both Mr. Stachow and Dr. Murphy. Are either of you familiar with the timeline for the Scrubber? When it was commenced?

When it became operational? When the first rate bump was approved in the Scrubber?

CHAIRMAN HONIGBERG: Mr. Bersak?

MR. BERSAK: Let him answer.

MS. AMIDON: Mr. Chairman, I object.

The rate -- strike that. The record in the Scrubber docket is closed. All of those questions pertain to issues that were discussed in 11-250. That record is closed. And, I do not understand the relevance of revisiting when the Scrubber went into rates, when the Scrubber was operational, as it relates to whether or not the Commission should approve the Settlement Agreement before it today.

CHAIRMAN HONIGBERG: Mr. Cunningham?

MR. CUNNINGHAM: The question, Mr.

Chairman, of reasonableness of the Scrubber cost has been opened by Staff, the Non-Advocate Staff. And, I'd really

like to cross-examine the basis of the conclusion that

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1
       "the Scrubber costs are reasonable".
                         CHAIRMAN HONIGBERG: I believe that
 2
 3
       Non-Advocate Staff has asked "whether the resolution of
 4
       the Scrubber docket in this context was reasonable?" I
 5
       believe that's the question they were asked, and the
 6
       question that they answered.
 7
                         MS. AMIDON: Thank you, Mr. Chairman.
                         CHAIRMAN HONIGBERG: I haven't ruled
 8
 9
       yet. But, just so we're clear about what's actually been
10
       asked and answered, Mr. Cunningham, do you want to try
11
       again, in terms of making an argument why that question --
       why you should be allowed to proceed?
12
13
                         MR. CUNNINGHAM: Well, if the
14
       residential ratepayer cannot question the conclusory
15
       testimony that "the Scrubber costs are reasonable" in this
16
       docket, because having been raised by the proponents of
17
       this Settlement Agreement, I think that's manifest error.
18
                         CHAIRMAN HONIGBERG: Well, I think your
       question at the end of what you started with was "well,
19
20
       when could they?" And, there's an answer to that
21
       question, in Docket 11-250, which residential ratepayers
22
       would have been allowed into as intervenors, including
23
       your client. So, there's a pretty clear answer to that
```

question, is there not?

1 MR. CUNNINGHAM: No, there is not, Mr.

- 2 Chairman, if the finding of the Commission is that "the
- 3 Scrubber costs are reasonable", based on testimony we
- 4 heard today.
- 5 CHAIRMAN HONIGBERG: That's not the
- 6 testimony heard today. As we just -- the objection is
- 7 sustained. Move on.
- 8 BY MR. CUNNINGHAM:
- 9 Q. Let me go to Mr. Antonuk. Mr. Antonuk, in your
- 10 testimony, I think you have it in front of you?
- 11 A. (Antonuk) I do.
- 12 Q. You determined, you made a finding, and you provided
- testimony on when the default service rate for PSNH
- increased beyond other generators in New Hampshire?
- 15 A. (Antonuk) Do you have a reference? I don't recall that
- 16 specific statement.
- 17 Q. If I can find it.
- 18 A. (Antonuk) It is certainly my opinion that they have
- been higher for PSNH default service customers.
- 20 Q. Can you tell us when that transpired? When that took
- 21 place?
- 22 A. (Antonuk) My recollection is that that phenomenon
- 23 started to reverse maybe, there's a chart, I think it's
- 24 maybe in the 2009 or so timeframe. And, I believe that

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[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]
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- actually is taken from the report that we worked with
- 2 Mr. Frantz on back in 2013, which is an attachment to
- 3 the testimony. If you give me a second, I'm sure I can
- find the chart. I'm remembering it.
- 5 Q. It's in the Liberty report?
- 6 A. (Antonuk) The Liberty/Staff report.
- 7 Q. On Page 9.
- 8 A. (Antonuk) Page 9?
- 9 Q. And 10.
- 10 A. (Antonuk) Yes. That's the chart.
- 11 Q. And, if you look at Page 10, the first sentence in the
- 12 last paragraph in the Liberty report. If you would
- read that, the first sentence or two to me or for me.
- 14 A. (Antonuk) The first sentence of the last paragraph?
- 15 Q. Of the last paragraph on Page 10 of the Liberty report.
- 16 A. (Antonuk) The first sentence of that last paragraph?
- 17 Q. Yes.
- 18 A. (Antonuk) "It is clear from Figure 1 that a significant
- swing in market conditions evidenced itself in
- 20 mid-2009."
- 21 Q. And, continue to read please.
- 22 A. (Antonuk) "PSNH's Default Service rate" --
- 23 CHAIRMAN HONIGBERG: Mr. Antonuk, read
- 24 slowly, so Mr. Patnaude can get it.

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

1 WITNESS ANTONUK: He's been telling me

2 that for about 20 years now.

3 CHAIRMAN HONIGBERG: And, it's still

4 true.

6

7

8

9

10

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5 WITNESS ANTONUK: And still true.

BY THE WITNESS:

A. (Antonuk) "PSNH's Default Service rate had been consistently below the default service rates of the other New Hampshire electric utilities since 2006. In 2009, the situation reversed and, with only very

short-term exceptions, PSNH's Default Service rate has

exceeded the others' rates since mid-2009."

13 BY MR. CUNNINGHAM:

- Q. And, what data or what information did you use to render that -- do you agree with that conclusion in the Liberty report?
- A. (Antonuk) It is, I will have to say, two and half years
 later it's past recollection recorded. We worked with
 Staff and exchanged a lot of data. And, I'm sure we
 can recover the source. But I do not independently
 recall it at this point.
- 22 | Q. And would you disagree with the Liberty report?
- A. (Antonuk) I do not. Other than the fact that I want to keep describing it as the "Liberty and Staff report".

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- 1 Q. All right. And, you incorporated that report into your
 2 testimony, did you not?
- A. (Antonuk) That statement was part of the foundation for our belief today, yes, and during the course of the settlement discussions.
- Q. And, do you know, Mr. Antonuk, what the status the construction of the Scrubber was on the date that you described in 2009?
- 9 A. (Antonuk) I do not.
- Q. And, do you know whether or not the Scrubber was operational on that date?
- 12 A. (Antonuk) I do not recall those dates at the present time.
- Q. And, in your capacity, do you give company management advice?
- 16 A. (Antonuk) Much more commonly, we give commissions
 17 advice about company management. But, on numerous
 18 occasions, we have also consulted to management.
- 19 Q. And, were you asked to consult on this Scrubber with
 20 respect to these rates that you describe that happened
 21 in 2009?
- A. (Antonuk) No. If you're referring to what we were doing at that time, we were not engaged in any consultation with management or the Commission

1 regarding the Scrubber.

- Q. All right. Now, another question I was interested in, you said that "the Scrubber deal is a good deal, because litigation is a bad deal"?
- A. (Antonuk) No. I said "the Settlement", which is about more than the Scrubber, "is a good deal." And, certainly, the views of the Settling Team about the Scrubber formed a part of that, but it was done in a holistic way. The Scrubber was never a unique and separate part of, certainly, our deliberations and our considerations. It was always an integral part of looking at "what is the best way to carve a future for customers that will produce the best rates in the short-term and the best prospects for continuing low rates in the longer term?"
- Q. What I'm asking about is you described that "if this litigation continues on and on and on, that will be a bad deal for ratepayers". Is that what you said?
- A. (Antonuk) No. What I said was, whatever value you put on the Scrubber disallowance, you have to consider the fact that it may take you a number of years to achieve that result. And that, during those years, you will have lost the benefits of securitization. So that every year it takes to resolve the Scrubber case

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- finally, the amount of that disallowance will have to grow, and it will have to grow by roughly, I think

 Brattle would say "\$33 million a year", the numbers we were using were in the same range.
- Q. Well, let me put it this way. Why is a litigation risk wagging this dog? Why not go ahead with the divestiture, as quickly as we can go ahead with the divestiture, and let the litigation proceed?
 - A. (Antonuk) Well, because there would be litigation about that outcome. And, I don't understand how that litigation would take any less time.
- 12 Q. Not, sir, if the shareholders assumed that responsibility.
- 14 A. (Antonuk) I'm not sure --

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- 15 Q. Instead of the ratepayers.
- 16 Α. (Antonuk) You have to give me a lot more, a lot better 17 framework for what your alternative is here. Because I 18 see, when I think about forced divestiture without 19 resolving these issues, what I see, frankly, is 20 Seabrook back in the '90s. That's exactly what we had. And, we had a federal judge calling the "New Hampshire 21 banana republic", and we were tied up in grotesque 22 23 knots that looked like they were never going to end. 24 And, I will tell you, that's a lot of my

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frame of reference now. Is litigation, once you start it, and once you put PSNH on the other side of it, and you basically put them in a "bet the ranch" proposition, you're in for one long, hard slog.

Sometimes it is better to switch than fight.
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- Q. But the answer to your question is premised on the fact of the Settlement being in place, and the ratepayers assume all the costs. My question to you is, what would be wrong with some of the the shareholders assuming some of these costs, and then litigating it after divestiture?
- A. (Antonuk) How do we -- what I don't understand -- I do not want to answer your question with a question. I apologize.

CHAIRMAN HONIGBERG: Mr. Antonuk, stop.

Mr. Cunningham, you're largely just arguing with him about
a settlement that isn't in front of us. We're not looking
at that scenario right now. We're looking at a large
Settlement Agreement that the Parties entered into that
resolves many issues.

I think there are interesting questions you could ask him about the statements he made about the Scrubber resolution portion of this. And, you asked one of them. If you wanted to continue along those lines,

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- that might be of interest. I have some questions about
 what he said.
- But, at this point, you're really just

 suggesting to him "why didn't you bring us a different

 deal?" And, that's really not going to help us right now.
- 6 MR. CUNNINGHAM: All right. All right,
- 7 Mr. Chairman.

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- 8 BY MR. CUNNINGHAM:
- 9 Q. I'm going to ask Mr. Frantz about the Scrubber
 10 timetable, the same questions. When did the Scrubber
 11 construction commence?
- 12 (Frantz) Well, I think it commenced in somewhere Α. 13 around -- it was a long process. There was planning, 14 preconstruction, a lot of engineering work, permitting. 15 So, that's a -- if you ask me "when did that commence?" 16 I'd say, probably pretty soon after the law that 17 discussed the Scrubber and mandated it was passed. Ιf 18 you ask me "when the Scrubber became operational?" Ι 19 believe that was in 2011.
 - Q. And, so, that was two years after Mr. Antonuk described in his testimony that PSNH rates exceeded the rates of other generators in the State of New Hampshire?
- A. (Frantz) When it became operational is subject to check. It's been a while since I was on the stand

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

testifying in the Scrubber proceeding. But it was
after, it became operational after that chart. That is
correct.

CHAIRMAN HONIGBERG: Ms. Amidon?

MS. AMIDON: Mr. Chairman, thank you. I just wanted to say, the temporary cost recovery of the Scrubber, the temporary rate for cost recovery of the Scrubber, which was a partial rate, you know, it was not full cost recovery, commenced with an order issued by the Commission in April 2012, in 11-250. Just for your information.

CHAIRMAN HONIGBERG: Thank you. Mr.

Cunningham.

14 BY MR. CUNNINGHAM:

- Q. And, the temporary rate increase that happened in

 April 2012 was after the default rates became known -
 that the PSNH default rates became known to be

 exceeding all other rates in the State of New

 Hampshire, isn't that correct?
- A. (Frantz) Well, based on that chart, the rates of PSNH were lower than other default service rates for electric distribution companies for a period of time.

 And, then, they switched and went -- and were higher starting around 2009. And, that's what the chart

1 shows.

Q. And, did you, as a member of Staff, you were not part of Advocate Staff at that time, did you question that, in terms of the cost of the Scrubber, when it became operational in the Fall of 2011?

MR. BERSAK: Mr. Chairman?

CHAIRMAN HONIGBERG: Mr. Bersak.

MR. BERSAK: It really appears we're going over the prudence of the Scrubber once again. The Commission has already ruled that the evidentiary record in DE 11-250 is closed, and there is no further opportunity for discovery and testimony on the prudence issues. I think we've crossed that line, and we're now into prudence issues regarding the Scrubber.

CHAIRMAN HONIGBERG: Mr. Cunningham?

MR. CUNNINGHAM: I can only repeat my

argument, Mr. Chairman, that these witnesses opened this

question of "reasonableness". And, that's before the

Commission, and I have a right to cross-examine the basis

of that opinion.

CHAIRMAN HONIGBERG: Well, I think they have answered that. They have given the basis for that opinion. Do you want to make an offer as to what you expect they would say, if you were allowed to continue

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

1 questioning them?

2 MR. CUNNINGHAM: Well, I want to go on.

3 I want to ask a few more questions.

CHAIRMAN HONIGBERG: I think you're -that Mr. Bersak's objection is about to be sustained. So,

if you want to make an offer of proof as to what you
expect the record would show if you were allowed to

proceed, I'm going to allow you to do that.

BY MR. CUNNINGHAM:

Q. Mr. Frantz, --

CHAIRMAN HONIGBERG: No. You're going to make an offer of proof about what you think the witnesses would say, if you were allowed to question them.

MR. CUNNINGHAM: Well, I expect the witnesses would say that they knew that the PSNH rates had increased significantly in 2009, beyond the rates of other generators in the state. That they went ahead, two years later, without objection, approved a rate for the Scrubber. I think the witnesses would say, if I was permitted to ask, that they did not challenge the quality of management decisions that allowed PSNH to proceed on, after their rates jumped so significantly, that they went on to proceed on spending more and more money on the Scrubber.

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz] 1

CHAIRMAN HONIGBERG: So, Mr. Bersak is 2 correct. You're interested in arguing the prudence of the 3 Scrubber. And, you have a record to work with, which 4 we've given you full access to, in Docket 11-250. And, 5 you are free to make the arguments that, based on that record, whatever you want to say about it, and then use 7 that to make an argument that the resolution of all of these dockets, which includes resolution of 11-250, is not 8

But, I think, if that's what you expect these witnesses to give you, the objection is sustained formally. And, you are preserved with what you would have gotten from them -- what you think you would have gotten from them, had you been permitted to ask.

So, why don't you move on to a different topic.

17 MR. CUNNINGHAM: Thank you, Mr.

18 Chairman.

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BY MR. CUNNINGHAM: 19

reasonable.

- Q. I have a few questions for Mr. Chung. Now, Mr. Chung, you're familiar, are you not, with the La Capra report?
- 22 (Chung) I'm generally familiar with it. And, can you 23 clarify which report you're referring to?
- 24 The original 2014 report. Q.

Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

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1 Α. (Chung) I'm generally familiar with it, yes.

2 Q. In fact, I think, if you look at your testimony, you

referred your report -- or, referred to the La Capra

report? 4

- 5 (Chung) Yes. Let me clarify. In the La Capra report,
- I refer to the overall sale proceeds that they cited. 6
- 7 I should clarify, anything else is really the Staff/La
- Capra analysis. So, the forecasts were from the Staff 8
- 9 report.
- 10 Is there anything in the La Capra report that you Q.
- 11 disagree with? Let me ask a specific question. Do you
- 12 disagree with the La Capra assessment of the market
- 13 value of Merrimack Station?
- 14 (Chung) I'm not in the forecasting business. So, I
- 15 don't have an opinion on it. That is a number they
- 16 came up with. And, I, for the purposes of my analysis,
- 17 I accepted their fleet valuation.
- 18 Q. And, correct me if I'm wrong, the La Capra assessment
- 19 of the value of Merrimack Station, based on their
- 20 discounted cash flow analysis, is, as of the date of
- the report, or as of the following first of the year, 21
- 22 January 1st, 2014 -- or '15, is zero, is that correct?
- 23 (Chung) I'm going to take a look at the report, if I Α.
- 24 have it.

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1 Q. By all means.
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- 2 A. (Chung) Thank you.
- 3 Q. Don't let me misstate something.

4 CHAIRMAN HONIGBERG: While Mr. Chung is

5 doing that, Mr. Cunningham, give me a sense of how much

longer you have, because we're probably going to need to

7 take a break for Mr. Patnaude soon?

8 MR. CUNNINGHAM: Yes. I need a break as

9 well. I am very dry.

10 CHAIRMAN HONIGBERG: All right.

MR. CUNNINGHAM: This is tough going,

12 Mr. Chairman.

6

13 CHAIRMAN HONIGBERG: All right. Then,

that's what we're going to do. We're going to break now,

and we'll come back in ten minutes.

16 (Recess taken at 3:29 p.m. and the

hearing resumed at 3:49 p.m.)

18 [Brief off-the-record discussion

19 ensued.]

20 CHAIRMAN HONIGBERG: Mr. Cunningham, the

21 floor is yours.

22 BY MR. CUNNINGHAM:

23 Q. I was asking Mr. Chung about the La Capra report. And,

24 whether he was familiar with it and whether he was

- familiar with the appraisal conclusions that La

 Capra -- what conclusions they reached on the values?
- 3 A. (Chung) Mr. Chung, so, during the break I turned out to
- 4 not have the report, and Mr. Frantz was kind enough to
- 5 loan me his copy. So, I'm familiar with -- I guess
- 6 I'll read you what I'm looking at. I'm looking at
- 7 Page 68, the paragraph is under the heading "10.1 DCF
- 8 Results Merrimack Station". I'll just read what's
- 9 there, you can correct me if I read it wrong. "The
- results of the cases, shown in the table below, have
- 11 | 12/31/2014 current value outcomes ranging from a high
- of 159 million to a low of zero."
- Is that the part you're referring to?
- 14 Q. Yes.
- 15 A. (Chung) Okay.
- 16 Q. And, again, back to the question of the
- "reasonableness" of the Scrubber deal, does it make
- sense to you that La Capra appraises Merrimack Station
- a value of zero just two years after or three years
- after the investment was made?
- MR. BERSAK: Objection, Mr. Chair.
- We're back to, what he's really asking is "was the Company
- 23 | prudent in building a scrubber that the law of this state
- required the Company to build in light of things in the

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      marketplace?"
                         CHAIRMAN HONIGBERG: Overruled. He can
 2
 3
       answer that.
 4
                         WITNESS CHUNG: Could you repeat the
 5
       question?
 6
                         CHAIRMAN HONIGBERG: Does it make sense
 7
       that the value is zero two years after the Scrubber went
       on line?
 8
    BY THE WITNESS:
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10
          (Chung) I don't know how to answer that question. So,
11
          I'll answer a different one, which I think is what
12
         you're asking.
13
                         CHAIRMAN HONIGBERG: Are you sure you
14
       really want to do that, Mr. Chung?
15
                         WITNESS CHUNG: Well, yes. I just want
16
       to be helpful. I just, I mean, I don't have a way to
17
       answer that. Again, I'm not a forecaster. I don't do
18
       valuation for a living. And, what I am looking at is a
19
       global settlement. This is one issue that is settled.
20
       And, do I think it's reasonable, looking at the
21
       constellation of terms, to include this term -- the way --
22
       the resolution of the Scrubber docket, along with the
23
       other ones, I absolutely think that's reasonable.
24
     BY MR. CUNNINGHAM:
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Q. Were you are present, Mr. Chung, during the La Capra deposition?

- 3 A. (Chung) Yes, I was present.
- Q. And, do you recall me asking the La Capra witness where they got their data to make the DCI projections?
- 6 A. (Chung) I don't recall that.

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- Q. And, the answer that the La Capra witness provided was that PSNH gave them much information on fixed costs, the variable operating costs and the like, and that they used that data to make their discounted cash flow appraisal valuations?
 - A. (Chung) I don't remember you saying that. But my recollection of the process is essentially what you described.
- Q. And, that information would have been available to you and your peers there at Eversource, would it not?
- 17 A. (Chung) Yes. Since we provided the data to them, we had access to it.
- Q. And, based on that data, let me ask this question
 again, does it make sense for the ratepayers to have to
 pay 422 million, or whatever it is, for a Scrubber
 that's valued at zero two years later?

23 CHAIRMAN HONIGBERG: Sustained.

MR. BERSAK: Thank you.

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                         CHAIRMAN HONIGBERG: It's a different
 2
       question than the one you asked a minute ago.
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                         MR. CUNNINGHAM: Yes. I apologize, Mr.
 4
       Chairman.
 5
                         CHAIRMAN HONIGBERG: I mean, if you want
 6
       to go back to the question you asked, I'll let him answer
 7
       that.
 8
                                          I'm sorry. I forget
                         MR. CUNNINGHAM:
       what the question was. Can you repeat the question? I'm
 9
10
       asking the court reporter.
11
                         [Court reporter indicated that the
12
                         question was asked a few minutes back
13
                         and may take time to retrieve the
14
                         original question.]
15
                         MR. CUNNINGHAM: I'll let it go, Mr.
16
       Chairman. I think I've made my point.
17
                         CHAIRMAN HONIGBERG: Fair enough.
18
    BY MR. CUNNINGHAM:
19
          Are you familiar, Mr. Chung, with the Settlement
     Q.
20
          Agreement itself?
21
          (Chung) Yes, I am.
     Α.
22
          And, did you participate in the negotiation of that
     Q.
23
          Agreement?
24
          (Chung) Yes.
    Α.
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[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- 1 Q. And, were you responsible in any way for the wording of the Agreement?
- A. (Chung) I don't understand the question. Could you rephrase it?
- 5 Q. Well, do you have the Agreement in front of you?
- 6 A. (Chung) Give me one second, I'll make sure.
- 7 Q. Sure.
- 8 A. (Chung) Yes. I have it in front of me.
- 9 Q. And, would you look at Page 10 please.
- 10 A. (Chung) I'm there.
- 11 Q. "Part 1", the second paragraph.
- 12 A. (Chung) Yes.
- 13 Q. And, it has this language: "RRBs shall be authorized
- in an amount sufficient to fund reasonably expected
- 15 stranded costs, cost and revenue deferrals, transaction
- 16 costs, transaction advisor fees, tax liabilities,
- employee protections, tax stabilization payments,
- 18 decommissioning costs, retirement costs, environmental
- 19 costs, and other costs, liabilities, and expenditures".
- 20 And, where, Mr. Chung, could I find the
- 21 quantification of those amounts?
- 22 A. (Chung) So, those amounts will be finalized -- well,
- let me back up. The securitized amounts would be
- finalized in the auction proceeding that would be

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

subsequent, and partially in parallel to this one,
where the -- if there's a winning bidder or bidders
selected, then there would be a review of the amount to
be securitized.

For the purposes of my exhibits, I did my best to evaluate a set of estimates for those stranded costs, knowing that they're just estimates, because, you know, you don't know when you're going to securitize. In my exhibits, I believe it is EHC-1, Pages 3 and 4. So, those are some of the line items.

And, like I said, you really don't know what the final numbers are going to be until you get down to the actual securitization. We don't know what the final securitization amount is until we have a sale proceeds to net against any gross stranded costs.

- Q. Well, let me ask it this way. What is meant, in that sentence, what is meant by "decommissioning costs"?
- A. (Chung) Well, I think this paragraph was meant to encompass the range of things that one might typically securitize, without being specific, because those costs are just not known at this time. Like I said, I did my best to estimate them in my exhibit. But, you know, we just don't know what those costs are.
- Q. And, what are "decommissioning costs"? Is it just not

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- 1 part -- is that part of a sale?
- 2 A. (Chung) I didn't hear what you said. Could you please repeat that.
- 4 Q. Are decommissioning costs part of a divestiture?
- 5 A. (Chung) I don't know. I'd have to -- I'm not an
 6 auction advisor. So, I'd have to defer to an expert on
 7 that.
- Q. And, let me ask the same question about "retirement costs". Would that be part of a divestiture?
- 10 A. (Chung) I think there's a category of things that might
 11 happen. You know, give me -- you know, if some of the
 12 units do not sell, and the Commission chooses to not
 13 pursue a separate auction in addition, and there's a
 14 failed auction, then maybe a unit would be retired. In
 15 that case, there might be a retirement cost.
- 16 Q. And, the same question about "environmental costs"?
- 17 A. (Chung) I think that's, you know, the same category.

 18 These are broad categories. And, there are things that

 19 one can't estimate until we have a final sale that we

 20 are evaluating in front of the Commission.
- Q. And, "other costs" and "liabilities", your answer, I assume, is the same?
- 23 A. (Chung) Yes, it is.
- Q. And, in terms of the sale, in terms of your estimated

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

costs that you cannot determine at this time, suppose there's a failed auction. How does that work?

- A. (Chung) I'm not an auction advisor. So, I can't answer to the details of it.
- Q. Well, how does that work in the sense of securitized costs?
 - A. (Chung) So, I don't think it is specifically laid out in the Settlement Agreement, but there is a provision for having a Commission process, in the case of a failed auction, and assessing what costs go into securitization.
 - Q. For example, if Schiller, with its mercury contamination, doesn't sell, how is the Commission to determine what the stranded costs are? Do they roll over? Does the continued operation of that plant remain part of the ongoing operation of your company?
 - A. (Chung) That's purely speculative. We don't have a, you know, like I described before, this would be a Commission order. If the Settling Parties thought this was that particular project were in the best interest to go forward, and given the advice of an auction manager, then the Commission would have an opportunity to approve or not approve.
 - Q. Well, isn't that the point here, that so much of this

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1 language in this Agreement provides for speculative
2 recovery of costs?
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- A. (Chung) I wouldn't call it that. I'd say it's a framework for recovery. And, I don't think you can —
 I think speculation is not an appropriate way to characterize this. The Settlement Agreement and the term sheet before it were frameworks for accomplishing a major topic, which is the completion of restructuring and the stabilization of rates in the Settlement.
- Q. But when, sir, will we ever know what the costs are for the purposes of this docket, and when will it end?
- A. (Chung) When you say "when will it end", could you be more specific?

MS. ROSS: I'm going to object for Mr. Bersak. It's been asked and answered. It isn't going to end until there are sales and other decisions are made. We've been over this ground several times.

CHAIRMAN HONIGBERG: Mr. Cunningham?

MR. CUNNINGHAM: Well, that's my point,

Mr. Chairman. That this Agreement is so vague as to be

unenforceable. This Agreement is so vague, how can

ratepayers know what the stranded costs are going to be?

How can ratepayers know what the ongoing costs will be?

For example, Merrimack Station, we have significant

1	testimony that's uneconomical to operate.
2	CHAIRMAN HONIGBERG: Okay. That's a
3	closing argument. You're trying to ask questions here of
4	this panel of witnesses that will give you factual
5	information, that will give you a basis to make an
6	argument at the end of this.
7	MR. CUNNINGHAM: Fair enough. Based on
8	that, I don't have any further questions of Mr. Chung.
9	CHAIRMAN HONIGBERG: Okay. Do you have
10	any questions for any of the others or are you done?
11	MR. CUNNINGHAM: I am done.
12	CHAIRMAN HONIGBERG: Okay.
13	MR. CUNNINGHAM: Thank you.
14	CHAIRMAN HONIGBERG: Ms. Lauderdale, do
15	you have any questions?
16	MS. LAUDERDALE: No, sir.
17	CHAIRMAN HONIGBERG: Ms. Holahan?
18	MS. HOLAHAN: No thank you.
19	CHAIRMAN HONIGBERG: Is that it? Is
20	that everybody? I think I hit everybody, right?
21	[No verbal response]
22	CHAIRMAN HONIGBERG: Okay. Commissioner
23	Bailey.
24	COMMISSIONER BAILEY: Good afternoon.

Most of my questions are probably about the technical details of the Settlement. So, anybody who can answer them, or, if more than one of you can answer them, that would be great.

BY COMMISSIONER BAILEY:

Q. I think I want to start off, though, with you, Mr.

Chung, and the question that I asked Mr. Smagula about,

the environmental clean-up costs. And, what you know

about that. And, maybe, if you don't know, Mr. Reed

can inform us further tomorrow.

But do you have any idea how much the cost would be to remediate the mercury problem at Schiller?

A. (Chung) And, so, I'll caveat my answer by saying I'm a layman, because I'm not an engineer. But I'll describe generally what I know, and maybe Mr. Reed can supplement, when he's available.

So, as I understand it, these types of removals are very rare, and they don't, you know, they certainly don't use this technology anymore, and there's a very small number of them ever used. I'm talking about mercury boilers. And, that's why, to understand the potential cost of removal, we went through a competitive RFP process preemptively, and

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

that way we thought we could get as much information as
possible.

Q.

Okay.

What we found, in the process, is that it's difficult to predict the amount of mercury, lead, and asbestos that comes out, until you actually start the project. So, as a result, the bids were on a per unit basis.

However, with some of our own internal analysis and working with the bidders, I can represent, in a ballpark, is probably 20 to 30 million. And, you know, I think it's -- I'd say 30 is a very conservative estimate. You know, again, you could ask either Mr. Smagula or Mr. Reed, but I think it might be towards the bottom of that spectrum.

- Q. Well, I asked Mr. Smagula, and he said the most was 100,000?
- A. (Chung) Well, I think he answered it in the context of the Environmental Site Assessments. This was not raised as an issue in the Environmental Site Assessments, because there's no compliance obligation. So, there's no condition to report or have an obligation on it. So, you know, that was how I understood his answer.

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- 1 A. (Chung) And, this comes up, as I mentioned before, in
- 2 the context of thinking about "how do we maximize the
- 3 total transaction value for the benefit of customers?"
- And, Mr. Reed suggested this might be something that he
- 5 would recommend from a buyer's perspective.
- 6 Q. Right. Okay. Thanks. Mr. Frantz, maybe you know
- 7 this. How much of the \$225 million in the asset sale
- 8 is attributed to Schiller?
- 9 A. (Frantz) If I may have a moment?
- 10 Q. You certainly may, because I don't know where it is.
- 11 A. (Frantz) La Capra, on "Table 26: Summary of PSNH
- 12 Generation Fleet Valuation".
- 13 Q. Okay. Wait a second. Who's testimony is that in?
- 14 A. (Frantz) This is the La Capra report. And, I --
- SP. COMMISSIONER IACOPINO: Exhibit V.
- 16 COMMISSIONER BAILEY: V. Exhibit V,
- 17 | like "Victor". We were just looking at it.
- 18 CHAIRMAN HONIGBERG: And, so, what page
- 19 were you referring to, Mr. Frantz?
- 20 WITNESS FRANTZ: I'm looking at Page 95,
- 21 the very end of the report. It has a table, Table 26.
- 22 **BY THE WITNESS:**
- 23 A. (Frantz) That values Schiller at approximately
- 24 \$5 million.

- A. (Chung) If I can add just one comment to that. As I understand the La Capra report, and Mr. Frantz can correct me if I'm wrong, they looked at not what a buyer might pay for the plants, but they looked at a range of discounted cash flows related to if you operated the plants on a continuing operation basis. So, any other usage of that, of the Schiller site, was -- I don't understand that to be embedded in that figure that Mr. Frantz cited.
- A. (Frantz) That's true. A buyer may pay more for the site. But what La Capra did was, based on the variable O&M of the unit, it looked out over time, the timeframe, and it has a production cost model that it usually incorporates each of the units into the production cost model, to see when they'd run, and potentially what revenues it would receive in any one of those hours for the megawatts that were bid or would have cleared in the supply stack, over the 8,760 hours of each year through the number of years that they looked out, and then discounted it back into today's dollars.
- 22 BY COMMISSIONER BAILEY:

Q. Okay. And, that's how they determined it was worth 5 million?

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- 1 A. (Frantz) Yes.
- Q. But that isn't necessarily what the price is going to be at the sale?
- A. (Frantz) No one knows until you actually put them up
 for sale. And, a good example of that was Seabrook.

 We looked at that, had a lot of hearings on Seabrook,
 estimates at the time, based on comparable sales, were
 very low. And, we ended up with one of the highest
 prices, if not the highest price, for a nuclear sale up
 to that time for Seabrook.
- Q. Okay. Thanks. Okay. Going back to the Settlement itself, Exhibit 1 [Exhibit A?]. On Page 21, at the top of the page you're talking about necessary "federal approvals" for any facilities that are FERC-jurisdictional. Can you tell me which facilities are "FERC-jurisdictional"?
 - A. (Chung) So, I believe that refers to the hydroelectric facilities. So, it would be the -- we have nine hydroelectric facilities.
- 20 Q. And hydro facilities are FERC-jurisdictional?
- 21 A. (Chung) Yes. Yes.

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- Q. Okay. Now, you only have two PPAs, Lempster and
 Burgess Biomass, right, that are involved in this?
- 24 A. (Chung) You know, subject to check, I believe there are

other smaller IPPs that are in the current Stranded

2 Cost Recovery Charge. But those are the main ones.

- 3 Q. Okay.
- 4 A. (Chung) Yes.
- Q. Is there anything preventing you, if this all getsapproved and you get divested, from entering into PPAs
- 7 in the future?
- A. (Chung) I don't -- I'm not the market expert for the

 companies. So, my layman's understanding is "no", but

 I'd have to go back and check it. And, I can certainly

 do that, if you'd like.
- 12 Q. Okay. Anybody else have an opinion on that?
- 13 A. (Frantz) Well, the Commission is allowed to approve long-term PPAs for renewable power. And, that's
- actually how the Burgess Biomass Project was approved
- for a long-term PPA, as well as Lempster. So,
- 17 theoretically, someone could come in and ask for, under
- the statute for renewable energy, a long-term PPA to be
- 19 approved by the Commission.
- 20 Q. And, if the price of that PPA were over market value,
- 21 would the difference -- the difference wouldn't be
- included in the stranded costs, because we're going to
- 23 securitize those stranded costs, right?
- 24 A. (Frantz) I think that would be up to the Commission how

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

1 it gets recovered. I mean, the Commission has handled 2 it in different ways. All the costs, I believe, of the 3 Burgess Biomass Project are in the Default Service rate 4 right now. There was approval of the PPAs for the 5 small wood-powered generators that came to the 6 Commission, based on negotiations that I led. And, 7 those over-market costs were not included in default service, as I recall, and were actually included in the 8 9 stranded cost recovery. Based on -- that was not how 10 it was originally proposed, but the Commission amended 11 the Agreement and PPAs and said "That's what's going to 12 happen. And, we'll bid those into the market. And, 13 over-market costs of those PPAs associated with those 14 wood-fired generators would be recovered through 15 stranded costs."

- Q. And, now, the same thing is happening with Burgess and Lempster?
- 18 A. (Frantz) All the costs of -- they would be treated 19 similarly, correct.
- Q. Okay. Thank you. How long -- how many years are left on the PPAs with Burgess and Lempster?
- 22 A. (Chung) I believe that Lempster -- Lempster's last year is 2023, and Burgess's last year is 2033.
- Q. And, we're going to pay all those stranded costs in the

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

next 15 years, I guess 2033?

A. (Chung) Well, no. The way we've set it up is that, so,

Part 1 is the securitized amount, and that would be a

15-year -- likely be a 15-year securitization time.

Part 2 are the ones that they may or may not last 15 years. You know, another example is the Settlement Agreement proposes tax stabilization payments for the benefits of the town.

9 Q. Right.

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- 10 A. (Chung) That would end in three years. These contracts
 11 would end just whenever they end, so, 2023 and 2033.
- 12 Q. That's why I had that question. Thank you.
- 13 A. (Chung) Sure.
- 14 A. (Antonuk) Can I add just a point of clarification, just
 15 to make sure we're not misleading? I think what Tom
 16 said was accurate. But you asked about future PPAs.
 17 If you look at Page 5, Line --

[Court reporter interruption.]

BY THE WITNESS:

A. (Antonuk) Yes. If you look at Line 133, it's on Page 5 of June 2015 Agreement. It defines PPAs that are covered by this Agreement to include only those existing ones now that are mentioned. So, this isn't kind of an, -- there's no onramp into this Agreement

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

for future purchase power agreements.2.

BY COMMISSIONER BAILEY:

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Q. Okay. Thank you. Okay. Now, I want to talk a little bit about the possibility of failed auctions. And, there are some provisions in the Settlement Agreement that I don't understand how they would work if there was a failed auction.

So, you had the first auction, and just say one of the plants doesn't sell. And, you had a second auction, the Commission approves the second auction, hypothetically, and it doesn't sell. Then, the Settlement Agreement says, at that point in time, it's going to be retired, is that right?

- A. (Antonuk) Yes. Yes.
- Q. Okay. Do we have to wait to issue the RRBs until we've been through both of those auctions?
 - A. (Chung) I think that would be a good question for our Treasury witnesses, who will be available on Thursday. So, the Company witnesses are Phil Lembo and Emilie

Q.

O'Neil.

Okay.

A. (Antonuk) I think, certainly, if you have a failed auction, the goal is going to be to determine very quickly why. Was it something fundamental and

irreparable about the unit or the units? Was it a packaging issue? Does it appear that doing it a different way would work? And, I think, by definition, that's all going to be done on an expedited basis. And, with recognition that, if there's not a clear prospect for success the second time, that that would be it. Then, there would be a need to do an assessment of what it will take to close it down.

And, PSNH remains responsible for operating it until retirement, because there's, obviously, an obligation to continue to operate an asset prudently, even if you're shutting it down.

But the goal would be, once you decide that it is not going to move, either through a second auction or after a second auction, then, in order to handle it through the RRBs, you would have to kind of -- you'd have to identify a firm estimate of the cost involved and provide for that. You know, because, obviously, retirements could take an extended period of time.

Q. Right.

A. (Antonuk) Take, for example, Schiller, if retirement includes remediation of the mercury, and that's going to take some time, then I think you'd have to make a

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

judgment call about what to do. You know, how long do you want to wait to get that final increment of dollars put into the RRBs. I think those will all be judgment calls that would be before the Commission in what I'm going to call the "auction approval process".

And, I think there would be some things that are not black-and-white. I think there would be some judgment calls there. Do we really want to get the last 5 or 10 million of retirement costs pinned down, before we issue bonds in the amount of, you know, four or \$500 million. And, I think that's basically a value proposition to me.

- Q. Okay. I'd like to ask each one of you for your opinion on which do you think is the most likely property to fail at auction?
- 16 A. (Frantz) I don't see a lot of volunteers going first.
- [Laughter.]
- 18 BY COMMISSIONER BAILEY:

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- 19 Q. I'm just trying to -- I'm just trying to get a handle 20 around it, around --
- A. (Antonuk) I think, well, first of all, from a marketing
 perspective, I'd like to say that these all present
 tremendous opportunities for buyers, and, therefore,
 for customers. I think the difficulty in answering the

question is not so much where the value is and is not in the plants directly, but what can be done with the sites. We see value, potentially, in all the sites for repowering. And, we put some value there. When you see a "zero", that basically doesn't mean the plant's worth zero on a DCF basis, it usually means it's worth less than zero. But we put a minimum value on all of them, because we think they have site values.

And, here's the other thing that I think is kind of interesting. If I were buying them, and at this point I didn't have any short-term plans for, but I thought someone else might, I might be happy to buy it on the basis of having a long-term plan.

On the other hand, if somebody sees a particular value in that one site, and really wants to get in the market on a limited basis, and no one else is particularly interested in putting that in this package, maybe you get a good bid there.

So, I think it's really very complicated to answer that question, because of the fact that repowering is an option that potentially exists, even for the ones that look the worst from a discounted cash flow point of view.

Q. Okay.

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

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A. (Antonuk) And, you know, to the extent I want to see
these all generate a lot money, you know, I'm sort
of -- I certainly don't want to, if I had an opinion, I
wouldn't want to put it out there probably.
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- Q. Okay. So, you think that there's a likely possibility that all the properties will sell?
- A. (Antonuk) I think so. I think, if there was one -- if
 there were one or ones for which the prospects were
 very dim, we would have -- we would have said "why
 don't we try to hive that off, so that we, you know,
 that we can birth this 800-pound gorilla more quickly."
- 12 Q. "Hide it off"?
- 13 A. (Antonuk) "Hive it off". Take it out of the process.
- 14 Q. Oh. Okay.

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- 15 Α. (Antonuk) Deal with it a different way. So, I think, 16 if we saw, you know, just a fundamental problem with 17 one of the sites, the recommendation probably would 18 have been "let's not put that one in the main mix, but 19 we'll try to deal with it separately." They're all in 20 the mix. And, I think that the collective judgment is then that's the right way to look at it. Is that they 21 all have a potential to be attractive to the market. 22
 - Q. Okay. Anybody want to add anything here?
- 24 A. (Stachow) Yes, Commissioner. I had an opportunity

1 with --

- 2 Q. Can you pull the mike closer please.
- 3 A. (Stachow) Sure. I had the opportunity with my team to
- 4 talk to a number of potential auction managers who have
- 5 come along to present their case. And, so far, I
- 6 haven't had an impression from any of them that they
- 7 would consider any of these assets to be in danger at
- 8 this point. So, they're all interested, and they
- 9 believe that there's a possibility of a productive
- 10 transaction.
- 11 Q. Okay.
- 12 A. (Stachow) Which reinforces what Mr. Antonuk is saying.
- 13 Q. Great. All right. Thank you.
- 14 A. (Antonuk) And, we may both be perfectly wrong
- eventually.
- 16 A. (Stachow) Of course.
- 17 A. (Antonuk) The answer is, we can't be sure.
- 18 Q. But that's what you believe right now, as the experts,
- 19 with the information that you have?
- 20 A. (Antonuk) Yes.
- 21 Q. All right. So, my next question was going to be, and I
- don't know if I need -- I'll ask it, and you can tell
- me if you have the same answer. But, you know, what
- happens, if one of the plants has to be retired, to the

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

property tax stabilization payment? So, you know, we go through a couple of auction processes, it doesn't

- 3 sell, understanding that that's unlikely. The
- 4 municipality doesn't want to buy it.
- 5 A. (Antonuk) I'd have to take a look. I think the answer
- is in there, but I can't answer that off the top of my
- 7 head. Having known you for a long time, I should not
- 8 have expected easy questions.
- 9 Q. Sorry.

- 10 A. (Antonuk) I mean, if you want, I mean, we can stop or
- go on, and we'll take a look as you continue.
- 12 Q. Okay. All right. I think it was under the property
- 13 tax exemption -- or, tax stabilization payment section,
- but we can come back to that.
- 15 A. (Chung) I'm just looking at the section which I think
- starts on Page 22, and it goes onto the next page. I
- don't see any nod to how those are treated in the
- 18 situation of a failed auction. I think, with a lot
- of -- like a lot of things, if we're in that situation,
- 20 I think we just have to have some collaboration in
- 21 front of the Commission and, you know, agree on what
- 22 makes sense, giving, in that situation, the towns are,
- obviously, impacted anyway.
 - Q. Right. That was my -- my take was that it wasn't

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- covered. And, what happens, if it needs to be covered?

 And, your answer is "We'll have to come back and figure it out"?
 - A. (Chung) I think so. And, that's just the nature of these types of agreements. We try to go down all of the different trees that happen. But I think it's silent on this issue, but I think, you know, approaching it reasonably and collaboratively would make sense.
- 10 Q. Okay.

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- 11 A. (Antonuk) I think, would it be appropriate for us to
 12 undertake to kind of give you a written description, --
- 13 Q. Sure.
- A. (Antonuk) -- if, on further review, we kind of see what

 specifically is in there? You know, I don't know what

 the process is for -- Canada, they call them

 "undertakings".
- 18 COMMISSIONER BAILEY: A record request,
 19 maybe?
- 20 CHAIRMAN HONIGBERG: That is what we
 21 would call it. We would call it a "record request". How
 22 long would it take for such a document to be created?
 23 WITNESS ANTONUK: By tomorrow morning.

MR. BERSAK: Overnight.

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                         CHAIRMAN HONIGBERG: All right.
                                                          So, we
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       can reserve a space for it, which would be "WW"?
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                         MS. AMIDON: That's what I have.
 4
                         [Exhibit WW reserved.]
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                         MR. BERSAK: And, what is precisely
 6
       being requested?
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                         CHAIRMAN HONIGBERG: I think Mr. Antonuk
       just made an offer. Mr. Antonuk, why don't you explain
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       what it is you are offering to create.
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                         WITNESS ANTONUK: We are offering to
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       describe the degree to which the Settlement Agreement does
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       or does not address what happens with respect to the
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       clauses concerning property taxes in the event of a failed
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       auction. And, if it does affect it, we will explain what
       we believe the Agreement's treatment of that situation is.
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                         COMMISSIONER BAILEY:
                                               Thank you.
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     BY COMMISSIONER BAILEY:
          On Page 26, Paragraph C, you talk about an "annual
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     Q.
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          report" and "the results of the sale of the output from
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          PSNH's plants". So, originally, I was thinking that
          this annual report would be -- would happen after
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22
          divestiture, but that's not what it means, if you're
          still talking about "output of PSNH's plants". So,
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          what is that paragraph talking about?
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- A. (Antonuk) Until divestiture, or on a continuing basis, if, in the case of a failed auction, where we're still deciding what to do with the plant in the future.
 - Q. You think that's going to take years?
- A. (Antonuk) No. No. I'm guessing that's -- that's

 probably one -- it certainly should be one report,

 because there will be an interim period, there may be

 two. And purchase obligations. So, to the extent

 purchase agreements go on, there will be regular

 reporting about those as well.
- 11 Q. What's a "purchase agreement"?

- 12 A. (Antonuk) Power purchase agreements.
- Q. Which are going to be rolled into stranded costs, aren't they?
 - A. (Antonuk) Yes. But what this allows is for the

 Commission to kind of get whatever sort of operational
 information they want about those agreements, how
 they're being managed; if they have amendment
 provisions, how are they being treated; if there's any
 change in the status of the seller, for example. It's
 really just there for the Commission to have a vehicle
 to get any information that it needs to deal with any
 kind of let's call them "continuing entanglements" on
 the supply side of the business, principally affecting

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

the plants till divestiture, but also potentially there
may be information needs the Commission may want about

3 purchase obligations that continue as well.

4 Q. Okay.

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- A. (Antonuk) And, it's really more operational
 information, kind of the status. You know, who's -who in the zoo, who's running it? Are there problems?

 Is delivery an issue? That sort of thing.
- 9 A. (Frantz) I mean, this is under the section of

 "Marketing the Energy". So, up until the divestiture,

 PSNH still has the obligation and requirement to

 prudently operate and manage their generating assets,

 both to help customers, but also to make sure that and

 ensure that we have a well-maintained fleet of assets

 for the sale.
- Q. No, I appreciate that. But what threw me off was that this was going to be an "annual report". And, --
- 18 A. (Frantz) It will be just one annual report.
- Q. Right. Well, "annual" sort of sounds like "recurring" to me. But, okay.

Okay. Page 28, at the bottom of the page, where it talks about the "RRBs in an amount sufficient to refinance unrecovered net book value of the generation assets, deferrals, transaction costs,

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[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]
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- 1 tax stabilization payments, employee protections...less
- 2 the 25 million in deferred equity return", I understand
- 3 all that. But why is the \$5 million in the Clean
- 4 Energy Fund not included in that accounting?
- 5 A. (Chung) The 5 million in the Clean Energy Fund, you
- 6 know, is something the Company is funding, and the
- 7 customers aren't paying for. So, that's why it's not
- 8 included in this. It is treated separately.
- 9 Q. Well, but that's the same as the "25 million in
- deferred equity return", isn't it?
- 11 A. (Chung) It's a separate category.
- 12 Q. I know it's a separate category. But it's the same
- concept?
- 14 A. (Chung) It's a different concept. So, I'd say we --
- so, we are, you know, I think it's very separately
- allocated for energy efficiency and distributed
- 17 generation.
- 18 Q. I get that.
- 19 A. (Chung) But I'd say it's coming from a "different
- 20 pocket", if you will, and we don't -- so, you know,
- we're not expecting customers to pay for it. So, it
- shouldn't be part of the accounting in this particular
- 23 section on the "Commission Order".
- 24 Q. And, the same applies for the 25 million that you're

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

1 not going to charge customers for the Scrubber?

2 MR. BERSAK: If I may, Commissioner

3 Bailey. This section says that we will be requesting to

4 recover, amongst other things, "the unrecovered net book

5 | value of generation assets". If that stands alone,

6 | without the \$25 million deduct, we'd be over-recovering.

7 That \$5 million isn't covered by one of these other

categories, so, there's no need to deduct it to make the

9 math work.

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10 COMMISSIONER BAILEY: Thank you.

11 BY COMMISSIONER BAILEY:

- 12 Q. How will the RRBs appear on customer bills? Anybody
 13 know that?
- A. (Frantz) I'd expect that a customer's bill will look a

 lot like it looks know, with a "Stranded Cost Recovery

 Charge" rate. And, the RRBs, the costs of recovering

 them, are included in the overall Stranded Cost rate.
- 18 Q. Okay. So, it's a separate line item. And, --
- 19 A. (Frantz) Yes. It was before and will be going forward.
- Q. And, I think right now there's only a Part 2 Stranded
- 21 Cost Recovery rate on the bill, right?
- 22 A. (Frantz) Correct.
- 23 Q. And, in the old -- before, when there were Part 1 and
- 24 Part 2 and Part 3, were they separately identified?

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1 A. (Frantz) No. Not on the customer's bill.
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- 2 Q. Okay.
- 3 A. (Frantz) There was one Stranded Cost rate, and all of
- 4 the components were included in the stranded costs.
- 5 Q. Okay. So, if this goes up, then the stranded cost will just go up, and I got it.
- 7 A. (Frantz) Correct.
- 8 CHAIRMAN HONIGBERG: Off the record for
- 9 a minute.
- 10 [Brief off-the-record discussion
- 11 ensued.]
- 12 CHAIRMAN HONIGBERG: So, we can go back
- on the record. Go ahead, Commissioner Bailey.
- 14 BY COMMISSIONER BAILEY:
- 15 | Q. Okay. Next, on Page 32, this is another thing that I
- just don't understand. Under the "Credit Enhancement,
- "the exposure to losses...due to shortfalls in
- 18 projected sales of energy...must be minimized." I
- mean, and this is a non-bypassable charge not based on
- 20 usage, right?
- 21 A. (Antonuk) It's a per kWh charge.
- 22 Q. Oh, it is?
- 23 A. (Antonuk) Yes.
- 24 Q. Okay. All right. I didn't understand that.

- A. (Antonuk) Credit enhancement is because you base the charge based on projected sales and projected time it takes customers to pay. So, in order to get the AAA rating, I'm sure the folks who are going to deal with this later can handle it in much greater detail than I can. The people who issue the bonds require this credit enhancement there to sort of be a pool to cover those kind of differences. It's usually fairly small and nominal, and, ultimately, kind of refundable, if you will, it's all reconcilable.
 - Q. Yes. Okay. All right. Here's another thing that I —
 it's probably just I missed it, something I don't
 understand. But, on Page 33, you talk about "when the
 revenue recovery bonds are fully paid, the balance in
 the Reserve Subaccount [gets] returned to PSNH".
 Bottom of the first not full paragraph. The second
 last sentence in the —
 - A. (Antonuk) Yes. I need to look and see what the

 "Reserve Subaccount" is. Again, this is something that
 we may be able to do it generally, but the folks who do
 the financing will know the details.
 - Q. Okay. I mean, I could wait for the financing guys to be here.

MR. BERSAK: That would be beneficial,

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Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]
      [WITNESSES:
 1
       Commissioner Bailey.
                         COMMISSIONER BAILEY: Okay.
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                         MR. BERSAK: Our Treasurer, Mr. Lembo,
       and his Director, Emilie O'Neil, will be able to testify
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 5
       that the Reserve -- the Overcollection account you're
 6
       talking about is a capital infusion from the Company
 7
       itself, not customer money.
 8
                         COMMISSIONER BAILEY: Okay.
                         MR. BERSAK: But I'll let them testify.
 9
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                         WITNESS ANTONUK: Yes. That's on
11
       Page -- on Line 157, on Page 6.
12
     BY COMMISSIONER BAILEY:
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          Okay. On Page 34, and I forgot that there are line
     Q.
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          numbers on these pages, I apologize, look at Lines 908
15
          through 910. You, as part of this Settlement
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- Agreement, you're requesting that "following closure of 14-238, the Commission open a docket with appropriate ongoing proceedings to address administration of the divestiture auction". And, you have refined that request, have you not? I can't remember where I read it, but my understanding was that you want the Commission to undesignate --(Chung) That's correct.

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24 -- Advocate Staff and start the docket on the auction Q.

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

- 1 process right away, before --
- 2 A. (Chung) That's right. So, that's --
- 3 Q. -- before we even approve this.
- 4 A. (Chung) I think you're referring to the motion that the
- 5 Parties filed to undesignate Staff and begin some of
- 6 the activities in parallel for the purpose of
- 7 expediency, and, in particular, the cooperative
- 8 procurement of an auction advisor. So, I would agree,
- 9 this is -- I think we intend to not have this be in
- 10 sequence. But, I think, for given where we are in
- 11 2016, have them run slightly in parallel.
- 12 Q. Okay. And, it's your understanding that everybody on
- the Settlement Agreement agreed to that?
- 14 A. (Chung) Yes.
- 15 Q. Agrees with that?
- 16 A. (Witness Frantz nodding in the affirmative).
- 17 A. (Antonuk) Yes.
- 18 Q. All right. Are all parties to the 1999 Agreement part
- of this Agreement?
- MR. BERSAK: Commissioner Bailey, I can
- 21 answer that, because they might not be aware. There are
- 22 two parties that are not parties to the 2015 Agreement
- 23 that were parties to the earlier 1999 or 2000 Agreement.
- 24 Those parties are the Governor of the State of New

Stachow~Murphy~Chung~Antonuk~Brennan~Frantz] [WITNESSES: 1 Hampshire and the Attorney General. 2 COMMISSIONER BAILEY: Okay. But the 3 Governor's Office is represented by the Office of Energy & 4 Planning. MR. BERSAK: Well, the Governor's Office 5 6 of Energy & Community Services was, in fact, a separate 7 party to the 1999 Agreement. That agency now has been renamed to "Office of Energy & Planning". So, you know, 8 the relationship to the Governor is beyond me. 9 10 COMMISSIONER BAILEY: Okay. 11 MR. BERSAK: And, the Governor was a separate signing signatory to the earlier Agreement, as 12 13 was the Attorney General. 14 COMMISSIONER BAILEY: And, was the 15 Attorney General representing sort of the Advocate Staff? 16 MR. BERSAK: No. It was representing the State of New Hampshire. 17 18 COMMISSIONER BAILEY: Okay. 19 WITNESS ANTONUK: One of the principal 20 contributions from the Attorney General's Office, aside 21 from helping with things in general, was to deal with the financial issues associated with RRBs, which were quite a 22 23 new thing for New Hampshire then. And, they were very

instrumental in making sure that that part of the

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      [WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]
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       arrangement was all set up correctly. And, that's on
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       which we have modeled the current Agreement as well.
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                         COMMISSIONER BAILEY: Okay. All right.
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       So, there's no issue then about "all parties to the '99
       Agreement must agree that the '99 Agreement is rescinded
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       and superseded"?
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                         MR. BERSAK: We would we seeking, if
       this Commission was to approve this Agreement, we'd be
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       seeking the concurrence of the Governor and the Attorney
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       General to dismantling the earlier Agreement.
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                         COMMISSIONER BAILEY: Okay.
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     BY COMMISSIONER BAILEY:
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          Okay. Now, I have probably some questions for you, Mr.
     Q.
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          Frantz. This is our only opportunity to talk about the
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          rate design issue, right, with you?
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     Α.
          (Frantz) Tomorrow.
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          (Antonuk) Tomorrow.
     Α.
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- 18 Α. (Frantz) Tomorrow we have set aside time to 19 specifically address rate design issues.
- 20 Q. Oh. So, you'll be back on the stand for that?
- 21 (Frantz) I will. Α.
- 22 Oh. All right. Then, I don't have to ask you that Q. 23 today.
- 24 What about, I guess, the questions that

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

I have about the legal standards of review? So, we

have to take into account the impact on all PSNH

customer classes, that will be under rate design.

Consider the impacts on the economy in PSNH's service

territory. Are you going to testify tomorrow about the

REMI report? And, are we going to have an opportunity

to talk about that tomorrow or --

- 8 A. (Frantz) Yes.
- 9 Q. Okay.

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- 10 A. (Frantz) And, someone from REMI will also be available
 11 to ask questions in more detail than perhaps I can
 12 answer concerning their -- the study.
- Q. Okay. Do any -- can any of the panelists shed light on how the Settlement Agreement will impact the economy in PSNH's service territory?
 - A. (Frantz) Well, I think, based on the analysis that's been done by Brattle, as well as the original analysis, that there will be savings to PSNH's customers overall from divestiture. Those savings then will accrue to those customers, who can then either reinvest them, spend them in the economy, which has multiplier effects. And, we could get into a whole lot of detail about how those are spread across the economy. And, that's exactly what the REMI model does. It's

essentially a linked regression input/output model that looks at those issues, what the economy is at the time, different segments of the economy, and then models it to see what those savings will be, and how it then translates into additional jobs, because customers will have more money to actually spend, and where those spendings occur, how much leaks from out of the economy, how much stays in, and increases in gross state product, etcetera, based on the savings that accrue from divestiture.

- Q. Okay. Anybody else on the panel have anything to add?
- A. (Antonuk) Yes. I want it, not my usual custom to talk about effects on big businesses, but I want to here particularly. You know, they started off nominally outside of the zone of interest here, when it came to Scrubber and stranded costs. And, I think one of the things that a number of them have come to realize is that eventually the migration issue was going to engulf them one way or another as it became unsustainable.

 And, I think what this Agreement gives them, apart from a share of the -- of the benefits, and also a sharing of the pain, if you will, is a certainty that didn't exist before, predictability, and stability. Because now this looming -- what I would say was a "looming

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

crisis" is now going to be resolved with the Settlement Agreement. So, one of the important things that they get is the ability to plan on a longer term and more secure basis about what their rates are going to be over time. And, I think that's, you know, obviously, they want their rates low, and, to the extent they're lower, they benefit.

But I think just having them be much more predictable, and having this -- the engulfing uncertainty taken away from them is a very, very big benefit to the business community of New Hampshire as well.

- Q. Okay. Thank you. I have the same question, and the answer may be the same, about the ability to attract and retain employment across industries. How does the Settlement do that?
- A. (Frantz) Commissioner, I think that's probably best left for tomorrow, and for the -- for REMI and myself.
- 19 Q. Okay.

- 20 A. (Frantz) Thanks.
- Q. Okay. Mr. Murphy -- or, sorry, Dr. Murphy, your analysis assumes that there's full recovery of the Scrubber costs in the No Divestiture case?
- 24 A. (Murphy) In the No Divestiture case, the customer costs

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1 that I characterize here do include full recovery of
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- 2 the Scrubber costs. That was what was in the data that
- I got for the depreciation, return on rate base, and I
- 4 guess operating costs, that went into my analysis, yes.
- Q. And, the Divestiture case assumes that \$25 million have
- 6 been removed?
- 7 A. (Murphy) That's right.
- 8 Q. Okay.
- 9 A. (Murphy) Yes.
- 10 Q. So, do you think it would be reasonable to compare
- apples-to-apples and take 25 million out of the O&M
- 12 costs?
- 13 A. (Murphy) Well, it wouldn't be 25 million per year.
- 14 Q. That's right.
- 15 A. (Murphy) It would -- you'd have to go say "well, how
- would that reduce the depreciation?" It would be
- 25 million, less depreciation, spread over the life of
- 18 the Scrubber, and a return on 25 million less, although
- 19 25 million and declining smaller amount of return. So,
- and as I understand it, the operating costs, this
- 21 wouldn't affect the operating costs.
- 22 Q. Right.
- 23 A. (Murphy) Mr. Chung might be able to help me on that.
- 24 A. (Chung) No, that's correct.

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[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]
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- 1 Q. So, even if the Commission, hypothetically, decided to
- 2 disallow \$25 million --
- 3 A. (Murphy) In the No Divestiture case?
- 4 Q. In the No Divestiture case, the savings would be
- 5 greater in the Divestiture case?
- 6 A. (Murphy) The savings due to divestiture would still be
- 7 possible.
- 8 Q. Okay.
- 9 A. (Murphy) Yes.
- 10 COMMISSIONER BAILEY: Thank you. I
- 11 believe that's all I have. Thank you very much.
- 12 CHAIRMAN HONIGBERG: Commissioner
- 13 Iacopino.
- SP. COMMISSIONER IACOPINO: Thank you.
- 15 BY SP. COMMISSIONER IACOPINO:
- 16 Q. First, I just gotten confused by one of the questions.
- 17 I understood that the costs of the PPAs are in the
- Non-Securitized Stranded Costs. Am I correct in that,
- in the Settlement?
- 20 A. (Chung) That's correct. So, they're part of the RRBs,
- but they're Part 2, which is Non-Securitized.
- 22 Q. Okay. All right. Mr. Chung, in the "Approvals"
- 23 section of the Settlement Agreement, there is a
- reference that you may need approvals from lenders to

the Company. What approvals will the Company need?

- 2 And, who are the lenders that you need to get approvals
- 3 from?
- 4 A. (Chung) Could you please refer me to a line number?
- 5 Q. I'm looking for it. I had it before. But it's in the
- 6 "Approvals" section, after you go through the federal,
- 7 state, and you've got financing, I believe. On Page
- 8 21, Line 560, it says "The asset sales may require
- 9 prior concept of certain lenders under PSNH's existing
- 10 credit agreements."
- 11 A. (Chung) That would definitely be a question for our
- 12 | Company Treasurer tomorrow or Thursday.
- 13 Q. Okay. So, you're not aware of who those folks are?
- 14 A. (Chung) No.
- 15 Q. Okay. Let me quickly go to Mr. Stachow. At some point
- in your testimony you reference the Brattle report as
- being a "directional estimate". Can you just tell me
- 18 what you mean by that?
- 19 A. (Stachow) Yes. Let me just find that piece of my
- 20 testimony first. Can you refer me to the page?
- 21 Q. Oh. Actually, it will take me too long to find it.
- 22 | A. (Stachow) Well, I think I can try and respond without
- 23 finding it.
- 24 Q. Okay.

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[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]
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- 1 A. (Stachow) But the Brattle analysis is an analysis, is
- 2 modeling certain outcomes, is modeling various
- 3 scenarios. It's a direction. Now, there could be
- 4 multiple other scenarios that could be created also.
- 5 So, what that's -- the directional nature is indicating
- 6 there's a high probability that there would be customer
- 7 savings.
- 8 Q. Okay.
- 9 A. (Stachow) But the 33 million is just one potential
- 10 outcome.
- 11 Q. Okay. That I understand. But I wanted to make sure is
- that the Staff is not suggesting that there is a lack
- of confidence in this particular study?
- 14 A. (Stachow) Not at all.
- 15 Q. Okay. Dr. Murphy, let me move on to you then. You
- created the model that's part of your testimony,
- 17 correct?
- 18 A. (Murphy) Yes, I did.
- 19 Q. And, you've done -- you've done this before, many
- times, I can tell from your resumé, correct?
- 21 A. (Murphy) Things like it.
- 22 Q. And, just in your own work, how confident are you in
- 23 the way that this model is actually structured? Forget
- about the data you've put into it, but the structuring

of it?

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(Murphy) Probably the best way to understand it is with Α. the Figure 1, on Page 5 of my testimony. I'm quite confident in the general structure of this analysis. And, the thing that I think helps a lot to understand the customer savings due to divestiture is the ability to abstract out of that question the question of "well, what are market prices going to be and how much is it going to cost to serve our load?" Well, that, which is the largest part of these costs, is uncertain, but it does not contribute to the difference between the Divestiture and the No Divestiture case. Which gives me much more confidence about my ability to estimate the savings as a result of divestiture than perhaps I could about what it will cost to serve customers in the future.

The future of the market does leave some uncertainty in this analysis, primarily in what the plants would be able to earn in the market. In a high-price market, the plants will earn more, that will offset more of their fixed costs. In a low-price market, they'll earn less, it will offset less of their costs.

But, by structuring the analysis this

Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

1 way, it takes out of this question that sort of larger

- 2 question of "what will market prices be and what will
- it cost to serve customers?" Because a large part of
- 4 that does not contribute to the customer savings.
- 5 Q. Then, the second part of the model, obviously, is the data that you put into it?
- 7 A. (Murphy) Yes.

[WITNESSES:

- Q. And, I know that you -- that's not your data, you've received it from others.
- 10 A. (Murphy) In some parts, yes.
- 11 Q. I assume you've done some high-level analysis of it?
- 12 A. (Murphy) Yes.
- Q. And, are you comfortable and confident with the nature of the data that you've plugged into the model itself?
- 15 A. (Murphy) Let me take that in a couple of parts, where
- 16 the -- based partly on where the data came from and
- what I did with it. The data that I got from
- 18 Eversource on the fixed costs of owning and operating
- 19 the generation is I looked at some historical data that
- 20 had been provided by Eversource in data responses in
- 21 this, and I believe in other dockets. And, the costs
- 22 that they provided to me as an input here was generally
- in line with the aggregate costs in the -- I believe I
- had seen numbers projected from 2013 projecting --

including projections through 2016, and it was generally in line with those. So, fixed operating costs change from year to year, they do. And, the projections that I was given seem entirely reasonable, in light of what I had seen previously.

The numbers they gave me for this model were aggregate across the entire fleet. They didn't break them down plant-by-plant. I didn't ask for that, because I wasn't -- I didn't need that to do this analysis. But those seemed reasonable. And, similarly, the depreciation and the return on rate base were in line with other comparable numbers that I had seen for recent past years.

Beyond that, I can't validate them. I would have to refer you to Eversource witnesses. But there wasn't anything in those numbers that struck me as likely to be problematic. And, in fact, there is a reasonable history of operating costs. And, for depreciation and rate base, that is, in part, a financial projection forward of costs, historical costs that are known.

So, I've got reasonably good confidence in those numbers. And, in the figure, those are the sort of three top sections of the bar on the left.

1 The market revenues, I'll break out into 2 capacity and energy revenues. For capacity revenues, 3 we already know what capacity prices are through 20 --4 part way through 2019. So, I don't have any real 5 question about those. The projection I used going 6 forward is for capacity values to remain in that same 7 range of what we currently see for the 2018-2019 commitment period. And, that seems reasonable to me, 8 9 given what I --

- Q. And, you got that from another source, didn't you?
- 11 A. (Murphy) That was from SNL Financials, yes.
- 12 Q. Okay.

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A. (Murphy) But that seems a reasonable capacity price projection. Is it guarantied? No. That the current price for FCA 9 is 9.55 a kilowatt-month. Each additional dollar more or less translates to about \$13 million per year. So, and I don't expect capacity prices to be moving by multiple dollars per kilowatt-month going forward, in part because we're retiring a fair amount of baseload generation with coal, oil, and now a couple of nuclear units. So, we are getting rid of what has been a persistent capacity surplus in New England for many years, and had caused the capacity prices to be quite low relative to the cost of new

1 generation.

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I can't promise you that those capacity prices will remain at that level. But it certainly doesn't seem -- it certainly seems quite probable to expect that they are likely to.

The last piece is the energy revenue that the plants will earn. And, I think that is the most uncertain piece here. Because, at least the fossil plants, Merrimack Schiller and Newington, are all high-cost plants, their operating cost is high relative to the typical price of power in New England. That means they make most of their revenue during relatively short periods of time when prices are high. Just how long those short periods of time will be, and just how prices -- just how high the prices will be during those high-price periods, can be fairly uncertain, even if you have relative confidence in the average price or a typical price of power. Because of that, there can be more variability in the revenues that these units would earn, relative to, say, a more efficient unit that dispatched at a lower price, ran more of the time, earning money through more hours of the year. So, I think that's the most uncertain piece of this analysis.

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

And, if the energy price were considerably higher than current expectations would lead us to believe, then the plants might earn more value under those higher energy prices.

Now, that also raises the question of "Wouldn't the sale price of these plants also go up?

If they're more valuable to keep, wouldn't they also be more valuable to sell?" And, the answer is "Possibly."

And, that depends to an extent on whether these high-price conditions in the future are foreseen at the time of divestiture or if they're not foreseen. If they are foreseen, then, yes, I would expect the sale price to be higher, which would at least partly offset the loss of their operational value if you divested them.

- Q. And, in inputting the data into your model, did you include the cost of the employee protection? Is that included in, or was it just like a lump-sum figure you got from the Company?
- A. (Murphy) It was more like the latter. I understand it includes that. But, for confirmation, we should ask the Eversource witnesses.
- A. (Chung) So, that's correct. An estimate of the employee protections is included in the stranded cost

figure I gave Dr. Murphy.

- Q. And, was there any inclusion in your data, because
 there's this term in the Agreement that there's going
 to be a delay in seeking a rate case, was there any
 factoring in of that into, at least from your
 perspective, Dr. Murphy, in your opinion model?
- 7 A. (Murphy) I did not include that, no.
- Q. Okay. And, Mr. Chung, do you know if anything you provided to Dr. Murphy encompassed that?
- 10 A. (Chung) No. I didn't provide him anything related to that.
- 12 Q. Do you have an independent assessment of what the value --

[Court reporter interruption.]

SP. COMMISSIONER IACOPINO: I'm sorry.

16 BY SP. COMMISSIONER IACOPINO:

- Q. Do you have an independent assessment of what the value of foregoing a rate case for two years, or until 2017?
- A. (Chung) I don't. I mean, I can speak generally that,
 you know, when you look at past rate cases, whether
 it's our company or others in New Hampshire, it's not
 zero. There is some benefit to, I believe customers do
 realize, to a stay-out. And, the option to go in is
 something that is a give by the Company at any time.

Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

So, I don't, you know, we haven't done a cost of service as part of this docket or anything. So, we don't -- that's not in the record.

Q. Okay.

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- 5 (Murphy) If I can make a clarification about my 6 analysis. I did not analyze what current rates are. 7 What I looked at is the cost of operating and -operating the generators. And, I assumed, for the 8 9 purpose of my analysis, that the cost of operating the 10 generators would be accurately reflected in rates. So, 11 I used cost as a proxy for what customers would pay. To the extent that rates get out of line with costs 12 13 temporarily, I did not include that in my analysis.
 - Q. That was the next question I was going to ask you, actually. That what you've modeled is total cost. What would it take to model rates?
 - A. (Murphy) Well, you need some way to understand or to include in the analysis how rates are set and how they are related to costs. I haven't made any attempt to do that in my analysis. And, I wouldn't want to hazard a guess as to what the effect would be.
 - Q. The Company is essentially foregoing, under their terms, they're foregoing \$25 million of recovery, basically. And, I just want to ask all the Parties

[WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz]

here that are Parties to the Agreement, if that is a settlement position? Or, did the agreeing Parties,

- have they attributed that to something? And, if we could start with Staff, and go down the aisle.
- 5 A. (Stachow) I'm not sure I'm competent to respond to that question to the Commissioners.
- Q. Okay. Well, I don't want you going beyond your competence.
- 9 A. (Stachow) I will not.
- 10 Q. And, Dr. Murphy, you're, obviously, not involved in the
 11 Settlement Agreement.
- 12 A. (Murphy) Correct.
- Q. But, if we could go down, Mr. Frantz, I guess you're next?
- 15 A. (Frantz) It's a settlement term. It was, you know, I
 16 think reasonable people could reasonably disagree about
 17 what that right number is. But it was a -- it was an
 18 important part of the settlement discussions that we
 19 reached agreement on.
- A. (Antonuk) I think, from my perspective, the principal
 attribution we made was what I was describing earlier,
 really is the time value. And, so, by putting it
 behind us, without having to wait for the litigation
 course to run its course, and then, presumably,

1 thereafter, even still have to struggle through how 2 we -- if and when we divest, that, you know, that I 3 kind of view the value of that \$30 million as a multiple, really, depending on how long it takes for us 4 5 to kind of wend our way through a non-settlement course 6 to get to resolution of the Scrubber case and its final 7 appeal, and then, presumably, thereafter, or maybe partly in parallel, it's not clear to me, the 8 9 divestiture and securitization course.

- Q. So, if you weren't so concerned about the timing, you would have asked for more?
- A. (Antonuk) I think, like Tom, it was never a matter of kind of separating it out. I mean, I think, given everything, and given the value that was produced for customers, a value that I think the latest analysis confirms, subject to the uncertainty that we all agree exists in the market, that that number sounded like it was a good resolution of not just the divestiture case or, of the Scrubber case, but also divestiture and securitization, getting finding cheap money to finance stranded costs.
- 22 Q. Mr. Brennan, does OCA agree?

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A. (Brennan) Yes. My understanding is that it was a settlement number. It was not based on an analysis of

components adding up to \$25 million, but was stated as a settlement amount.

- 3 Q. And, Mr. Chung?
- 4 A. (Chung) And, the Company shares that perspective. It was a term as part of a greater settlement package.
- Q. And, as my final question, this is for Dr. Murphy, in Exhibit 2, not the figure, but the exhibit at the end of your thing?
- 9 A. (Murphy) Yes.

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- Q. You actually showed a \$75 million savings in year one, and a \$8 million savings in year five. Which seems to me to be a big -- I mean, you've averaged it out to 33 million a year. But the difference between years one and eight seems to be a big difference to me. Does that indicate any kind of softness in the model that you've got that wide range?
 - A. (Murphy) What that indicates, primarily, is the change in the capacity revenues over time. Capacity prices for the 2017 delivery year are based on, if I get this right, the Forward Capacity Auction Number 7, which had much lower prices than more recent auctions, which are for later delivery periods.

So, if you look at, under the "No

Divestiture" case, the "Capacity Revenues" line, you'll

- see that is providing -- it's a negative number, it's an offset to costs. In the first year, it's quite a bit smaller, it's about half of what it is in the third year. And, that's what's driving the large majority of that change in annual customer savings over time.
- Q. Is there a tipping point, though? Where, I mean, in year six, for instance, "'22", you're down to a \$5 million savings, and then it looks like, in the following years, there's no savings. So, it's negative savings.
- A. (Murphy) Well, if you knew that, no matter when you sold the generators, they would sell for 225 million, you might prefer to -- you might prefer to time it.

 But the reality, of course, is, given the plants have that lower value in the early years, because of lower capacity value, and higher value in the later years, the sale price might not stay the same, depending on when you sold them.

So, for the purpose of this analysis,
I've assumed simply that they sell for 225 million.
And, I haven't done any analysis to say what's the optimal time to sell. But, if I were to ask that question, "what's the best time to sell?", I would also have to include the fact that the timing of the sale

may influence the price at which I can sell them. So,

if I wait a few years and sell them later, I'm -- what

the buyer gets is a higher value, because they will get

higher capacity value right from the beginning of when

they own them, and they might sell for a larger number,

which would provide a bigger offset to stranded costs.

SP. COMMISSIONER IACOPINO: I don't have any other questions.

BY CHAIRMAN HONIGBERG:

- Q. Dr. Murphy, you testified orally, I think, that you had done certain sensitivity analyses?
- 12 A. (Murphy) Yes.

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- Q. And, I see a reference to "sensitivity", and you discussed it with respect to the RRB costs and sales price. What other sensitivity analyses did you do?
 - A. (Murphy) Really, three, three variables that I looked at. One was the RRB cost as a function of sales price, and I think I have actually in my testimony that each 100 million change in sale price changes the five-year average by 9.2 million per year.

I also looked at capacity price. And, I think I just mentioned that, if the capacity price were to increase by one dollar per kilowatt-month, now, it can't increase for the years prior to 2019, because

it's already set, but, if it did, if it increased by a dollar per kilowatt-month for the whole horizon, that translates to an average of about \$13 million per year. And, so, if the capacity price increases, that increases the value of not divesting, which would reduce the savings due to divestiture. I'm sorry, I need to work my way through that.

And, with energy, I ran a couple of additional cases. My original case, my base case that is behind the numbers here, is based on a future that looks like the current view of natural gas and electricity prices that you can see in futures and forward prices for those commodities. So, I've calibrated my base case to the current view of gas and electricity prices.

"well, gas, and particularly electricity prices, might not be what the market currently thinks, but they might be substantially higher or substantially lower", I also ran cases associated with those, to see what might be the effect on the energy price. And, I found — or, not the "energy price", but the energy revenue that the plants can earn.

And, if you'll look at Figure 2, which

conveniently shows it graphically, you'll see an energy revenue, in my base case analysis, of \$24 million that offsets the cost of these. I found that, in a high energy price case, I can describe in a moment what that looks like, that \$24 million in revenue could more than double, could be over \$50 million in revenue. In a low energy price case, it could be cut in half.

So, if there's less opportunity for it to move down than up, because it can't go below zero, the revenue that these plants earn can't be less than zero. And, there's -- so, there's more upside due to high prices than there is downside due to low prices, because the plants are already fairly inefficient, they're not running very much. If they run even less, there's only so much less than they can earn. But I found that to be the variable to which the results are most sensitive.

- Q. And, in either scenario, does your conclusion change, in terms of savings to customers?
- A. (Murphy) In terms of the sign of savings to customers, if I looked at a scenario where energy prices are very high, and yet capacity prices are unchanged and the sale price of the units is unchanged, then it could actually change the sign of the customer savings. The

customers might -- it might cost customers more to divest than to not divest. And, you have to ask "well, what circumstances might that -- might that arise in?" As I think I alluded to, if the plants are divested at a time when energy prices are expected to be low or moderate, and after the -- and, therefore, they don't garner a high price when we auction the plants, so, they don't offset stranded costs by very much. And, yet, after-the-fact, energy prices go extremely high, that could lead you into a situation like the sensitivity analysis that I had done, at least with respect to the sale price.

So, it's possible, if you sell the plants when market expectations are, you know, low to moderate, and then suddenly electricity becomes much, much more valuable, you might wish you still had those plants. You can get into — you can go very far down the rabbit hole of saying "well, does that really make sense? What would have to happen in order for that to occur?" One of the things that might drive electricity prices very high is a need to remove more and more carbon from the power system. And, at least with the coal plants, it's unlikely that they would earn very high revenues, even in the face of high prices, if

- there was a high carbon price, because they emit more carbon than most of the plants in New England. So, --
 - Q. That's fine. I mean, I wanted to get a sense of what you had done and how it would change things. And, I mean, I might ask the panel more generally, is the scenario, that scenario that Dr. Murphy just outlined, at all likely? And, I think Mr. Antonuk looks like he wants to answer that question.
 - A. (Antonuk) I'm dying to answer that question.
- 10 Q. That's what I figured.

A. (Antonuk) First of all, the kind of modeling that's been done does not allow you to put probabilities on any of these outcomes. So, it's one thing to say "There's a high case and a low case. What are the odds on the high case? What are the odds on the low case?" And, I don't think there's an answer to that through any of the modeling that's been done.

Second, these variables are not independent. Pilgrim, Pilgrim doesn't like its high fixed costs relative to an energy market. If energy prices are high, is Pilgrim going to — is Pilgrim still going to fold or not? So, high energy prices may affect capacity retirements. So, you can't simply just kind of move all these variables around independently,

14'

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and then take a 10 percent high, add another 10 percent high, another 10 percent high, because now you have 10 percent cubed, which isn't even 1 percent.

So, I think it's dangerous to start talking about these scenarios like they have some kind of equal probability of occurring.

Q. I didn't, he did.

- 8 A. (Antonuk) Pardon?
- 9 Q. I didn't, he did. So, I don't think anybody suggested it. So, I mean, I'm --
 - A. (Antonuk) Yes. What I'm saying is, it's okay to do
 this, to sort of say "what if?" You know, I mean, you
 can do "what if a meteor hits?" It's really a question
 of, if you're going to use this to make decisions, you
 have to assess what are the probabilities that this is
 going to happen? What is the combination of things
 that has to happen? And, when you predict the high
 scenario, again, what do you assume about the effect of
 increasing carbon regulations on coal? What are you
 more willing to bet on? That there's going to be a
 persistent high spike in gas and capacity prices? Or,
 that the war on coal will eventually, essentially, get
 them all? I know where my bet is right now on that.
 And, I'm not going to tell you what the odds of that

1 are either.

All I'm trying to tell you is I don't really put a whole lot of stock here on just a qualitative — a qualitatively driven high and low estimate. Because what you end up with is maybe a one to — one-tenth of a percent high price, versus maybe a 30 percent low case. And, you've got to take that into account, when you sort of say "what am I going to do with these sensitivities? How am I going to use these sensitivities to make a decision today under uncertainty?"

- 12 Q. Understood. Mr. Frantz?
- 13 A. (Murphy) And, I'd like to just say, I don't disagree
 14 with anything that Mr. Antonuk just said.
 - Q. I didn't think you would. Mr. Frantz?
 - A. (Frantz) No, I just wanted to say, I know, for myself and Anne Ross, and I think for the others, but I'll let them speak to it, we appreciated what Staff did and what Brattle did by bringing some additional analysis, and taking a look at it in perhaps a different way than we did through the La Capra study, as well as updating numbers and information from that time period.

And, I think you can always find some scenario that supports you and some scenario that

doesn't. I think their base case scenario basically
says "divest and there's savings". Is it possible down
the road that you can find scenarios that don't?

Absolutely. So, it's not always an easy call. But I
think the overall evidence in this proceeding, based on
what we filed, and based on La Capra studies, based on
the information from Brattle, supports going forward.

- Q. I understand all of that. I mean, I appreciate Mr.

 Antonuk and Mr. Frantz making arguments about this.

 All I really want to know, and I think you both

 answered it, but you've answered it with many more

 words than I want to hear, is how likely is the

 negative scenario? Now, Mr. Antonuk, you don't have to

 give me specific odds, it's "one in a hundred" or "one

 in a thousand". If you say "it's very low", that's the

 kind of qualitative answer I'm looking for associated

 with a qualitative directional study.
- A. (Frantz) I think it's unlikely, based on information that I've looked at. I've looked at the forward curves. We have a good idea what forward capacity market prices will be, and they're going to be fairly stable, based on the ISO's movement to a net cone methodology for capacity.

But I've looked at the gas prices. You

know, I read them all the time. And, that doesn't mean it can't be wrong. But, based on the best information I think's out there, I think it's fairly low.

- A. (Antonuk) Before considering the environmental risk on coal plants, I think it's extremely low. I think the risk, the environmental risk on coal plants is one way, it only goes one way from today. So, if you layer that onto any scenario, I think, even if you're inclined to have a modicum of concern about the high scenario, I would still say "is that your bet?" Or, "is your bet that coal plants are going to continue a continual downward slide to elimination in a reasonably short period of time?"
- Q. All right. Thank you. New topic. I want to pick up on what Mr. Cunningham wanted to talk to you about, or what I thought he wanted to talk to you about, Mr. Antonuk. Your discussion about the litigation risk, and how it's associated with the decisions that are being made here, you elaborated on it a little bit with Commissioner Bailey. But one of the things, when you were first talking about it, right near the end you said "it would have to be very large before it would the reduction of them in costs allowed to be recovered would have to be very large before it would make

1 sense." How large are we talking about, in your view? 2 Α. (Antonuk) If you think litigation can end in two years, 3 in one year, it would have to be \$60 million. And, I want to separate now to the initial risk, which is just 4 5 the delay in getting the disallowances from the 6 eventual benefit coming through securitization. After one year, 30 million becomes 60, because that's the 7 benefit in the first year. After, if it takes two 8 9 years to get through the litigation, then that is 90. 10 If you put a 50 percent chance on getting 90, that's 11 worth 45. So, if you combine the uncertainty and ultimately winning in court with a large disallowance, 12 13 with the fact that that disallowance has to grow, I think you're talking about something in the range of 14 15 \$100 million, if you assume two years. And, that's 16 with a 100 percent certainty that you will prevail at 17 whatever court has final say. 18 And, then, whatever stranded costs are left from that point in time, what if it takes us two 19 20 years from that point to get securitization. So, we're going to lose, from that point, the 7 percent gap 21 between WACOG of the Company and securitization on 22

CHAIRMAN HONIGBERG:

All right.

That's

however much we securitize.

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152 [WITNESSES: Stachow~Murphy~Chung~Antonuk~Brennan~Frantz] 1 helpful. I don't have anything further. 2 Does any of the lawyers who sponsored 3 these witnesses have follow-up questions for the witnesses? 4 5 MS. AMIDON: No. 6 CHAIRMAN HONIGBERG: I see shaking heads 7 all around. 8 MS. AMIDON: No. 9 CHAIRMAN HONIGBERG: All right. I think 10 we're done with these witnesses. Thank you all very much, 11 gentlemen. 12 We're going to be able to adjourn 13 momentarily. And, we will be reconvening tomorrow at 14 10:00. And, I appreciate everybody's cooperation on that. 15 And, I understand you will be getting together starting at 16 9:30. Is that right? 17 MS. AMIDON: That's right. 18 CHAIRMAN HONIGBERG: Okay. Thank you 19 all very much. We are adjourned for the evening. 20 (Whereupon the hearing was adjourned at 21 5:19 p.m., and the hearing to resume on

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10:00 a.m.)

February 3, 2016, commencing at

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