

	STATE OF NEW HAMPSHIRE
	PUBLIC UTILITIES COMMISSION NHPUC FEB24'16 am10:2
	8, 2016 - 2:18 p.m. DAY 2 New Hampshire AFTERNOON SESSION ONLY
F	RE: DE 14-238 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE: Determination regardin PSNH's Generation Assets.
	DE 11-250 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE: Investigation of Scrubber Costs and Cost Recovery.
PRESENT:	Commissioner Martin P. Honigberg,Presidin Commissioner Kathryn M. Bailey Special Commissioner Michael J. Iacopino
	Jody Carmody, Clerk
APPEARANCE	ES: Reptg. Public Service Co. of N.H.: Matthew J. Fossum, Esq. Robert A. Bersak, Esq.
	Reptg. City of Berlin and the Town of Gorham, New Hampshire: Christopher L. Boldt, Esq. (Donahue, Tucker)
	Reptg. Conservation Law Foundation: Thomas F. Irwin, Esq.
	Reptg. Sierra Club: Zachary M. Fabish, Esq.
COURT RE	EPORTER: SUSAN J. ROBIDAS, NH LCR NO. 44

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1	APPEARANCES:	(continued)
2		
3		Reptg. Office of Energy & Planning: Christopher G. Aslin, Esq., DOJ Meredith A. Hatfield, Director
4		
5		Reptg. Granite State Hydropower Assn.: Susan S. Geiger, Esq. (Orr & Reno)
6		Reptg. New England Power Generators Assn.:
7		Carol Holahan, Esq. (NEPGA)
8		Reptg. Retail Energy Supply Assoc.: Melissa Lauderdale (Exelon)
9		Dente den Jeh Dredler
10		Reptg. Sen. Jeb Bradley and Sen. Dan Feltes: Senator Dan Feltes
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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 Div.
16		Reptg. Residential Ratepayers: Susan Chamberlin, Esq., Consumer Adv.
17		James Brennan, Finance Director Office of Consumer Advocate
18		Office of Consumer Advocate
19		Reptg. PUC Non-Advocate Staff: Alexander F. Speidel, Esq. Suzanne G. Amidon, Esq.
20		Leszek Stachow, Asst. Dir./Elec. Div.
21		Jay Dudley, Electric Division Richard Chagnon, Electric Division
22		Dean Murphy (The Brattle Group)
23		
24		
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1 INDEX 2 PAGE NO. 3 4 WITNESS: RICHARD CHAGNON 5 Direct Examination by Mr. Speidel 8 Cross-Examination by Senator Feltes 13 Interrogatories by: 6 Commissioner Bailey 14, 32 7 Sp. Commissioner Iacopino 24 Chairman Honigberg 29 8 Recross-Examination by Senator Feltes 31 Redirect Examination by Mr. Speidel 34 9 BILLY S. LEUNG 10 WITNESS PANEL: THOMAS C. FRANTZ 11 ERIC H. CHUNG 12 Direct Examination by Ms. Ross 37 13 Cross-Examination by: 43 Mr. Aslin 14 Mr. Aalto 44 Mr. Cunningham 45 Mr. Speidel 15 49 Interrogatories by: 16 Commissioner Bailey 51 74 Sp. Commissioner Iacopino 17 Chairman Honigberg 81 Redirect Examination by Ms. Ross 84 18 19 20 21 22 23 24

EXHIBITS EXHIBIT ID DESCRIPTION PAGE NO. $\mathbf{Z}\mathbf{Z}$ Eversource 1st quarter 2015 Customer Migration Report Document substituted for Υ previously premarked exhibit RECORD REQUEST - REMI data run AAA to show the cost savings across various industry sectors {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

PROEEDINGS 1 (Hearing resumed at 2:18 p.m.) 2 MS. AMIDON: I stood up to 3 remind myself of a couple administrative issues. 4 Attorney Aslin wants to address 5 a matter, and Attorney Ross does as well. 6 One 7 concerns a record request response that was submitted but not discussed with the Commission. 8 And we'll see what else Ms. Ross has. 9 Thank you. 10 CHAIRMAN HONIGBERG: Thank you 11 for the preview. Mr. Aslin. 12 13 MR. ASLIN: Thank you, Mr. 14 Chairman. Just a couple quick administrative 15 pieces. 16 First was we did submit this 17 morning the record request response that was marked as Exhibit WW. And I wanted to ask Commissioner 18 19 Bailey if that response adequately answered her 20 question. If not, we'd be happy to provide a 21 further response. And if you don't know yet, 22 that's also an appropriate answer. 23 COMMISSIONER BAILEY: Thank you. 24 I haven't had a chance to look at it. But I'll let {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 you know tomorrow if there's any issue. 2 MR. ASLIN: That'd be great. COMMISSIONER BAILEY: 3 Thank you. MR. ASLIN: The second 4 administrative piece for me was Senator Feltes 5 asked that I make one clarification from his 6 7 testimony earlier. To the extent that he was 8 speaking about the docket -- or sorry -- the Order 25,302 that was in his testimony, his testimony is 9 10 correct, but there may have been a misstatement 11 that that order was part of the Burgess Biomass It was actually part of the small woods --12 docket. small wood plant docket that came after Burgess. 13 That's Docket 11-184. And that's reflected 14 15 correctly in his prefiled testimony. But the 16 Burgess approval docket was actually Docket 10-195. 17 So, just to make sure there was no confusion about that, I wanted to clarify that piece. 18 19 CHAIRMAN HONIGBERG: All right. Thank you. 20 21 And Ms. Ross. 22 I just would like to MS. ROSS: 23 ask that this exhibit, which is the migration data for the past year for PSNH, be marked as an 24 {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 exhibit. It was referenced in Mr. Franz's direct testimony, and I used it in friendly cross with 2 him, but this would be the first time it would 3 appear in the record. 4 5 CHAIRMAN HONIGBERG: We're going to mark that as YY? 6 7 THE CLERK: ZZ. 8 CHAIRMAN HONIGBERG: ZZ. Sorry. (Exhibit marked for identification.) 9 10 (Discussion off the record) 11 CHAIRMAN HONIGBERG: We're back on the record. I'm also told that Exhibit YY is an 12 errata sheet that Susan Geiger has already 13 submitted electronically. That will make its way 14 15 through to everyone presently. 16 All right. Mr. Speidel or Ms. 17 Amidon, I believe the next witness is Mr. Chagnon; is that right? 18 19 MR. SPEIDEL: That is correct, 20 Mr. Chairman. I would like to invite Mr. Chagnon 21 to approach the stand to be sworn. 22 (WHEREUPON, RICHARD CHAGNON was duly 23 sworn and cautioned by the Court 24 Reporter.) {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		RICHARD CHAGNON, SWORN
2		DIRECT EXAMINATION
3	BY M	R. SPEIDEL:
4	Q.	Mr. Chagnon, could you please state your full
5		name for the record.
6	A.	Richard Chagnon.
7	Q.	And what is your business affiliation and
8		title?
9	A.	I am a utility analyst here at the PUC.
10	Q.	Did you prepare the testimony that has been
11		marked as Exhibit S in this docket?
12	Α.	Yes, I did.
13	Q.	And do you have any corrections or additions to
14		that testimony?
15	Α.	No, I do not.
16	Q.	May you please, for the benefit of the
17		Commissioners and the assembled parties here
18		today, provide a brief summary of your
19		testimony.
20	A.	Yes, I will.
21	Q.	Thank you.
22	A.	My testimony is to present Staff's additional
23		options to the Stranded Costs Recovery Charge
24		allocation to customer rate classes for PSNH
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	customers for the Commission's consideration.
2	My direct testimony previously submitted
3	included three alternative options regarding
4	the rate design and stranded cost recovery.
5	Staff understands and appreciates the economic
6	value and jobs that LG customers and businesses
7	deliver to New Hampshire. Staff believes that
8	all commercial and industrial customers
9	contribute to the economic vitality of New
10	Hampshire. Staff also believes that the
11	Commissioners are better served with more than
12	one option when considering the allocation of
13	costs from divestiture of PSNH generation
14	assets. Our job here at Staff is to advise the
15	Commission on the fair allocation of costs of
16	the divestiture among customer classes.
17	Staff's alternative options represent
18	three of many for the Commission to consider.
19	And to just quickly go over the options, Option
20	A, it was designed to equalize the manner
21	achieved for the same average bill increase for
22	the average bill in each rate class. Option B
23	was to equalize rates LG, GV and G, and give
24	additional relief to rate R. Option C was to
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equalize costs throughout rates LG, GV and G, 1 while leaving the allocation for rate R the 2 same that was in the Settlement Agreement. 3 Staff has recommended Option B as a way to 4 equalize the average percent increase on the 5 average monthly bill within each LG, GV and G 6 customer based on the electric rates that were 7 in effect in July of 2015. This Option B also 8 gives residential rate customers some 9 additional rate relief while keeping the actual 10 11 rate for R and G at a similar dollar or penny These options were presented and 12 level. designed as a method to arrive at a fair 13 allocation of stranded costs within each rate 14 15 class. We believe that Option B is a more fair 16 and more reasonable allocation. 17 Going back to Senate Bill 221, it

18 expressly stated that the Commission may 19 incorporate rate designs that fairly allocate 20 the cost of divestiture of some or all of PSNH 21 generation assets among customer classes. 22 Staff believes that our Option B is a more fair 23 allocation of those costs. It also states 24 that, in considering rate designs, the

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1Commission shall consider the impacts on the2economy and PSNH's service territory, and the3ability to attract and retain employment across4industries. Staff believes that our5rate-allocation option will have a similar6effect on New Hampshire's economy and potential7new jobs created, as proposed in the8Restructuring and Rate Stabilization Agreement,9through the savings achieved for all rate class10customers at PSNH.11Q.12housekeeping questions I'd like to ask.13For starters, is this your first time14testifying before the Commission?15A.16Q.Q.Could you describe your previous work17experience very briefly prior to coming to the18Commission as a new utility analyst.19A.20held many positions throughout my career. But21some that are directly related to what we're22testifying today have to do with my work with			
 ability to attract and retain employment across industries. Staff believes that our rate-allocation option will have a similar effect on New Hampshire's economy and potential new jobs created, as proposed in the Restructuring and Rate Stabilization Agreement, through the savings achieved for all rate class customers at PSNH. Q. Thank you, Mr. Chagnon. I have a few housekeeping questions I'd like to ask. For starters, is this your first time testifying before the Commission? A. Yes, it is. Q. Could you describe your previous work experience very briefly prior to coming to the Commission as a new utility analyst. A. Yes. I did work for PSNH for 36 years, and I held many positions throughout my career. But some that are directly related to what we're 	1		Commission shall consider the impacts on the
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 20 held many positions throughout my career. But 21 some that are directly related to what we're 	18		Commission as a new utility analyst.
21 some that are directly related to what we're	19	Α.	Yes. I did work for PSNH for 36 years, and I
	20		held many positions throughout my career. But
22 testifying today have to do with my work with	21		some that are directly related to what we're
	22		testifying today have to do with my work with
23 large power billing and accounting, those	23		large power billing and accounting, those
24 customers. Also served as an accounting	24		customers. Also served as an accounting

	executive for G-rated customers, LG customers
	and GV customers, as well as credit analyst.
Q.	Thank you. Mr. Chagnon, in light of earlier
	testimony early this afternoon and this
	morning, do you specifically have any position
	on the inclusion of PPAs and the stranded costs
	included for rate recovery on distribution
	rates?
A.	No, I do not.
Q.	And do you have an opinion that the settlement
	as proposed before the Commission globally is
	in the public interest generally?
Α.	Yes, we believe it is in the public interest
	generally.
Q.	And one last question. Are you of the opinion
	that your rate design counterproposal would
	have at least a neutral or perhaps even a
	beneficial effect for jobs and the economy in
	this state?
A.	Yes, I do.
Q.	Thank you very much.
	MR. SPEIDEL: I invite
cro	ss-examination of Witness Chagnon.
	CHAIRMAN HONIGBERG: All right.
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	A. Q. A. Q. A. cro

1 Who has questions for Mr. Chagnon? I see Senator Feltes's hand. Anybody else besides Senator 2 Feltes? 3 (No verbal response) 4 5 CHAIRMAN HONIGBERG: All right. Senator Feltes, you're up. 6 7 SENATOR FELTES: Thank you, Mr. 8 Chairman. CHAIRMAN HONIGBERG: Is your 9 microphone on? It is now. 10 11 SENATOR FELTES: Thank you, Mr. Thank you, Mr. Chagnon. 12 Chairman. 13 CROSS-EXAMINATION 14 BY SENATOR FELTES: 15 As I understand your testimony, the options ο. 16 presented by Staff specifically in your 17 testimony you regard as more fair, particularly Option B; is that right? 18 19 Α. That's correct. 20 But your testimony isn't that the Settlement 0. 21 Agreement rate design is unfair. 22 That is correct as well. Α. 23 Okay. And did you solicit input from the Q. business community or any chamber of commerce 24 {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 in constructing these rate design recommendations? 2 No, I did not. 3 Α. SENATOR FELTES: 4 Thank you, Mr. 5 Chairman. CHAIRMAN HONIGBERG: Any other 6 7 questions? Anyone else have questions for Mr. Chagnon? Commissioner Bailey. 8 COMMISSIONER BAILEY: Thank you. 9 I want to say congratulations, first time 10 11 testifying. 12 THE WITNESS: Thank you. 13 INTERROGATORIES BY COMMISSIONER BAILEY: Just so that I know that I sort of understand 14 Q. 15 your three options, Option A is the 16 equi-proportional distribution of the stranded 17 costs; right? 18 A. Correct. 19 Q. And if the Commission were to adopt that 20 option, residential customers would get a 21 decrease from what is proposed in the 22 settlement. 23 That's correct. А. And they would pay the same proportionate 24 Q. {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		amount of the stranded costs as every other
2		customer.
3	Α.	Based on an average bill within that rate, yes.
4	Q.	Okay. And Option B, residential customers
5		would get a slightly lower percentage of the
6		stranded costs than they would under the
7		Settlement Agreement.
8	Α.	Correct.
9	Q.	And the business customers would get the same
10		proportion. So the large C and I and the
11		medium and small customers, business customers,
12		would all pay the same.
13	Α.	That's correct.
14	Q.	And in C, residential customers would pay the
15		same as is proposed in the Settlement
16		Agreement.
17	A.	Yes.
18	Q.	And then the remainder would be equally split
19		between the business customers.
20	Α.	That's correct.
21	Q.	Okay. Did you are you familiar with the
22		letter from BIA that Senator Feltes and Senator
23		Bradley had attached to their rebuttal
24		testimony?
	<u> </u>	1 050 (DE 14 020) (DIV 0 DV 0 and a onlock (00 02 16)

1 A. Yes, I am.

2	Q.	And do you believe that the Business and
3		Industry Association would represent the
4		interests of all businesses? I mean, it was a
5		pretty strong recommendation to adopt the
6		proposal that doesn't give the business classes
7		equal treatment.

I believe that they have done their best job 8 Α. for their association members of the 9 association. However, I'd like to point out 10 11 that manufacturing jobs aren't just LG customers, and LG customers aren't just 12 manufacturers. They're scattered throughout 13 the three industrial commercial rates. 14 So 15 we've got manufacturing at all levels, not just 16 at the LG level. It's a rate class. It's not an industrial rate. 17

Q. Okay. But the Business and Industry
Association, I would imagine, understands the
difference between LG, GV and G rates.

21 A. Hmm-hmm.

Q. And they understood that the largest rate
class, LG, would have the smallest proportion
of the stranded costs, largely because, as I

			Т
1		understand it, they don't pay any of those,	
2		any they wouldn't pay any of those if we	
3		didn't divest because they've all migrated.	
4	Α.	Correct.	
5	Q.	So I don't I want to understand why you	
6		think it's more fair to allocate those costs	
7		equally among business classes when the	
8		business association thinks it's more fair to	
9		do it the other way.	
10	Α.	In regards to fairness, when we're looking at	
11		jobs, it's the whole economy of New Hampshire.	
12		It's not just the LG customers, even though	
13		they employ about 10 percent of total	
14		employment in New Hampshire.	
15		Throughout the rate structure at PSNH,	
16		you've got many customers that are truly GV	
17		customers, that are still large customers, per	
18		se meaning that they have multiple	
19		accounts because a rate is just a meter, and	
20		a meter is just a billing location for the	
21		delivery of power. So if we're looking at job	
22		increase and creation, then we should also be	
23		considering that these LG class customers are	
24		really I'm sorry. Excuse me these GV	
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			Τ¢
1		rate customers are really LG rate customer	
2		wannabes. And if they're going to grow, how	
3		are we enticing them to grow if we're actually	
4		putting more cost onto them through this rate	
5		structure? I know it's just a small component,	
6		but we're adding all these up for businesses.	
7		And so the intent really is to make sure that	
8		there's a level playing field for all	
9		commercial and industrial rates to succeed in	
10		New Hampshire.	
11	Q.	Okay. I'm sorry. I'm looking for your	
12		testimony.	
13		CHAIRMAN HONIGBERG: S.	
14		COMMISSIONER BAILEY: I'm in the	
15	rig	ht place. Here it is. Okay.	
16	BY C	OMMISSIONER BAILEY:	
17	Q.	Page 5, where you have calculated and I	
18		appreciate this because I didn't see it	
19		anyplace else, and maybe I missed it what	
20		the actual rate impact would be, assuming the	
21		stranded costs are what they are predicted to	
22		be.	
23	Α.	Yes.	
24	Q.	And these rates are if we adopt the Settlement	
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Agreement. 1 2 Α. That's correct. Okay. And so residential rates would see about 3 Q. a penny. But without divestiture, they'd see 4 about 1.9 cents when we include the Scrubber 5 costs, and the charge becomes a permanent rate 6 7 that we just recently approved. 8 Α. Yes. And is there any equivalent rate on any of 9 Q. 10 these other rate classes right now? I guess it 11 would be 1.9 cents for every rate class. But the argument is that the large majority of 12 those, of LG and GV, don't pay it because they 13 14 are not taking default service. 15 Correct. Α. So, should we be comparing the default service 16 Q. 17 rate to the rate impact that the Settlement Agreement would bring? 18 19 Α. There's so many different ways of creating 20 rates, and sometimes it can become more of an 21 art than a science. 22 Another way to look at it is to, for true 23 comparisons, is to take out that 1.72 from the whole Scrubber cost out of the EES rate 24 {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

		2
1		currently and compare that to all companies
2		or all rates. Excuse me. If you did that,
3		you'd come out with a similar percentage
4		allocation because now you're backing them all
5		out of all rates because you put them in the
6		rates to do the comparison to begin with.
7	Q.	So you're saying that we should compare 1.72,
8		which is the cost of the Scrubber
9	Α.	Yes.
10	Q.	to these rates that you have calculated
11		here.
12	Α.	Yeah. And I'm saying that the 1.72 all
13		these rates for comparisons are including
14		PSNH's energy service rate, as well as if LG
15		and GV customers were actually paying those
16		rates.
17	Q.	Right. So if you take out the energy service
18		rate
19	A.	The Scrubber piece.
20	Q.	and you just compare the Scrubber piece
21	Α.	You take out the Scrubber piece, and everything
22		left, if you compare those across the board of
23		all rates, you would still come out with a very
24		similar allocation in percentage to each rate
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class. 1 But the rates here don't include the energy 2 Q. service rates. This is just the piece for 3 stranded costs, the rates that you calculated. 4 Nope. All these rates do include the energy Α. 5 service rate so that there's a true comparison. 6 So, for -- oh, so, for the residential class of 7 0. 8 1.0632 cents per kilowatt hour, that includes the energy service rate? Isn't the energy 9 service rate like 9 cents a kilowatt hour, 9.2, 10 11 9.8, something like that? MR. SPEIDEL: Commissioner 12 Bailey? 13 14 COMMISSIONER BAILEY: Yeah. 15 What am I confused about? I'm sorry. 16 MR. SPEIDEL: Considering that 17 this isn't a court, I can interpose myself a little bit --18 19 COMMISSIONER BAILEY: Thank you. 20 MR. SPEIDEL: -- in the spirit 21 of the day. I do this but rarely, as the sitting 22 commissioners know. 23 I think what Mr. Chagnon is referring to is the fact that the Scrubber will be 24 {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	amo	rtized through a stranded cost rate that will be
2	app	lied equally to all distribution rate classes,
3	as	opposed to being assigned directly just to the
4	ene	rgy service rate.
5		COMMISSIONER BAILEY: And the
6	Scr	ubber rate, if you assign it to the energy
7	ser	vice rate, that piece of it is what? Is it
8	1.7	2?
9		MR. SPEIDEL: Well, I would
10	pre	fer Mr. Chagnon answer that.
11		COMMISSIONER BAILEY: That's
12	wha	t I think he said.
13	BY C	OMMISSIONER BAILEY:
14	Q.	Is that what you said?
15	Α.	Yes, I did.
16	Q.	Okay. So, without divestiture, every rate
17		well, no. Every default service rate would
18		include a penny 1.72 cents to recover the
19		cost of the Scrubber.
20	A.	Correct.
21	Q.	And under the settlement proposal, because it's
22		distributed over distribution rates rather than
23		default service rates, everybody pays
24		something, but less than what the default
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

			2:
1		service customers would have paid.	
2	A.	That's correct.	
3	Q.	And it sort of makes it by spreading it over	
4		the distribution rates, that's probably better	
5		for competition; right?	
6	А.	Yes, it is.	
7	Q.	Okay. So what would the rate be I know you	
8		have it in here somewhere but for LG if you	
9		implemented rate Option B?	
10	Α.	The rate, the stranded cost rate under Option	
11		B, the percentage allocation would be somewhere	
12		around 12.6 percent.	
13	Q.	Well, tell me what the rate would be. Is that	
14		on your table, too?	
15	А.	Yes, it is. It would be .67 cents under the	
16		scenario.	
17		MR. SPEIDEL: Mr. Chagnon, can	
18	you	direct us to a specific page reference for that	
19	tab	le?	
20		COMMISSIONER BAILEY: Page 12, I	
21	bel	ieve.	
22		THE WITNESS: Page 12 is	
23	cor	rect.	
24	BY C	OMMISSIONER BAILEY:	
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16	5}

			24
1	Q.	But I thought that Option B had the same oh,	
2		they have the same percentage, but it doesn't	
3		turn out to be the same rate?	
4	A.	Correct. So, it's the same percentage of the	
5		average bill within each rate class.	
6	Q.	Okay.	
7	A.	It's a different rate	
8	Q.	Got it.	
9	Α.	based on the class, but it's the same	
10		percentage on average bills.	
11	Q.	Okay. All right. Thank you very much.	
12	A.	You're welcome.	
13		CHAIRMAN HONIGBERG: Commissioner	
14	Ia	copino.	
15	INTE	RROGATORIES BY SP. COMMISSIONER IACOPINO:	
16	Q.	Just a follow-up on what I'm sorry. Just to	
17		follow up on what Commissioner Bailey was	
18		asking you, then I should compare that column	
19		where you have the .67 cents on Page 12 for	
20		your Option B in the Stranded Cost Recovery	
21		Charge rate column, where you're doing the	
22		analysis with the .3050 cents for rate LG on	
23		Page 5.	
24	Α.	Yes, that's correct.	

т	Q.	inat's the correct comparison.
2	A.	Yes.
3	Q.	Okay.
4	A.	And it's all on the same page, on Page 12, for
5		comparison.

Okay. My questions are a little less specific. 6 ο. 7 I want to get more into your -- I understand 8 you're not saying that the Settlement Agreement is unfair. But you're giving us your opinion 9 that your Option B, and perhaps some of these 10 11 other options, are more fair. And if I 12 understand your reasoning for coming to that conclusion, I sort of take it in two parts. 13 14 The first is that, in the past, historically, 15 when there's been an attribution of a stranded 16 recovery cost, it's been equal proportion to 17 each rate class.

18 A. Yes, sir.

19 0. And where does that come from? I know in both 20 Mr. Franz's testimony and in your testimony you 21 reference it being "historical." But I guess I 22 don't sit here every day, as you know. I'm 23 just curious. Is that just from other cases, or is there a statute? Or what's the basis for 24 {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

			20
1		that?	
2	Α.	I don't have the history for that only because	
3		I've been here nine months. So I apologize.	
4	Q.	Okay. Well, I can talk to you when we	
5		deliberate then.	
6		Okay. So my second question, then, is you	
7		also seem to make this argument that the	
8		smaller users over the past 10, 15 years or so	
9		have not had the benefit of deregulation.	
10	Α.	Correct.	
11	Q.	And I asked this of the prior panel. That's	
12		sort of the way I look at it, you're sort of	
13		looking backwards and trying to make up. Is	
14		that what you consider that part of what you're	
15		doing to be, trying to make it up to the	
16		smaller ratepayers this time around?	
17	A.	No, not at all. I'm actually moving forward	
18		and saying that wiping it clear and saying	
19		by going forward, this is the social situation	
20		where everyone pays evenly on average bills	
21		within each rate so that you've got more fair	
22		billing. And specifically, companies, upon	
23		competition, you've got as I mentioned	
24		before, you have many companies that have	
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16	5}

1		multiple accounts. They may have one LG
2		account and they may have three GV accounts,
3		all right. So you're billing them differently.
4		And as a company grows, they could become an LG
5		account if indeed they're all billed under one
6		meter.
7	Q.	Well, isn't that what we want, though?
8	Α.	That is what we want, yes. But you also
9		have you may have a company that has two GV
10		accounts and a similar company, not that same
11		one, that has one LG account. These two GV
12		accounts could have more kilowatt hours, more
13		usage, and even more customers, all right. But
14		meanwhile, this other company, just because of
15		the way they're billed and electrically
16		connected could actually have a competitive
17		advantage in regards to electric bills.
18	Q.	But is that something that we should be trying
19		to remedy in the context of a proceeding like
20		this, or should there be a different remedy for
21		that, something that deals with the way things
22		are billed?
23	A.	Yeah, I suggest that we look at it right now.
24		Just saying that, going forward, everyone pays
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 2	their fair share, if you will, even though large customers may not like that. Now we're all in this together.
2	
	all in this together.
3	
4 Q.	You also say that you give the opinion that you
5	believe that awarding the more favorable rate
6	to the LG customers challenges the fair and
7	reasonable mandate of the Commission. And I
8	just want to get a sense of when you say it
9	"challenges the fair and reasonable mandate,"
10	at the same time you said it's not unfair. So
11	what does that mean, that it "challenges the
12	fair and reasonable." Is it just a way to put
13	these options in context for us, or is it do
14	you have a real concern that we're pushing the
15	envelope on being "fair"? Because you said
16	it's not unfair.
17 A.	It's not unfair because at the end of the day
18	all customers will benefit. It's how much will
19	they benefit, and is it a fair allocation. And
20	so the point is that it is less fair, if you
21	will, to have an LG rate, have a less
22	percentage of allocation of stranded costs. So
23	that was the intent.
24 Q.	I think that's all my questions. Thank you.

1 INTERROGATORIES BY CHAIRMAN HONIGBERG:

2 0. Mr. Chagnon, I think I'm in the same area that Commissioner Iacopino was just talking about. 3 And this may not really be a question for you 4 ultimately. May be more of a legal question of 5 what the statute calls for us to consider. 6 But fair and unfair is kind of a binary concept. 7 It either is or it isn't. It's fair or it's 8 not fair. 9

In your view, does the statute call for us 10 11 to find the best, the most fair, the maximum of all fairness possibilities in doing this, or 12 are we just directed to find a fair one? 13 We could consider many possible fair ones. 14 But if 15 it's fair, it's fair, and that means we can 16 approve it.

17 A. It says that the Commission may incorporate 18 rate designs that fairly allocate cost of 19 divestiture. "Fairly." And I would say that 20 less fair means it's not fair. And so that's 21 why we approached fairness across each of the 22 rate classes.

Q. I think Senator Feltes may want to follow up with you on that, because I think his question {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		was a fairly stark question regarding the rate
2		presentation as it is in the Settlement
3		Agreement. And his question was, is that, in
4		your opinion, fair, and you said yes. So I'm
5		not sure what you just said is consistent with
6		that.
7	Α.	I guess you're correct. I didn't understand
8		the question perfectly.
9	Q.	So let's make sure we are clear then. I think
10		we're probably going to give Senator Feltes an
11		opportunity to follow up.
12		So your testimony now is that, in your
13		view, the rate allocation in the or the
14		allocation in the Settlement Agreement is not
15		fair.
16	A.	Correct.
17	Q.	That was all I had.
18		CHAIRMAN HONIGBERG: I think
19	bef	ore we circle back, before we circle back to
20	Sta	ff, I want to give Senator Feltes a chance, if
21	he'	s interested, because of the way this arose.
22		SENATOR FELTES: Thank you, Mr.
23	Cha	irman.
24		
L	(z	

1	CROSS-EXAMINATION (cont'd)
2	BY SENATOR FELTES:
3	Q. Mr. Chagnon, in light of your changed
4	testimony, is it your suggestion that the rate
5	design agreed to by all the stakeholders that
6	is supported by the Business and Industry
7	Association which represents LG, G and GV, that
8	everybody agreed on something that's unfair?
9	A. I believe that they did, and only in the sense
10	that it's they obviously moved forward to
11	make this all work for everyone. And as you
12	had said earlier, it was a negotiation. And we
13	understand how the agreement landed where it
14	did. However, it was Staff's job to look at
15	this and see if indeed it was fair. And it is
16	not fair amongst classes of PSNH rate classes.
17	SENATOR FELTES: Just one
18	follow-up, Mr. Chairman?
19	CHAIRMAN HONIGBERG: You don't
20	need to ask permission. You are questioning now.
21	SENATOR FELTES: Thank you, Mr.
22	Chairman.
23	BY SENATOR FELTES:
24	Q. So, in light of the change from the rate design
	{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

		3
1		in the settlement being fair to now being
2		unfair in your changed testimony, are you
3		changing your testimony, too, about whether or
4		not the Settlement Agreement as a whole,
5		including the rate design, serves the public
6		interest?
7	Α.	No, I am not. It does serve the public
8		interest.
9		CHAIRMAN HONIGBERG: Commissioner
10	Ва	iley.
11	INTE	RROGATORIES BY COMMISSIONER BAILEY (cont'd):
12	Q.	So do you believe that the only way to fairly
13		allocate the costs, the stranded costs, is to
14		make sure that everybody sort of pays the same
15		amount? There's no wiggle room?
16	Α.	No, I believe that the fair way is to levelize
17		the playing field throughout small commercial,
18		medium commercial and large commercial rate
19		classes.
20	Q.	So the only way to make it fair is if the
21		percentages across all three business classes,
22		that all businesses pay the same amount.
23		That's the only way to make it fair.
24	Α.	Correct. The same percentages on average
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 bills.

2	Q.	If it were that simple and maybe this is a
3		legal question, and it's not fair to ask you.
4		But if it were that simple, wouldn't the
5		Legislature have told us that? I mean, the law
6		says, "The Commission may incorporate rate
7		designs that fairly allocate the costs among
8		customer classes." And they didn't define what
9		"fairly" means. And we had testimony this
10		morning that suggested that the panel believed
11		that the way they allocated was fair, and
12		because all the businesses or the BIA agreed
13		it was fair, that it must be fair. And I guess
14		your testimony is the only way to make it fair
15		is if all businesses pay the same percentage of
16		the costs.
17	A.	Correct. Yes.
18	Q.	All right. Thank you.
19		CHAIRMAN HONIGBERG: Mr.
20	Spe	idel, do you have any further questions for your
21	wit	ness?
22		MR. SPEIDEL: This will be an
23	int	eresting form of redirect, insofar as I think my
24	wit	ness was given a hypothetical and he had to
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

	3
1	answer the hypothetical in a black and white way,
2	where in fact he may have wanted to answer in
3	shades of gray, insofar as
4	CHAIRMAN HONIGBERG: Do you need
5	to take a short break, Mr. Speidel?
6	MR. SPEIDEL: No, I don't think
7	so.
8	CHAIRMAN HONIGBERG: Okay.
9	REDIRECT EXAMINATION
10	BY MR. SPEIDEL:
11	Q. Mr. Chagnon
12	A. Yes.
13	Q would you agree that, if there's a
14	hypothetical question that's posited to you
15	wherein your alternative rate design is
16	described as "fair," and that the only basis
17	for challenging the proposed rate design in the
18	Settlement Agreement is unfair, that was kind
19	of the premise that you were forced to accept
20	in a way?
21	SENATOR FELTES: Objection, Mr.
22	Chairman. You know, that's restating I think a
23	cross-examination question. His testimony is his
24	testimony. You know, I asked questions. There was
	{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	an answer. I think restating my questions I think
2	is not necessarily permissible.
3	CHAIRMAN HONIGBERG: Oh, I'm not
4	sure you want to go there, Senator Feltes. That's
5	overruled.
6	MR. SPEIDEL: Yeah, I wasn't
7	referring to the Senator's question as much as the
8	Bench questioning.
9	BY MR. SPEIDEL:
10	Q. One way or the other, Mr. Chagnon, would you
11	reiterate that, in your view, there's a
12	spectrum of fairness wherein you believe that
13	your rate design alternative is more fair, but
14	that does not necessarily mean that in any
15	circumstance the proposed rate design within
16	the Settlement Agreement is unfair?
17	SENATOR FELTES: Objection, Mr.
18	Chairman. I think that this is a leading question,
19	and I think on redirect or direct you want to ask
20	open-ended questions, not leading questions.
21	CHAIRMAN HONIGBERG: The Rules
22	of Evidence don't apply, and so I'm going to
23	overrule.
24	SENATOR FELTES: Thank you, Mr.
l	{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 Chairman. Yes, I agree. 2 Α. BY MR. SPEIDEL: 3 Thank you, Mr. Chagnon. I appreciate it. 4 0. MR. SPEIDEL: I have no further 5 redirect questions, Mr. Chairman. 6 7 CHAIRMAN HONIGBERG: All right. 8 You may return to your seat, Mr. Chagnon. Let's go off the record for a 9 minute. 10 11 (Discussion off the record.) MS. ROSS: I would like to call 12 Billy Leung, Tom Frantz and Eric Chung. And I was 13 just about to ask the Commission, the reason I'm 14 15 calling Eric is that he has provided the inputs for 16 the REMI model, and we thought it might be handy to 17 have him up there. If you prefer he not be up there, we can query him if necessary. But it's at 18 19 your pleasure. CHAIRMAN HONIGBERG: 20 Mr. 21 Chung -- Mr. Bersak, is it okay if Mr. Chung is up 22 there? 23 MR. BERSAK: Fine. 24 MS. ROSS: And I need to find {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	Mr. Frantz. Excuse me.
2	CHAIRMAN HONIGBERG: Off the
3	record.
4	(Discussion off the record.)
5	(WHEREUPON, BILLY S. LEUNG was duly sworn
6	and cautioned by the Court Reporter, and
7	panel witnesses Frantz and Chung having
8	been previously sworn.)
9	BILLY S. LEUNG, SWORN
10	THOMAS C. FRANTZ, SWORN
11	ERIC H. CHUNG, SWORN
12	DIRECT EXAMINATION
13	BY MS. ROSS:
14	Q. You do need to have the mic very close to you.
15	Would you state your name for the record,
16	please.
17	A. (Leung) Billy S. Leung.
18	Q. And who do you work for?
19	A. (Leung) I work for REMI, Regional Economic
20	Models, Incorporated.
21	Q. And what is it that you do with REMI?
22	A. (Leung) I am a vice-president at REMI. I've
23	been with REMI for the last 15 years. My focus
24	at REMI is to do economic consulting and
ļ	{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		leading the team with economic reports and
2		model usage.
3	Q.	And I'm going to refer you to Exhibit M, as in
4		mother, which is the direct testimony of Thomas
5		Frantz. And attached at the back of that
6		testimony is a report titled "REMI - Measuring
7		The Economic Impacts of Public Service New
8		Hampshire Electric Generation Asset Divestiture
9		Options." Do you have that document?
10	Α.	(Leung) Yes, I do.
11	Q.	And can you confirm that that document was
12		prepared under your supervision?
13	Α.	(Leung) Yes, it was.
14	Q.	And at the time that that I'm actually going
15		to ask you now for the subsequent document.
16		MS. ROSS: And I'm also going to
17	ask	the Commission that we substitute a newer
18	ver	sion of this one-page exhibit which is currently
19	des	ignated Exhibit Y. So I'm going to pass
20	the	re are minor text changes on the first page. So
21	I'm	going to pass this out.
22		(Atty. Ross distributes new Exhibit Y
23		page to all parties.
24	BY M	S. ROSS:

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1	Q.	Mr. Leung, I'm referring you now to the
2		one-page Exhibit Y that I've shown you. Can
3		you confirm that that was also prepared under
4		your supervision?
5	А.	(Leung) Yes, it is it was.
6	Q.	And could you give the Commissioners a little
7		bit of information on the REMI model.
8	A.	(Leung) Okay. The REMI model is a model that
9		was developed under Dr. George S. Treyz 35
10		years ago. We're a specialist in regional
11		economics. We follow the same type of
12		methodology as Dr. Lawrence Klein that
13		developed CG models back in the 1960s, '50s,
14		'60s and '70s, and won a Nobel Prize in the
15		1980s. Where Dr. Klein focused on macro
16		models, global and national models, the REMI
17		model we focus under the supervision of Dr.
18		Treyz focused on regional models. So we
19		focused our model is a model of 3,000 by
20		3,000, done by county, by 170 industry sectors.
21		(Court Reporter interrupts.)
22	A.	(Leung) So we have a cross-matrix of 3,000 by
23		3,000 county by 170 industries out to the year
24		2050 forecast. So the model has been used by
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		every state in the U.S, by every major
2		metropolitan area over the last 35 years. Our
3		international client base we cover around
4		70 percent of the global gross world product.
5		Our client base includes North America, Canada,
6		U.S. and also Mexico. We work very closely
7		with Asian countries, such as China and South
8		Korea, and also countries in the Middle East.
9		We advise governments on different types of
10		policies using the model to show the economic
11		impacts of their policies. The model is not
12		just solely used for energy. It's used across
13		different areas, such as transportation,
14		security issues, competitive issues and things
15		like that.
16	Q.	And Mr. Leung, can you scale your model to look
17		at a specific state like New Hampshire?
18	A.	(Leung) Yes, it can.
19	Q.	And this past summer, were you asked to do some
20		work by Mr. Frantz, Director of our Electric
21		Division?
22	A.	(Leung) Yes, we were.
23	Q.	Could you describe the work assignment that
24		REMI was given.
	-	

{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	Α.	(Leung) The work assignment that REMI was given
2		was we would take input data from Mr. Frantz,
3		and we would model simulations on the different
4		types of price changes and impact to the New
5		Hampshire economy.
6	Q.	Thank you. And recently you were asked to
7		update that work. And could you describe what
8		the work request was for the update?
9	Α.	(Leung) The work request for the update was to
10		take an input from Dr. Murphy, and we were
11		given changes of \$163 million in energy cost
12		savings to incorporate that into the REMI.
13	Q.	And could you briefly summarize the results of
14		that modeling effort.
15	Α.	(Leung) Okay. So we modeled that \$163 million
16		in energy cost savings from 2017, shared out
17		from 2017 to 2021. And what we put in for
18		price changes was, we put in a consumer energy
19		savings of 36.58, consumer commercial price
20		savings of 30.1 million, and industrial price
21		savings of 7.79 million, public street light
22		savings of 2222 million. And then from
23		the results we showed that there was a net
24		positive impact towards the New Hampshire
	{DE	11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	economy, with a total employment gain of 1,658
2	man years for employment. It grew the economy,
3	drawing population to 2,759 people, grown the
4	labor force by 1,733; also, additional personal
5	income of \$188 million to this date over a
6	five-year period.
7	But also what's interesting is there was
8	also additional growth in the commercial and
9	industrial sector, too, from competitiveness
10	from the energy side of things.
11	Q. Thank you. What inputs did you obtain? Inputs
12	by customer class from Eversource, from Mr.
13	Chung?
14	A. (Leung) Correct.
15	MS. ROSS: I think with that I
16	would make the witness available for cross. I
17	would reserve the right to redirect if necessary.
18	CHAIRMAN HONIGBERG: All right.
19	Who is going to have questions for this panel? Mr.
20	Cunningham, Mr. Aslin.
21	Mr. Aslin, you're going to be on
22	the settling side, so you're going to go first it
23	looks like. Anyone else besides those two?
24	(No verbal response)
	{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	CHAIRMAN HONIGBERG: All right.
2	Mr. Aslin, you may proceed.
3	MR. ASLIN: I just have one
4	quick question for Mr. Leung.
5	CROSS-EXAMINATION
6	BY MR. ASLIN:
7	Q. If you had the discretion to allocate customer
8	savings that came out of divestiture to a
9	particular industry sector in order to maximize
10	job growth and economic development, or
11	economic growth in the state or I should say
12	in the PSNH region there's a better term,
13	but I'll leave it at that which sector would
14	you put the savings into to get the maximum
15	economic benefit?
16	A. (Leung) That's a very interesting question,
17	because we put it in all residential and
18	commercial and industrial. But also what we
19	found out was when you put it in residential,
20	although there was an increase in economic
21	output, once this savings was gone, that
22	provided consumption spending. So that's not
23	really in the model, it's not really an
24	investment. But if you put it in commercial
	{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

	*
1	and industrial, what happens is it lowers
2	production cost, it increases market share, and
3	it grows the economy that way. So, from the
4	model reaction and from competitiveness, I
5	would put it in industrial and commercial
6	relative to residential, because residential is
7	a spending, where industrial and commercial is
8	an investment.
9	Q. Thank you. No further questions.
10	CHAIRMAN HONIGBERG: Mr. Aalto,
11	you have something you want to ask?
12	MR. AALTO: Yes, a very brief
13	question, just to confirm
14	(Court Reporter interrupts.)
15	CHAIRMAN HONIGBERG: Pentti,
16	find a microphone, please.
17	CROSS-EXAMINATION
18	BY MR. AALTO:
19	Q. Just to confirm that your model ran on a number
20	that was provided to you as the savings and to
21	identify what effect that would have. Am I
22	correct on that?
23	A. (Leung) Yes, it was. It was provided to us by
24	Dr. Murphy from The Brattle Group.
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1	A. (Chung) Just to clarify, so Dr. Murphy provided	
2	the aggregate level of savings, the \$163	
3	million that he spoke to the other day. What	
4	the Company did was, we translated that into	
5	the customer accounting classes that Mr.	
6	Leung's model anticipates, which is	
7	residential, commercial, industrial and public	
8	street lighting. Those don't necessarily map	
9	one-to-one to the revenue-requirement	
10	allocation percentages specified in the	
11	Settlement Agreement. So the Company helped	
12	translate that using billing data as a proxy,	
13	which tends to be good for a proxy going	
14	forward.	
15	CHAIRMAN HONIGBERG: Mr.	
16	Cunningham.	
17	CROSS-EXAMINATION	
18	BY MR. CUNNINGHAM:	
19	Q. You substituted if I understand your	
20	testimony, Mr. Leung, you substituted The	
21	Brattle Group data for assumptions for La	
22	Capra?	
23	A. (Leung) Yes, we did.	
24	Q. How did that change?	
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1 (Leung) The results -- as you can see right on Α. 2 the back, the results were less. So, instead of on Table 3 and Table 4 it summarizes that, 3 where the range was ranging per dollar 4 investment of 204 --5 (Court Reporter interrupts.) 6 7 (Leung) Where the -- we're at Table 3 and Table Α. 8 4. You can see the total employment dropped from a high of 1,900 to 1,658. So there was a 9 300-job difference. 10 And who asked you to change the data base that 11 Q. 12 you used? (Frantz) I did. Well, not the database, but 13 Α. the input. 14 15 The data input. Q. 16 (Frantz) Yeah. А. 17 SP. COMMISSIONER IACOPINO: Can 18 you just show us where on the exhibit? I can't find that on here. 19 20 THE WITNESS: (Leung) I 21 apologize. It's on Table 4, where it shows total 22 employment. 23 SP. COMMISSIONER IACOPINO: Okay. 24 THE WITNESS: (Leung) So the new {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 information is BPD. The old simulations are TC-46, TC-46B, TC-46BB, TC-46BC. 2 SP. COMMISSIONER IACOPINO: 3 Okay. Thank you. 4 5 COMMISSIONER BAILEY: I still can't find it. 6 7 THE WITNESS: (Leung) Table 4. 8 COMMISSIONER BAILEY: Thank you. BY MR. CUNNINGHAM: 9 And Mr. Leung, did Mr. Frantz explain to you 10 0. 11 why he wanted to change the data input from La 12 Capra to Brattle? (Leung) No. We just were just told that we 13 Α. needed to adjust a model 163 million. 14 15 And just a few more questions. Part of your Q. 16 analysis was of the rate design, was it not, as 17 proposed in the Settlement Agreement? (Leung) Unfortunately, I only understand the 18 Α. 19 economic modeling component. They give us the 20 inputs, we model it. 21 Q. Well, I guess my specific question is: Did you 22 analyze what impact among rate classes the 23 settlement would have vis-a-vis residential 24 ratepayers as compared to industrial and {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

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1		commercial ratepayers?	
2	A.	(Leung) The impact, we were just looking at	
3		impacts. And the impact showed that the model	
4		group from residential and industrial	
5		benefitted from competitiveness for market	
6		share, that that's basically just the results	
7		of the model that we showed.	
8	Q.	So	
9	A.	(Leung) But no	
10	Q.	you did not analyze whether or not this deal	
11		would help residential ratepayers?	
12	Α.	(Leung) It was just an outcome. So with the	
13		model, it's just the outcome from the model,	
14		how it helped the residential and how it helped	
15		commercial and industrial.	
16	Q.	I'm not sure I understand what the answer is.	
17		MS. ROSS: I'm not sure that	
18	you	're asking I think you're asking a	
19	que	stion maybe Mr. Frantz can assist in	
20	des	cribing what the REMI model was measuring. I	
21	don	't believe it was measuring the stranded costs	
22	sep	arately. I think it was based on overall	
23	sav	ings. But maybe Tom can help us.	
24	Α.	(Frantz) We asked REMI to model the output from	
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1		the Brattle analysis. And that was the \$163
2		million over five years using the same
3		rate-design cost allocation that was in the
4		Settlement Agreement.
5	A.	(Chung) So, just to add on to that, an input to
6		the REMI model was the savings broken down by
7		residential, commercial, industrial and street
8		lighting. And as I understand the REMI model,
9		the economic impacts are an aggregate based on
10		that mix.
11	A.	(Leung) Right.
12	Q.	So is it fair to say, then, there's no discrete
13		analysis of the benefits to residential
14		ratepayers or not?
15	A.	(Leung) Correct. There was no discrete
16		analysis. We just modeled the \$163 million.
17	Q.	Thank you.
18		CHAIRMAN HONIGBERG: Just want
19	to	confirm that other counsel didn't have questions
20	for	this panel. Mr. Speidel.
21		MR. SPEIDEL: Thank you.
22		CROSS-EXAMINATION
23	BY M	R. SPEIDEL:
24	Q.	Mr. Leung I would just like to ask a few
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1		clarification questions about what each of
2		these graphical tables mean.
3		So, just to recap, Table 1 is a summary
4		output table on the basis of The Brattle Group
5		energy savings calculations for their baseline,
6		their base case scenario; is that correct?
7	Α.	(Leung) Correct, the \$163 million.
8	Q.	Very good. Under Table 2, there is a breakdown
9		of various subcategories of data outputs:
10		Total employment, private non-farm employment,
11		et cetera, in either individuals or millions of
12		current dollars of percent change. That is
13		also based on the base case of The Brattle
14		Group output scenario that was presented
15		earlier in this proceeding; is that correct?
16	Α.	(Leung) Yes.
17	Q.	Okay. Now we're going to move on to Table 3
18		and Table 4. I think it would be fair to say
19		that the only element of both of these tables
20		that comports specifically with the energy cost
21		savings outputs presented by The Brattle
22		scenarios, prepared by Dr. Murphy and his team,
23		are the first numerical column that has the
24		heading "BPD" in each table. Is that fair to
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1 say? 2 Α. (Leung) Yes. And that all of these TC-46A, TC-46B, TC-46BB 3 Q. and TC-46BC columns in both Table 3 and Table 4 4 5 relate to hypothetical scenarios that apply the original, for lack of a better term, "Chung 6 7 analysis" that was fed through a number of reruns that Staff -- that is, Non-Advocate 8 9 Staff, had requested during the pendency of this proceeding; is that correct? 10 11 (Leung) Yes. Α. 12 So those tabular outputs relate to the higher Q. Chung savings calculations as opposed to the 13 14 slightly lower Brattle Group savings 15 calculations; is that right? 16 (Leung) Correct. Yes. Α. 17 MR. SPEIDEL: Thank you very 18 much. I have no further questions. 19 CHAIRMAN HONIGBERG: Commissione 20 r Bailey. 21 INTERROGATORIES BY COMMISSIONER BAILEY: 22 So I want to make sure I really Okay. 0. 23 understand this. Looking at Table 1, in 2017, 24 you assumed -- or you were given as an input {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		that the overall savings would be \$75 million?
2		That's what the "75" means in the first box?
3	A.	(Leung) Correct.
4	Q.	And then you spread that out among the savings
5		among the four different types of ratepayers.
6		Or Mr. Chung, you did that?
7	A.	(Chung) Yes, that's correct.
8	Q.	Okay. So, and then from there you figured out
9		what the effect of that kind of savings on the
10		economy would be.
11	Α.	(Leung) Yes.
12	Q.	Okay. So if were you here for the last
13		discussion about rate design?
14	Α.	(Leung) No. The one that just
15	Q.	Yeah, the one that just took place.
16	Α.	(Leung) Yeah. Essentially, yeah.
17	Q.	Okay. And Mr. Frantz, you're probably going to
18		have to help me out with this.
19		If we increased the rate in the industrial
20		group, the savings of \$7,790,000 would be
21		reduced; is that correct?
22	Α.	(Frantz) Yes.
23	Q.	So if the savings in the industrial category
24		were reduced, what would the effect on the
ļ	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		economy be? Could you predict that just based
2		on what you know how the model works?
3	Α.	(Leung) If there was if the savings was
4		reduced?
5	Q.	Yes.
6	Α.	(Leung) Okay. If the savings was reduced,
7		then
8	Q.	No. Actually, it would be reduced there and
9		increased somewhere else.
10	A.	(Leung) The model can predict that. But I
11		would have to go into detail looking at the
12		industrial sectors of the industrial and
13		commercial sectors of New Hampshire to where
14		that would be re-allocated to.
15	Q.	So you can't give me any kind of
16	A.	(Leung) Unfortunately, not right now. I'm
17		sorry. I would have to rerun the model.
18	Q.	Okay. Can you go through more specifically the
19		impacts on the economy and PSNH's territory
20		resulting from the savings that are displayed
21		in Table 1? Just walk me through the other
22		tables.
23	Α.	(Leung) Okay. So what we have right here is
24		the total employment first starts out at around
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1		501 job growth	
2	Q.	Okay. Wait a second. Wait, wait, wait. Total	
3		employment, that's how many new jobs we would	
4		have in 2017?	
5	Α.	(Leung) Correct. Yes.	
6	Q.	Okay.	
7	Α.	(Leung) And then that would go down to 168 by	
8		2021. So, average for the years would be	
9		around 332 jobs.	
10	Q.	Three hundred and thirty-two new jobs every	
11		year for the first five years, on average.	
12	A.	(Leung) It would probably be the same jobs over	
13		the year period. Those are that's a part of	
14		the 500 in 2018, the 401 jobs, that's	
15		already part of the 501 jobs. So, basically	
16		it's the delta between the baseline. So	
17	Q.	So, in 2017 we'd add 500 jobs, roughly, and	
18		then in 2018 we'd lose 100?	
19	A.	(Leung) Lose a hundred, correct. But these are	
20		job years.	
21		(Court Reporter interrupts.)	
22	Q.	Can you explain that?	
23	Α.	(Leung) "Job years" meaning full-time	
24		employment equivalent for that particular year.	
ļ	{DE	11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16]	}

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1		So that the so that by 2021, the long-term
2		effect is 168 jobs. So the 168 jobs was
3		probably part of the 260 jobs at year 2020.
4		And part of that
5	Q.	So, over five years the net growth in jobs
6		would be 168?
7	Α.	(Leung) The net new?
8	Q.	What?
9	A.	(Leung) The net new jobs, yes.
10	Q.	The net new jobs would be 168. Okay.
11		All right. What does the next row mean?
12	Α.	(Leung) And that's private non-farm employment,
13		meaning that's taking out our farm and that's
14		taking out government employment. So the total
15		job years generated now would be 1,480. So
16		that's how we can account that in economics.
17		And on average, it's 296 jobs that you get
18		beyond the baseline that we have.
19	Q.	Right. But let's talk about the net jobs. So
20		you would get 137 over five years net new jobs
21		in non-farm employment?
22	A.	(Leung) Permanent jobs, right.
23	Q.	Permanent jobs. And what's resident-adjusted
24		employment?
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1	Α.	(Leung) Resident-adjusted employment is based
2		off your competitiveness. You actually get
3		jobs from people that because the growth of
4		the New Hampshire economy. You also get jobs
5		that are in other regions. So you have
6		commuters coming in, living in New Hampshire,
7		working in other areas and bringing that income
8		back to the state of New Hampshire.
9	Q.	And is that as a result of the energy savings
10		in New Hampshire?
11	Α.	(Leung) Correct, yes, because it's what we call
12		"economic geography," because when one region
13		grows, you pull up the other regions also
14		around you.
15	Q.	Oh, so people would move here because the
16		energy prices are lower?
17	Α.	(Leung) And then that's going to generate
18		economic activity, that's going to generate
19		employment across the board, and that's going
20		to feed back into your region.
21	Q.	Okay. All right. Okay. What's the population
22		row mean?
23	A.	Population means this is the net new population
24		that you're going to take in from the rest of
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1		nation. So your region is going to experience
2		population growth.
3	Q.	Oh, by 580 people net over the five years?
4	Α.	(Leung) Correct. Yes. The labor force growth
5		is basically the net new labor force that you
6		have. So that's the labor force you're going
7		to bring into the region.
8	Q.	Why is that larger than the total net new jobs?
9	Α.	(Leung) There will be unemployment. So you're
10		bringing in net new jobs, but you're also
11		bringing in job seekers that are moving to the
12		state that seek economic opportunity, and not
13		everybody is going to be hired.
14	Q.	Oh, so there's going to be 339 new people
15		looking for jobs, but only 168 of them are
16		going to have jobs?
17	Α.	(Leung) But in the long run, what happens is
18		that it balances out, too. So when they can't
19		find jobs, they tend to leave the region.
20	Q.	They what?
21	Α.	(Leung) They tend to leave the region if they
22		can't find opportunity.
23	Q.	Okay. What's gross regional product?
24	Α.	This is gross state product. So this is how
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			50
1		much net new economic activity that you're	
2		going to get in your region. So this you look	
3		at as a real delta. So you'll get 200 million,	
4		around 198 million, around 200 million of net	
5		new gross state product for the region over	
6		that five years.	
7	Q.	The "23" represents 2 million or	
8	Α.	(Leung) One hundred ninety-eight.	
9	Q.	Oh.	
10	Α.	(Leung) So you get 23 million that year.	
11	Q.	So, 198, it's 198	
12	A.	(Leung) Over five years.	
13	Q.	million over five years?	
14	A.	(Leung) Correct.	
15		And output is the economic activity. So	
16		you can think of gross regional product as	
17		profits that the state makes if you're a	
18		business owner. And output is including all	
19		the activities - so the intermediate	
20		company-to-company interactions. So that's why	
21		it's higher than the that's why it's 302	
22		compared to 198.	
23	Q.	Okay. And what's value added?	
24	Α.	(Leung) The "value added concept" is almost	
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1	exactly the same as the gross state product.
2	So this is how much value you add to your
3	economy. So it looks at a industry standpoint
4	compared to C plus I plus G, which is gross
5	regional product is consumption plus
6	investment
7	(Court Reporter interrupts.)
8	Q. Wait, wait, wait. Consumption plus
9	investment
10	A. (Leung) Goes back to economics, Economics 101.
11	Q. Yeah, I'm not an economist.
12	A. (Leung) Consumption plus investment plus
13	government spending, input and exports; so
14	that's GDP.
15	Now, value added, the components of the
16	Company. So you look at companies by specific
17	sectors and you add that all up.
18	MR. SPEIDEL: And Mr. Leung,
19	those would be economic activities and value added,
20	where you take, say a primary product like wood
21	shavings, or a secondary product, and then you make
22	them into wood pellets. When you convert that into
23	each higher stage of production, that's another
24	value-added chain element; correct?
L	

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1 THE WITNESS: (Leung) It's the profits for each of the production process. 2 MR. SPEIDEL: 3 Thank you. BY COMMISSIONER BAILEY: 4 Okay. Let's talk about personal income. 5 Q. (Leung) So that's net new personal income 6 Α. 7 that's going to -- consumption that's going to 8 happen in the before taxes. That's going to 9 happen in the state. So this is personal income before taxes. And the disposable 10 11 personal income takes into consideration of The real disposable personal income 12 taxes. takes into consideration the change in what we 13 14 call de -- I won't say deflation, but the less 15 cost of energy prices. That's why it's higher. 16 It takes into consideration price index. So, 17 because you're lowering the -- we're having 18 energy savings or lowering the cost of energy, 19 so that's why the disposable income is higher. 20 The real disposable income is higher than the regular disposable income because you're taking 21 22 into consideration now the basket of goods, and 23 it became a lot cheaper because of energy cost 24 price savings.

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1	Q.	Okay. All right. Given all of this
2		information on this table, would you say that
3		the if the Settlement Agreement were
4		approved and the savings that are predicted
5		that you used in this model are achieved, would
6		that do you think that's a significant
7		impact on the economy in New Hampshire?
8	А.	(Leung) It's hard to say. I mean, I'm not sure
9		what "significant" means. I'm sorry.
10	Q.	Mr. Frantz, do you have an opinion? Is that
11		significant, or is it just positive?
12	А.	(Frantz) It's positive. The state's economy is
13		very, very large, and so impacting it by \$163
14		million over five years, though positive, I'm
15		not you know, "significant" has different
16		words. I don't think the statute requires that
17		it be "significant."
18	Q.	Right.
19	Α.	(Frantz) But it's positive, and I think that's
20		important.
21	Q.	Okay.
22	Α.	(Leung) But also, I believe it also helps build
23		up on competitiveness because it helps reduce
24		the cost of production for industry and the
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commercial sector, and that's clearly shown in 1 the model. 2 Where is that reflected? 3 Q. (Leung) Unfortunately, I didn't put it in this 4 Α. document. But it will show up in basically the 5 cost of production and for all the sectors. 6 It 7 would be a positive for all the sectors. And I can provide that at a later date. 8 MS. ROSS: Would you like a 9 record request with that additional information? 10 11 COMMISSIONER BAILEY: Sure. BY COMMISSIONER BAILEY: 12 And that will show us how the settlement has 13 **Q**. 14 the ability to attract and retain employment 15 across industries? 16 (Leung) Correct. А. 17 COMMISSIONER BAILEY: All right. Yes, I would like to see that, please. 18 BY COMMISSIONER BAILEY: 19 20 Okay. How about the impact on all PSNH 0. 21 customer classes, is that -- well, no, that --22 I mean, Table 1 is just basically the inputs. 23 (Leung) Right. Α. So do you have something that shows the impact 24 Q. {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

			6.
1		on all PSNH customer classes?	
2	A.	(Leung) We can do it, but we would have to run	
3		it. We don't have it right now, but we would	
4		have to run it in the model.	
5	Q.	Mr. Frantz, do you think it would be worth the	
6		money to run that?	
7	A.	(Frantz) If it helps make the decision easier,	
8		I think it's worth running.	
9	Q.	Mr. Bersak, what do you think?	
10	A.	(Frantz) I think, you know, based on the	
11		savings, I think we'll see that it has positive	
12		effects across the different classes. But	
13		that's something that they definitely could	
14		model.	
15	Q.	Could okay.	
16	A.	(Frantz) It may take several days.	
17		MR. BERSAK: You're asking my	
18	opi	nion, Commissioner Bailey. And frankly, you're	
19	the	commissioner. If you feel it would be	
20	ben	eficial to help your understanding of the	
21	rec	ord, I'm sure REMI can do it, and we will get it	
22	to	you as quickly as possible. So we leave it to	
23	you	•	
24		COMMISSIONER BAILEY: Okay.	
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1 We'll take you up on that. (Commissioners conferring) 2 CHAIRMAN HONIGBERG: So we have 3 two record requests that I think have been 4 identified. And I think their letter designations 5 are going to be AAA and BBB. 6 7 THE CLERK: I have a question, though. The document that Anne distributed, I 8 would think that that is an errata sheet as well? 9 10 CHAIRMAN HONIGBERG: Well, let's 11 talk about that for a minute. I don't like to break your flow, 12 Commissioner Bailey, but Attorney Ross, the 13 14 document you gave us that you say is a different version of Exhibit Y, is it a replacement for what 15 16 we have as Y? 17 MS. ROSS: Substitute it, 18 please, because it was just --19 CHAIRMAN HONIGBERG: Okay. 20 MS. ROSS: As far as I know, 21 it's just some textual changes on the first page. 22 But REMI did give it to me recently and say that it 23 was the corrected version. 24 CHAIRMAN HONIGBERG: Is that {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 clear enough? THE CLERK: I only say that 2 because we had commission -- I mean Ms. Geiger's 3 errata sheet marked. 4 CHAIRMAN HONIGBERG: 5 That's a different situation because that was making a 6 7 number of corrections to different pages of testimony. But it's one sheet. So I think it made 8 sense. I think that's why we decided to mark it 9 separately. I understand Attorney Ross to be just 10 11 replacing like for like. THE CLERK: Okay. So it would 12 be -- the first record request would be AAA and the 13 14 second, BBB. 15 MS. ROSS: What was that? 16 CHAIRMAN HONIGBERG: Triple A 17 and triple B. MS. ROSS: Could I get a 18 19 description of -- I got the first one. But what is the second one specifically? Broken down by rate, 20 21 customer class? 22 COMMISSIONER BAILEY: Right. 23 The impact on all PSNH customer classes. MS. ROSS: 24 Okay. {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 (Chung) Commissioner Bailey, could you clarify? Α. 2 Do you mean rate classes; so, LG versus GB versus G? 3 4 0. I believe that's what I mean. I'm taking it right out of the statute. 5 (Chung) Okay. 6 Α. 7 COMMISSIONER BAILEY: So, 8 Ms. Ross, you can decide. But, you know, 369-B:3(a) requires us to consider the impact on 9 10 the ability to attract and retain employment across 11 industries and whether the proposed rate design -oh, we already talked about that. Impact on all 12 PSNH customer classes. 13 14 MS. ROSS: I think, just to 15 explain the distinction, there are specific rate 16 categories in the tariff, and then there are more 17 general customer classes that are more aligned with the way the REMI model breaks out segments. And so 18 19 we may decide to break it out by customer class 20 rather than specific rate groups at PSNH. I assume 21 either way will demonstrate to you how different 22 types of customers are going to be impacted. 23 COMMISSIONER BAILEY: So what would be a different definition of "customer 24 {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 classes" other than by "rate group"? MS. ROSS: Maybe I could ask Mr. 2 Chung to help us with that. 3 (Chung) Yeah, this is why I was helping with 4 Α. the translation before. So, just the rate 5 classes are distinctions for the purposes of 6 setting rates, but they aren't specifically 7 8 mapping one-to-one to residential, commercial, industrial and public street lighting. 9 Residential does map to residential in REMI's 10 I believe C & I is kind of distributed 11 model. across the middle three rate classes. 12 And so it's not as if, say, rate LG is strictly 13 industrial. 14 15 Okay. So what I would expect to see then is Q. 16 residential, commercial and industrial all -or like residential and business would be 17 different customer classes? 18 19 Α. (Chung) I think if I understand the REMI model, 20 the REMI model is characterized as residential, commercial, industrial and street lighting. 21 So 22 that would probably be, if an output could be 23 broken out that way, I believe that's what could be provided. 24

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Q. And commercial and industrial are two separate 1 2 classes when you say that? (Chung) Yes. 3 Α. 4 0. Okay. 5 MR. SPEIDEL: So that would be a blended rate that's set into the inputs on the 6 7 basis of the average of all the distribution rates? 8 THE WITNESS: (Chung) It's essentially blended. 9 10 (Chung) I think, just to make sure we're on the Α. 11 same page, is the request to break out Table 2 according to those classes? I'm not -- I 12 happen to not understand what that means. 13 14 I just wanted to see if there was some Q. 15 information in the REMI report that establishes 16 what the impact on PSNH customer classes is if 17 we approved the Settlement Agreement. And I'm not really sure how you want to show me that, 18 but I think Mr. Leung said that that 19 20 information was not in the model. 21 Α. (Chung) Well, we may have a disconnect. So let 22 me just --23 Q. Okay. (Chung) -- try it this way. So as I read --24 Α. {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		and I'm not a lawyer. But as I read the Senate
2		Bill 221, it talks about the impact to customer
3		classes. And I believe that is represented by
4		the impacts that we provided Mr. Leung. So, in
5		other words, as you characterized it, the
6		"inputs" would be how does that \$163 million
7		savings break down across different classes.
8		So I believe that's how I read what Senate Bill
9		221 is saying, rather than economic impacts,
10		which is then specified later in that sentence.
11	Q.	Okay. So then you believe that the impact on
12		PSNH customer classes in 2017 would be \$36.58
13		million in savings for residential customers,
14		\$30 million for commercial, and \$7- almost \$8
15		million for industrial? All right. I can
16		accept
17	Α.	(Chung) That's how I interpret it, yes.
18	Q.	I can accept that.
19		Do you think that's reasonable, Mr.
20		Frantz?
21	Α.	(Frantz) I do.
22		CHAIRMAN HONIGBERG: So does
23	tha	t mean that the second record request is being
24	wit	hdrawn?
		1-250/DE 14-228 [VAG 2 MA Goggion Only] (02-02-16)

{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 COMMISSIONER BAILEY: Yeah. 2 CHAIRMAN HONIGBERG: All right. COMMISSIONER BAILEY: So do we 3 4 need to discuss the first record request, or that one should be --5 MS. ROSS: My notes indicate 6 7 that you want a description of the production cost savings across industries so that it's broken out 8 by whatever sectors REMI can do. 9 10 And Mr. Leung I'd ask you to 11 comment if that's --12 THE WITNESS: (Leung) Yes, we can provide that information. 13 14 COMMISSIONER BAILEY: Without 15 running another model? 16 THE WITNESS: (Leung) Without 17 running another model. COMMISSIONER BAILEY: Okay. All 18 19 right. Then let's do that. 20 BY COMMISSIONER BAILEY: 21 ο. Okay. I just have one more question on Page 8 22 of the original report just because I'm not an economist and I was curious. I didn't write 23 24 down the line number.

{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	(Commissioners conferring)
2	MS. ROSS: Are you on Page 8 of
3	the REMI report? Because there are no line numbers
4	on the REMI report.
5	COMMISSIONER BAILEY: Yeah,
6	there we go. I am on Page 8 of the REMI report.
7	Thank you.
8	BY COMMISSIONER BAILEY:
9	Q. So, in the middle paragraph that starts with
10	"For the economic benefit," do you see that
11	paragraph, the second paragraph on the page?
12	A. (Leung) Correct.
13	Q. In the middle of that paragraph you start with,
14	"Lower electricity prices associated with
15	securitized divestiture of PSNH assets are
16	possible for two primary reasons. First, all
17	electric generators would be subject to full
18	competition for electricity at market-
19	established rates"
20	CHAIRMAN HONIGBERG: Slow down.
21	COMMISSIONER BAILEY: Oh, I'm
22	sorry, Sue.
23	BY COMMISSIONER BAILEY:
24	Q "yielding lower costs of electricity for
·	{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		customers."
2		And my question is: Do competitive
3		markets always yield lower rates?
4	A.	(Leung) That's a very interesting question. I
5		would say that's a very good question, because
6		I have worked on competitive markets that, in
7		an ideal scenario, yes, ideally. But I worked
8		on and currently I'm working on some very
9		interesting markets that are, if they're
10	Q.	If they're what?
11	A.	(Leung) If they're badly planned, then no. But
12		ideally, and if they're planned accordingly,
13		then yes. For instance, I've been working on
14		some Middle Eastern countries where there's
15		widespread corruption and things like that.
16		And unfortunately, it can be used as a tool.
17	Q.	Okay. But that's not really competitive then,
18		is it?
19	A.	(Leung) They're competitive by market
20		SP. COMMISSIONER IACOPINO: They
21	are	market competitors.
22	A.	(Leung) Market competitors, yes.
23	Q.	Okay. And Mr. Frantz, have we designed this
24		market badly?
		1-250/DE 14-228 [DAY 2 DM Soggion Only] (02-03-16]

{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	A.	(Frantz) I think we could spend a long, long
2		time
3	Q.	That was supposed to be a softball.
4	A.	(Frantz) There's a lot of aspects in this
5		market that I'm not sure, when we designed it
6		and started it over 15, 20 years ago, we
7		anticipated where we are at now.
8	Q.	You did or you did not?
9	A.	(Frantz) I think some parts we did, and there's
10		lots of parts we didn't.
11	Q.	Do you think that, looking forward, this new
12		competitive world where PSNH is fully divested
13		will result in lower rates?
14	A.	(Frantz) Yes.
15	Q.	Okay. Thank you.
16	A.	(Frantz) More importantly, I think it shifts
17		the risk where we intended it in electric
18		restructuring away from customers and prudence
19		cases and to the wholesale market and to the
20		generators and suppliers in that market.
21		COMMISSIONER BAILEY: All right.
22	I'm	not going to go any further out of my comfort
23	zon	e on the economics. Thank you very much.
24		CHAIRMAN HONIGBERG: Commissioner
ļ	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1 Iacopino. 2 SP. COMMISSIONER IACOPINO: Than 3 k you. INTERROGATORIES BY SP. COMMISSIONER IACOPINO: 4 5 I just have some basic questions about the Q. report. First of all, is Exhibit Y that we 6 7 received today intended to change anything in the report itself, or is it just using a 8 different set of numbers in your model? 9 (Leung) Currently it's just using a different 10 Α. 11 set of numbers in the model. Okay. So when I look at Table 1 and Table 2 on 12 Q. the original report, which is on Page 5, and 13 this was attached to Exhibit M of Mr. Franz's 14 15 testimony --16 CHAIRMAN HONIGBERG: M, as in 17 Martin. BY SP. COMMISSIONER IACOPINO: 18 19 0. -- those tables are still valid. They're just 20 using a different set of inputs; correct? 21 А. (Leung) Correct. 22 Okay. And if I understand, what you did **Q**. 23 originally was you tried to model what the 24 Settlement Agreement suggested, but also what {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		would happen if we had a good auction or a bad
2		auction of the generating assets; correct?
3	A.	(Leung) I just took in the values from them,
4		right.
5	Q.	Well, somebody else on the panel can answer.
6	Α.	(Chung) Yeah, we agreed to provide scenarios
7		with a different range of proceeds, sales
8		proceeds. I didn't characterize them as "good"
9		or "bad" auctions, just a range of proceeds to
10		see how the economic output measures would be
11		impacted.
12	Q.	And that's what the settlement high and
13		settlement low cases represented here.
14	A.	(Chung) Yes.
15	Q.	So Table 1 really isn't we can still rely on
16		Table 1 despite the work that went into
17		Exhibit Y.
18	A.	(Chung) It's my understanding, looking at
19		Table 1, that that is based on that is not
20		based on the Brattle analysis. And this is
21		so I guess I'll say it a different way. The
22		only scenario that's being looked at is the one
23		that says "Settlement Agreement." And the
24		difference between the Table 1 and Table 2 in
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		the original report is that the savings, the
2		aggregate savings number that was used has been
3		replaced by the Brattle analysis. The
4		subsequent, the PUC ordered divestiture, low
5		case, high case, those are not rerun.
6	Q.	Okay. Just wanted to make sure.
7		Whoever on the panel can answer this. It
8		seems to me that you made some key assumptions
9		in the original report, and those are reflected
10		on Page 28. Are those still key assumptions
11		for what's contained on Exhibit Y? I'm sorry.
12		When I say "Page 28," I mean of the original
13		REMI report.
14	A.	(Chung) So you're looking at Appendix 3, "Key
15		Assumptions for REMI Scenarios"; is that
16		correct?
17	Q.	Yes. Yes.
18	A.	(Chung) Okay. Give me one moment and I'll see
19		if it changes anything.
20		(Witness Chung reviews documents.)
21		SP. COMMISSIONER IACOPINO: It
22	was	a good idea to have Mr. Chung on the panel.
23		COMMISSIONER BAILEY: Hmm-hmm.
24	Α.	(Chung) There are two inputs that I think are
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		different, subject to check. But I think I'm
2		reasonably comfortable representing this. The
3		first one is the Scrubber deferral to recover
4		from customers. That says 103.2 million.
5		Given the passage of time versus when this was
6		run, I believe the deferral number is higher,
7		and it would be the number that is found in the
8		temporary rate filing in Docket 11-250. I
9		believe, subject to check, it's around 123
10		million.
11	Q.	Okay. But just so you think a different
12		input was provided to REMI to provide to
13		prepare Exhibit Y?
14	A.	(Chung) I do, because the 123 million was
15		provided to Brattle, and Brattle's results are
16		based on that 123 million versus the 103. So
17		it's reflected there. I don't think the impact
18		is that significant, that material. But I
19		believe that's different. The other number, I
20		believe is not actually, I know is not
21		reflected in the Brattle analysis is the
22		line that says "potential two-year savings due
23		to rate case stay-out." They didn't
24		(Court Reporter interrupts.)
	ן ⊒ת∫	$1-250/DE 14-238$ [DAV 2 DM Seggion Only] $\int 02-03-16$

{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1		THE WITNESS: (Chung) I'm sorry.
2	Α.	(Chung) The line that says "potential two-year
3		savings due to rate case stay-out," that number
4		was not provided to Brattle, so it wasn't
5		included in their savings number. Those are
6		the two lines that I think have changed.
7	Q.	So, to the extent that those things have
8		changed, and I know you're not familiar I'm
9		sorry, Mr. Frantz.
10	Α.	(Frantz) If I may, I think my expert to the
11		right would be much better at this, and he can
12		correct me. But I believe they just took the
13		163 million over each year, and that's the main
14		input into the actual modeling on here. These
15		are assumptions for getting to savings before,
16		but I believe, based on the Brattle analysis,
17		the input, the key input for the REMI modeling
18		was Dr. Murphy's average of \$33 million per
19		year over five years.
20	Q.	Well, I guess that's what I'm trying to get at
21		is, what is this based on, this change?
22		Because one of the questions I was going to
23		have is, if the 61 million, for instance, for
24		the potential rate case savings is not included
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

[WITNESS PANEL: Leung|Frantz|Chung]

1		in Dr. Murphy's report or Dr. Murphy's
2		consideration, then would Mr. Leung's analysis
3		contained in Exhibit Y be more positive?
4	Α.	(Chung) The way to answer that is, so Dr.
5		Murphy's analysis assumes zero savings from a
6		rate case stay-out. As I testified before on
7		the panel, I believe that is historically not
8		the case with rate cases in New Hampshire. And
9		if you assume some savings, certainly the
10		aggregate savings would go up and, you know,
11		Mr. Leung's results would be more positive. So
12		I would agree with that statement. But that's
13		the mechanism.
14	Q.	Mr. Leung, do you
15	Α.	(Leung) Yeah, I agree with that.
16	Q.	Mr. Frantz?
17	Α.	(Frantz) I agree, if you included the rate case
18		savings, they'd be higher numbers. What we
19		decided to do was to use and agree to the
20		Brattle analysis that had 163 million. So that
21		analysis is very simple, very clean, and that's
22		what and under a very tight time constraint,
23		that's what REMI was asked to model.
24	Q.	Okay.

{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	MS. ROSS: Just for
2	clarification, I think that Settling Staff intended
3	to offer Exhibit C as a more recent REMI analysis
4	based on the Brattle model. So I think we're just
5	now trying to figure out how to put the two reports
6	together. And the REMI description may still apply
7	from the original report. But I think in terms of
8	the numbers and the impacts, we would encourage you
9	to look at Y, which is run on sort of an agreed set
10	of assumptions among the parties to the Litigation
11	Settlement.
12	SP. COMMISSIONER IACOPINO: And
13	I'm just trying to test out what those assumptions
14	are and whether or not in this particular case, the
15	rate case stay-out assumption is in there.
16	Apparently it's not, which I have my answer.
17	BY SP. COMMISSIONER IACOPINO:
18	Q. Okay. And if I understand this is for Mr.
19	Chung because I guess it's your number that
20	rate case stay-out figure, the value that
21	you've assigned to that is merely based on an
22	average of prior rate case increases? Is that
23	accurate?
24	A. (Chung) Yes, and then netted out, per the
	{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

[WITNESS PANEL: Leung|Frantz|Chung]

1		Settlement Agreement, the extension of the
2		Reliability and Enhancement Program. So that's
3		how we derived that proxy at the time.
4		SP. COMMISSIONER IACOPINO: All
5	rig	ht. I don't have any other questions.
6	INTE	RROGATORIES BY CHAIRMAN HONIGBERG:
7	Q.	It's been a long time since you started, Mr.
8		Leung, and I just want to make sure I
9		understood something that you said really early
10		in your testimony. I think you said that you
11		did consider or you did model sending more of
12		the savings back to residential ratepayers, and
13		what the model produced was more consumption,
14		but not investment. And so the shift over to
15		sending more back to C & I increased
16		competitiveness and was a better, in your view,
17		economic solution and economic impact for the
18		state.
19	Α.	(Leung) Chairman, we put all the inputs in at
20		once. So, looking but just examining the
21		results and outputs from the variables, I just
22		noticed that how, when you model consumption in
23		the model, it goes directly into economic
24		output because that's the spending. But when
l	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	we look at industrial and commercial, we put
2	that into industrial cost savings because
3	that's where we that's the leverage. That's
4	the input into the REMI model. And that allows
5	for market share growth. And for market share
6	growth, basically it substitutes a way it
7	allows those industries to be competitive
8	compared to, you know, industrial and
9	commercial competitors outside of the region.
10	So, the industry the companies in New
11	Hampshire would be more competitive relative to
12	the rest of the nation.
13	Q. Okay. I understand that. Thank you. That was
14	very helpful. I think that was the only thing
15	I wanted to hit on.
16	CHAIRMAN HONIGBERG: Mr. Aalto,
17	it's really not your turn, but what would you like
18	to say?
19	MR. AALTO: I'm sorry for the
20	interruption in this. The concern I have is with
21	the data that goes in and my understanding of it.
22	And I guess Mr. Frantz would be the person who
23	would respond.
24	CHAIRMAN HONIGBERG: I'm not
l	{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	sure that you're in order right now to ask a
2	question. You had an opportunity to ask questions
3	of this panel. Why don't you before you address
4	the question to Mr. Frantz, why don't you tell us
5	what it is you would ask if we let you ask it.
6	MR. AALTO: The question I would
7	ask is, if the savings number that we're using is
8	the savings from a future, more expensive
9	alternative that would come from not doing the
10	process, if that's the case, then the question is:
11	Is that the appropriate number to use if we're
12	trying to look at the effects from the present
13	going forward? It would seem that it would have to
14	be the difference between the two or need two runs.
15	One would be a result of the higher or the
16	higher cost alternative and then run the lower
17	savings model on that to bring it back down. It
18	seems like it gives two different, two very
19	different results.
20	CHAIRMAN HONIGBERG: I'm going
21	to let Mr. Frantz address this if he feels he can.
22	THE WITNESS: (Frantz) I believe
23	this was a delta analysis. It actually was based
24	on Brattle's analysis of divestiture versus non-
	{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	divestiture and keeping the units. We used the
2	five-year time frame. It was based on the \$33
3	million average per year of savings from
4	divestiture and total cost over non-divestiture.
5	MR. AALTO: That is exactly what
6	I was worried about. The end result of that is
7	that the number we're looking at is related to a
8	future that's more expensive using
9	CHAIRMAN HONIGBERG: Mr. Aalto,
10	you're going to be able to make this argument
11	tomorrow.
12	MR. AALTO: Thank you.
13	CHAIRMAN HONIGBERG: Ms. Ross, I
14	think you called these people. Do you have any
15	follow-up questions for the panel?
16	MS. ROSS: I have two. Is this
17	working? For some reason I'm not
18	CHAIRMAN HONIGBERG: You sound
19	great.
20	MS. ROSS: Great. Okay. I just
21	have two redirect questions to Mr. Leung.
22	REDIRECT EXAMINATION
23	BY MS. ROSS:
24	Q. And I hope these are fair questions, because
l	{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

	they're somewhat general, and I know you try to
	be very specific with your model.
	But can you make a general statement in
	the REMI model that, if you increase savings to
	any group of, we'll call them "customers," but
	people or companies in New Hampshire, that you
	increase economic activity in the state?
А.	(Leung) That's a fair and difficult question to
	answer. But thinking about the REMI framework,
	it's best to invest in industries that are more
	competitive in the REMI model because this
	allows you to leverage market share and grow,
	and that's much more sustainable. Because if
	you invest in an industry that is less
	competitive, what's going to happen is that
	that money is you're throwing good money
	after bad.
Q.	So I guess the follow-up question, and this
	one's probably also going to be a little
	tricky, is if you have a choice of how you
	direct your savings money, and you want to
	choose between directing to, say residential
	customers, or directing it to commercial and
	industrial customers, which customer group, on
{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}
	Q.

1		a dollar-for-dollar basis, is more likely to
2		have the greater positive impact on the
3		economy?
4	A.	(Leung) From my experience of economic
5		modeling, the consumer base, there's a leakage,
6		because consumers buy goods and services. So
7		if you think about what happens a lot with
8		people and their tax rebates, after that they
9		go out and buy goods produced outside of the
10		region. So there's a fair amount of leakage
11		from that.
12		(Court Reporter interrupts.)
13	Α.	(Leung) So, if you give it to the residential,
14		I'm thinking not thinking about equity
15		issues. I'm thinking about economic issues,
16		economic gains. So if you give it to
17		consumers, there's a lot of leakage because you
18		buy goods and services from outside the region.
19		But if you provide that over to that
20		industrial and commercial base, what happens is
21		that there might be a larger multiplier effect
22		because the production facility tends to buy
23		goods and services from within the region, and
24		then you have a multiplier that's supporting
	{DE 1	1-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

1	industries to grow from that. And usually you	
2	capture a much higher share of economic growth	
3	from supporting the industrial and commercial	
4	sector.	
5	Q. Thank you. I have no further questions.	
6	CHAIRMAN HONIGBERG: All right.	
7	I think you gentlemen are done. You can return to	
8	your seats.	
9	Let's go off the record for a	
10	minute.	
11	(Discussion off the record.)	
12	CHAIRMAN HONIGBERG: I think	
13	we're done for the day. We will be reconvening	
14	tomorrow morning at 9:00, and we'll be hearing from	
15	Mr. Reed first thing tomorrow morning. So, thank	
16	you all very much. We are adjourned.	
17	(Hearing adjourned at 4:10 p.m.)	
18		
19	(This concludes the Afternoon Session of	
20	Day 2 regarding DE 14-238 & DE 11-250.	
21	Please note that the Morning Session	
22	was provided under separate cover	
23	so designated.)	
24		
	$\int DE 11_{250} / DE 14_{229} \int DV 2 DM Gaggion Only \int 02_{-02} - 16$	

{DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}

CERTIFICATE

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

12 I further certify that I am neither 13 attorney or counsel for, nor related to or 14 employed by any of the parties to the 15 action; and further, that I am not a 16 relative or employee of any attorney or 17 counsel employed in this case, nor am I 18 financially interested in this action. 19 20 J. Robidas, LCR/RPR Susan 21 Licensed Shorthand Court Reporter Registered Professional Reporter 22 N.H. LCR No. 44 (RSA 310-A:173) 23 24 {DE 11-250/DE 14-238} [DAY 2 PM Session Only] {02-03-16}