1		STATE OF NEW HAMPSHIRE
2		PUBLIC UTILITIES COMMISSION
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4	21 South Fru:	2023 - 9:03 a.m. DAY 1 It Street
5	Suite 10 Concord, NH	
6		
7	[ H 4	earing also conducted via Webex]
8	RE:	DE 23-068
9		ELECTRIC AND GAS UTILITIES: 2024-2026 Triennial Energy
10		Efficiency Plan.
11	PRESENT:	Chairman Daniel C. Goldner, <i>Presiding</i> Commissioner Pradip K. Chattopadhyay Commissioner Carleton B. Simpson
12		Eric Wind, Esq./PUC Legal Advisor
13 14		Doreen Borden, Clerk and PUC Hybrid Hearing Host
15 16	APPEARANCES :	Reptg. Public Service Co. of New Hampshire d/b/a Eversource Energy: Jessica A. Chiavara, Esq.
17		Reptg. Liberty Utilities (Granite State
18		Electric) Corp. and (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities:
19		Michael J. Sheehan, Esq.
20		Reptg. Unitil Energy Systems, Inc., and Northern Utilities, Inc.:
21		Matthew C. Campbell, Esq.
22		<b>Reptg. N.H. Electric Cooperative:</b> Susan S. Geiger, Esq. <i>(Orr &amp; Reno)</i>
23	Court Repo	orter: Steven E. Patnaude, LCR No. 52
24		

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2	APPEARANCES:	(Continued)
3		Reptg. Clean Energy New Hampshire:
4		Christopher Skoglund
5		Reptg. Conservation Law Foundation: Nicholas A. Krakoff, Esq.
6		Reptg. The Nature Conservancy: Meredith A. Hatfield, Esq.
7		Reptg. LISTEN Community Services:
8		Stephen Tower, Esq. (NHLA)
9		<b>Reptg. Southern New Hampshire Services:</b> Ryan Clouthier
10		
11		<b>Reptg. Residential Ratepayers:</b> Donald M. Kreis, Esq., Consumer Adv. Office of Consumer Advocate
12		Reptg. New Hampshire Dept. of Energy:
13		Paul B. Dexter, Esq.
14		Molly M. Lynch, Esq. (Regulatory Support Division)
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 $\{DE \ 23-068\} \ [Day \ 1] \ \{10-25-23\}$ 

1 2 INDEX 3 PAGE NO. SUMMARY OF THE DOCKET BY CHAIRMAN GOLDNER 4 9 5 STATEMENTS RE: PRELIMINARY STATEMENTS BY: 6 Mr. Kreis 11 7 SUBSTITUTION OF WITNESS ISSUE RE: 21 BY LIBERTY UTILITIES 8 STATEMENTS RE: PRESENTATION OF WITNESSES BY: 9 Chairman Goldner 21, 23 10 22 Ms. Chiavara Mr. Dexter 23 11 Mr. Kreis 23 \* \* \* 12 13 WITNESS PANEL: BRANDY A. CHAMBERS KATHERINE W. PETERS MARC E. LEMÉNAGER 14 YI-AN CHEN CINDY L. CARROLL 15 MARY A. DOWNES S. ELENA DEMERIS 16 ERIC M. STANLEY 17 TYLER J. CULBERTSON CAROL M. WOODS 18 Direct examination by Ms. Chiavara 25, 46 19 Direct examination by Mr. Campbell 31 Direct examination by Mr. Sheehan 39 20 Direct examination by Ms. Geiger 42 Cross-examination by Mr. Dexter 53 21 Interrogatories by Cmsr. Simpson 57 Interrogatories by Cmsr. Chattopadhyay 83, 243 22 Interrogatories by Chairman Goldner 177 23 24

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1 2 EXHIBITS 3 EXHIBIT NO. DESCRIPTION PAGE NO. 4 1 2024-2026 Triennial Energy premarked Efficiency Plan and Petition, 5 filed June 30, 2023; Revised attachments to Plan, filed 6 September 11, 2023 7 2 Office of the Consumer premarked Advocate Testimony of Tim Woolf 8 and Danielle Goldberg 9 3 Clean Energy New Hampshire premarked Testimony of Christopher J. 10 Skoglund 11 4 New Hampshire Department of premarked Energy Testimony of Heidi W. 12 Lemay, Elizabeth R. Nixon, Jay E. Dudley, and Mark P. 13 Toscano and attachments 14 5 Joint Party Stipulation filed premarked October 6, 2023 15 6 Revised Unitil Electric B/C premarked 16 Output Pages with Residential Lighting Measures Removed 17 7 Summary of Impacts to Unitil premarked 18 Electric B/C Model of Removing Residential Lighting Measures 19 20 21 22 23 24

PROCEEDING
CHAIRMAN GOLDNER: Okay. Good morning.
I'm Chairman Goldner. I'm joined today by
Commissioner Simpson and Commissioner
Chattopadhyay. We're here this morning for the
first scheduled hearing session in Docket Number
DE 23-068, relating to the Joint Utilities'
Petition to approve the 2024 to 2026 Triennial
Energy Efficiency Plan.
First, let's start by taking
appearances, beginning with Eversource.
MS. CHIAVARA: Good morning,
Commission. Jessica Chiavara, here on behalf of
Public Service Company of New Hampshire, doing
business as Eversource Energy.
CHAIRMAN GOLDNER: Thank you. Thank
you. Northern gas and Unitil Energy Systems?
MR. CAMPBELL: Good morning,
Commissioners. Matt Campbell, for Unitil Energy
Systems, Incorporated, and Northern Utilities,
Incorporated.
CHAIRMAN GOLDNER: Very good. Liberty
Utilities?
MR. SHEEHAN: Good morning,

1 Commissioners. Mike Sheehan, for Liberty 2 Utilities (Granite State Electric) and Liberty 3 Utilities (EnergyNorth Natural Gas). 4 CHAIRMAN GOLDNER: Thank you. The New 5 Hampshire Electric Cooperative? 6 MS. GEIGER: Good morning, 7 Commissioners. Susan Geiger, from the law firm 8 of Orr & Reno. I represent New Hampshire 9 Electric Cooperative, Inc. 10 CHAIRMAN GOLDNER: Thank you. The New 11 Hampshire Department of Energy? 12 MR. DEXTER: Good morning, 13 Commissioners. Sitting in a different spot than usual, to make way for the large witness panel, 14 15 my name is Paul Dexter, representing the 16 Department of Energy. I'm joined by co-counsel, 17 Molly Lynch. 18 CHAIRMAN GOLDNER: Very good. The 19 Office of the Consumer Advocate, in his usual 20 seat. 21 MR. KREIS: Indeed, Mr. Chairman. Ι 2.2 respectfully declined to refer my customary 23 ground. 24 Good morning to everybody. I'm Donald

1 Kreis, the Consumer Advocate, pursuant to RSA 2 363:28 -- 365:28, that is. We represent the 3 interests of residential utility customers. CHAIRMAN GOLDNER: Thank you. Clean 4 5 Energy New Hampshire? 6 MR. SKOGLUND: Good morning, 7 Commissioners. Chris Skoglund, with Clean Energy New Hampshire. 8 9 CHAIRMAN GOLDNER: Thank you. The 10 Conservation Law Foundation? 11 MR. KRAKOFF: Good morning, 12 Commissioners. Nick Krakoff, with the Conservation Law Foundation. 13 CHAIRMAN GOLDNER: Excellent. CPower? 14 15 [No indication given.] 16 CHAIRMAN GOLDNER: Okay. CPower is not 17 here today. The Acadia Center? 18 [No indication given.] 19 CHAIRMAN GOLDNER: All right. The 20 Acadia Center is not here today. The Nature 21 Conservancy? 2.2 MS. HATFIELD: Good morning, 23 Commissioners. Meredith Hatfield, for The Nature 24 Conservancy.

1 CHAIRMAN GOLDNER: All right. Thank 2 you. Thank you. LISTEN Community Services? 3 MR. TOWER: Thank you, Commissioners. 4 This is Steve Tower, of NHLA, appearing on behalf 5 of LISTEN Community Services. 6 CHAIRMAN GOLDNER: Thank you. And 7 Southern New Hampshire Services? 8 MR. CLOUTHIER: Good morning, 9 Commissioners. This is Ryan Clouthier, with 10 Southern New Hampshire Services. 11 CHAIRMAN GOLDNER: Okay. Did I miss 12 anybody? Any parties? No? 13 [No indication given.] 14 CHAIRMAN GOLDNER: Okay. As we stated 15 in our Friday, October 20th, 2023, procedural 16 order, and I'll quote: "In 2022 New Hampshire 17 Laws, Chapter 5, (HB 549) the legislature 18 directed the Commission to narrowly review energy 19 efficiency programming, entailing a review of 20 cost-effectiveness, RSA 374-F:3, VI-a(d)(4), and 21 changes to program offerings, RSA 374-F:3, 2.2 VI-a(d)(5), by November 30th, 2023, for the 23 current planning period. Subject to the hearing 24 process, the Commission sees no obstacles to

1 approval of the changes to program offerings 2 submitted by the Joint Utilities at the 3 conclusion of this proceeding. The Commission 4 anticipates asking questions at hearing with an 5 emphasis on cost-effectiveness and the changes to 6 program offerings to meet these statutory 7 requirements, as well as our duty to keep 8 informed under RSA 374:4. We also expect to 9 inquire about future energy efficiency plans." 10 I'll provide wide latitude at hearing 11 for any questions from the parties or 12 Commissioners today. The significant costs and 13 public interests in ratepayer-funded energy 14 efficiency planning and programming require 15 nothing less than a rigorous and transparent 16 review. 17 In parallel, to enable an efficient 18 proceeding, and taking care to preserve 19 sufficient time on October 31st for any 20 follow-up, I want to be clear that this hearing 21 will proceed until the Commissioners and parties 2.2 are satisfied with the Day 1 questions, answers, 23 and redirect. 24 If it appears that we won't have enough

1 time, we may need to stay beyond 4:30 today or 2 schedule additional hearing sessions. I mention this so that plannings can plan -- so the parties 3 4 can plan accordingly. 5 Okay. Are there any members of the 6 public here today that would like to address the 7 Commission? [No indication given.] 8 CHAIRMAN GOLDNER: Okay. Seeing none. 9 10 For exhibits, we have before us 11 premarked and prefiled Exhibits 1 through 7. Are 12 there any issues related to these exhibits? 13 [No indication given.] 14 CHAIRMAN GOLDNER: Okay. Again, seeing 15 none. We would like to discuss how the 16 17 utility witnesses will be presented today. But, 18 before we turn to witnesses, are there any other 19 matters the parties would like to raise? 20 Attorney Kreis. 21 MR. KREIS: Thank you. Thank you, Mr. 2.2 Chairman. 23 And I just want to start by thanking 24 the Commission for the opportunity to appear here

1 today in support of the Triennial Energy 2 Efficiency Plan. And I also want to thank the 3 Commission for the Supplemental Prehearing Order 4 that it issued on October 20th. Although, I 5 noticed this morning it does not yet appear on 6 the virtual docket page for this docket on the 7 Commission's website. That order provided some useful clarity to us about how the Commission 8 9 intends to proceed, and you've just given us some 10 additional clarity. 11 And that prompts me to take several 12 positions at the outset of the hearing that I 13 feel that I need to place on the record, 14 hopefully, in a manner that will be conducive to 15 the efficient and smooth progress toward a final 16 resolution of this docket by the statutory 17 deadline, which, as you all know, is 18 November 30th. This is essentially an 19 everything, everywhere, all-at-once objection to 20 certain things that I believe will occur at 21 today's hearing. 2.2 Our position, or my position, the OCA's 23 position, stems from the reality that, strictly 24 speaking, today's hearing isn't necessary. We

1 have two reasons for taking that position. 2 First, is the applicable statute, 3 Paragraph VI-a of the so-called "Restructuring 4 Policy Principles", which are codified in 5 Section 3 of RSA 374-F. Subparagraph (d)(5) of 6 that statute includes a series of specific 7 directives that are applicable to this very 8 proceeding. The sole task assigned to the Commission is to "issue its order approving or 9 10 denying a joint utility request to alter program 11 offerings no later than November 30th." 12 We were pleased to read, in the first 13 paragraph of the October 20th order, and that, 14 Mr. Chairman, you reprised this just now, that 15 you "see no obstacles to the approval of the 16 changes to program offerings submitted by the 17 joint utilities." Thus, we believe that there is 18 nothing in controversy. No facts about the 19 program offerings are in dispute. And, an order 20 approving the Triennial Plan, which is where 21 those changes to program offerings are set forth, 2.2 can and should issue forthwith. 23 Our second reason for believing that 24 today's hearing is unnecessary is that, on

1 October 6th, most of the parties to this 2 proceeding filed a Joint Stipulation of Fact, and 3 those parties that are not signatory to that 4 Stipulation do not dispute anything in that 5 document. Therefore, pursuant to Paragraph (d) 6 of Rule Puc 203.20, the Commission is bound by 7 those determinations. And, collectively, those 8 determinations comprise a full and comprehensive 9 basis for the Commission to approve the Triennial 10 Plan, even assuming, for the sake of argument, 11 that a broader inquiry is appropriate here. 12 In the first paragraph of the October 13 20th Prehearing Order, the Commission takes the 14 position that its task in this docket is not just 15 limited to changes in program offerings, but also 16 includes a review of cost-effectiveness pursuant 17 to Paragraph (d) (4) of the statute. We contend 18 that, to the extent that the Commission has 19 authority to conduct such a review, it is beyond 20 the scope of the proceedings envisioned, excuse 21 me, in Subparagraph (d)(5), the one limited to a 2.2 review of program offerings. 23 But, even assuming that a review of

cost-effectiveness is within the statutory scope

1 of today's hearing, no facts about that are in 2 dispute. The reason we think no facts germane to 3 cost-effectiveness are in dispute is that 4 Subparagraph (d) (4) of the statute directs both 5 the utilities and the Commission to rely on the 6 so-called "Granite State Test" as the primary 7 test for determining cost-effectiveness. We have previously briefed what "primary test" means in 8 9 this context, and we have previously briefed why 10 the discount rate proposed by the utilities is 11 predetermined by the Granite State Test, and we 12 incorporate those arguments by reference here. 13 It suffices to say here that everything 14 proposed by the utilities in the proposed Triennial Plan is cost-effective pursuant to the 15 16 Granite State Test, which, in turn, must be the 17 end to any inquiry that could conceivably be 18 permissible in the context of this hearing. 19 If the Commission has any work to do 20 here on the question of cost-effectiveness, and, 21 again, we do not concede that it does, that lies 2.2 in verifying that the utilities have used the 23 appropriate inputs and made the correct 24 calculations in applying the Granite State Test.

1 Again, the Commission is bound by the 2 Stipulation, which answers that question in the 3 affirmative. 4 Accordingly, although we intend to 5 submit our prefiled testimony into the record, 6 and to present our witnesses to adopt that 7 testimony after some minor corrections, and then we intend to tender our witnesses for 8 9 cross-examination, we must do so subject to a 10 standing objection that their testimony is 11 unnecessary, and merely cumulative. I interpose 12 that objection at this juncture, because, 13 although their written testimony is fully 14 supportive of Plan approval, I, of course, don't 15 know what other questions they might get in quest 16 of undermining the case for Plan approval. 17 In the final paragraph in its 18 October 20th Prehearing Order, the Commission 19 makes a determination that we, with respect, find 20 to be alarming. The ruling concerns the dozens 21 of interrogatories the Commission has issued in 2.2 this docket, mainly to the utilities, but in a 23 couple of instances to the OCA as well, after 24 sensibly reversing course on its previously

1 expressed indication that the Commission intends 2 to take administrative notice of the responses to 3 these interrogatories, the Commission now says 4 that it will "review the record request responses 5 and specific answers as part of our review of the 6 overall record in making our determinations in 7 this matter, affording this data the weight it 8 deserves." It is our respectful, but 9 emphatically held, view that any such 10 consideration of the interrogatory responses 11 would be a violation of the Administrative 12 Procedure Act, RSA 541-A, specifically 13 Paragraph VII [VIII?] of Section 31 of RSA 541-A. 14 This provision states that "Findings of fact 15 shall be based exclusively on the evidence and on 16 matters officially noticed in accordance with" 17 the provision in Section 33 that governs 18 administrative notice. 19 The interrogatory responses are not 20 evidence in this proceeding, or, more precisely, 21 will not be evidence, because no party intends to 2.2 offer them into evidence. In effect, therefore,

the Commission, I fear, is reserving the right to make its decision in a contested administrative

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proceeding based on materials that are not in the record. This is a grievous transgression of the principles of fairness and due process enshrined in the provisions of Administrative Procedure Act governing contested administrative proceedings.

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6 We, therefore, wish to interpose a 7 standing objection to any consideration of the 8 interrogatories or the responses to those 9 interrogatories at this hearing, or, certainly, 10 once the case is under advisement. We hope the 11 Commission will allow us to interpose that 12 standing objection now, as an alternative to 13 slowing down the hearing by making objections 14 each and every time the interrogatories or their 15 responses comes up.

16 The October 20th Prehearing Order 17 suggests that the Commission's statutory duty to 18 keep informed, which you've also mentioned here, is itself a basis for some of what the Commission 19 20 intends to inquire about in this hearing. We respectfully disagree. The Commission has, by 21 2.2 its enabling statute, both broad and 23 investigative authority, and plenary access to 24 the books and records of regulated utilities. Ιn

a contested administrative proceeding, such as this one, the Commission is limited to specific issues that are noticed and relevant to the specific legal authority by which the Commission must make a decision. It cannot use its investigative authority to turn hearings into free-wheeling inguiries.

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8 We've made related points, including 9 arguments related to the inputs and assumptions 10 that comprise the Granite State Test, but, rather 11 than repeat those arguments here, we will simply 12 incorporate them by reference. We're eager to 13 cooperate in the process of moving the Triennial 14 Energy Efficiency Plan swiftly toward approval, 15 as required by the statute. And we request that 16 we consign debate and discussion over the policy 17 choices embedded in that statute to the 18 appropriate forum, which, of course, is the 19 General Court, rather than the PUC. 20 Finally, I note, again, respectfully, 21 that, by statute, the Commission is the arbiter

23 the utility customers. In this case, the 24 Business & Industry Association of New Hampshire,

of the interests of the utility shareholders and

1 which represents commercial and industrial 2 customers, has filed a letter in support of the 3 Triennial Plan, and, of course, the Office of the 4 Consumer Advocate, which represents residential 5 customers, supports the Triennial Plan, and, of 6 course, all the utilities are here supporting the 7 Triennial Plan. So, therefore, again, 8 respectfully, there is really nothing to 9 arbitrate here, and New Hampshire law requires 10 Plan approval. 11 Thank you. 12 CHAIRMAN GOLDNER: All right. Thank 13 you, Attorney Kreis. The Commission notes and 14 observes your ongoing objections. It's preserved 15 in the record to enable a fair hearing and an 16 orderly disposition of the case. It's 17 unnecessary to make those again. And we thank 18 you for making those at the outset of the 19 hearing. 20 MR. KREIS: Thank you for allowing me 21 to do that, Mr. Chairman. That will help the 2.2 hearings go very smoothly, I'm quite confident. 23 CHAIRMAN GOLDNER: Thank you. 4:30 is 24 looking better and better.

1 MR. KREIS: Indeed. 2 CHAIRMAN GOLDNER: Okay. Any other --3 any other statements anyone would like to make 4 before we talk about witnesses? 5 [No verbal response.] 6 CHAIRMAN GOLDNER: Okay. Seeing none. 7 With respect to witnesses, I'll first 8 note that Liberty notified the parties and the 9 Commission of its intent to substitute a witness 10 yesterday. Would anyone like to be heard with 11 respect to the witness substitution issue? 12 [Multiple parties indicating in the 13 negative.] 14 Okay. Seeing none. CHAIRMAN GOLDNER: Consistent with the Commission's 15 Prehearing Order dated October 12th, 2023, we'll 16 17 begin today with the Joint Utilities' witnesses. 18 With that said, how these witnesses will be presented remains to be determined. I recall 19 20 there was discussion of different panels focusing 21 on topics. We're interested in asking questions 2.2 related to cost-effectiveness and changes to 23 program offerings, and then, finally, future 24 energy efficiency planning. And, since the

1 parties appear to be aligned, I hope that we can 2 arrange the witnesses to efficiently address 3 these questions. 4 So, I'd like to hear from the parties 5 now. And it would be fine with the Commission if 6 all of the witnesses were presented together, as 7 opposed to utility first, if that's the 8 preference of the parties. MS. CHIAVARA: Meaning "all party 9 10 witnesses be sworn in at the same time"? 11 CHAIRMAN GOLDNER: Yes. If that's --12 that may be faster today, if acceptable to the 13 parties. If not, then we can certainly proceed 14 in the normal fashion, with the utility witnesses first. 15 16 MS. CHIAVARA: I don't believe the 17 utilities have a problem with everybody else 18 being sworn in. But I would want to check with 19 the other parties to see if they're okay with 20 that. 21 CHAIRMAN GOLDNER: Sure, I can 2.2 just ask out loud. 23 Do the parties have any objections to 24 all the witnesses being sworn in together? Or,

1 would there be a preference to have the utility 2 witnesses first? 3 I can say that the vast majority of our 4 questions are for the utility witnesses. 5 Attorney Dexter. 6 MR. DEXTER: Yes. The Department of 7 Energy addressed this question at the prehearing conference. And we indicated that the utilities 8 are the Petitioner in this case, we believe it's 9 10 appropriate for them to take the stand first and 11 make their case first, and that the various 12 intervenors follow the testimony of the utility 13 witnesses. And we would renew that request 14 today. We think that's a more efficient, 15 appropriate way to proceed. 16 CHAIRMAN GOLDNER: Okay. Attorney 17 Kreis, I think you had your hand up? 18 MR. KREIS: I think our opinion is that 19 we would like to do whatever your pleasure is, 20 Mr. Chairman. I do have a brief direct exam to 21 conduct of my two witnesses, only because there 2.2 are a few corrections. And, subject to the need 23 to do that, we're at your service. 24 CHAIRMAN GOLDNER: Okay. Out of

	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1	respect for the Department of Energy, we'll go
2	with the utility witnesses first today. That may
3	take a little longer, Mr. Dexter, but I certainly
4	understand your point, and we can certainly do
5	that.
6	Okay. Let's see. So, let's proceed
7	with the utility witnesses. Mr. Patnaude, would
8	you please swear in the witnesses.
9	(Whereupon KATHERINE W. PETERS,
10	MARC E. LEMÉNAGER, BRANDY A. CHAMBERS,
11	YI-AN CHEN, MARY A. DOWNES,
12	CINDY L. CARROLL, S. ELENA DEMERIS,
13	ERIC M. STANLEY, TYLER J. CULBERTSON,
14	and <b>CAROL M. WOODS</b> were duly sworn by
15	the Court Reporter.)
16	CHAIRMAN GOLDNER: All right. Attorney
17	Chiavara.
18	MS. CHIAVARA: Thank you, Chairman.
19	KATHERINE W. PETERS, SWORN
20	MARC E. LEMÉNAGER, SWORN
21	BRANDY A. CHAMBERS, SWORN
22	YI-AN CHEN, SWORN
23	DIRECT EXAMINATION
24	BY MS. CHIAVARA:

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll|Demeris|Stanley|Culbertson|Woods]

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1	Q	Beginning with Ms. Kate Peters. Ms. Peters, can
2		you please state your name, your title, and the
3		company you work for?
4	A	(Peters) My name is Kate W. Peters. I am the
5		Director of Residential and Regulatory Energy
6		Efficiency Group at Eversource Energy.
7	Q	And what are the responsibilities of your role
8		with Eversource?
9	A	(Peters) In my role, I'm responsible for
10		oversight of implementation of our Residential
11		Programs in both Massachusetts and New Hampshire,
12		and also our Regulatory Group in both states.
13	Q	Have you ever testified before this Commission?
14	A	(Peters) Yes, I have.
15	Q	And, turning to the Plan filed on June 30th of
16		this year, did you file the proposed 2024-2026
17		Triennial Energy Efficiency Plan and associated
18		attachments that were filed on June 30th, 2023,
19		and the attachments that were modified and filed
20		on September 11th, 2023, all marked as
21		"Exhibit 1"?
22	A	(Peters) Yes.
23	Q	And were the Plan and attachments prepared in
24		part by you or at your direction?

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	A	(Peters) Yes.
2	Q	Do you have any changes or updates to make at
3		this time?
4	А	(Peters) No, I do not.
5	Q	And do you adopt the Plan and attachments today
6		as they were written and filed?
7	A	(Peters) Yes, I do.
8	Q	Thank you very much. Moving to Marc Leménager.
9		Mr. Leménager, can you please state your name,
10		your title, and the company that you work for?
11	A	(Leménager) Sure. My name is Marc Leménager. My
12		business address is 73 West Brook Street,
13		Manchester, New Hampshire. My position is
14		Supervisor - Regulatory Planning and Evaluation.
15		And, in that position, I provide service to the
16		Company the Company's energy efficiency
17		programs in New Hampshire and Connecticut for
18		Eversource Energy Service Company and its
19		affiliates, including Public Service Company of
20		New Hampshire, doing business as Eversource
21		Energy.
22	Q	And what are the responsibilities of your role
23		with Eversource?
24	A	(Leménager) My responsibilities include

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll|Demeris|Stanley|Culbertson|Woods]

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1		participating in and monitoring regulatory
2		proceedings and stakeholder engagement, related
3		to the energy efficiency programs, as well as
4		program planning, reporting, coordination, and
5		outreach.
6	Q	Have you ever testified before this Commission?
7	A	(Leménager) Yes.
8	Q	And, regarding the June 30th Plan, did you file
9		the proposed 2024-2026 Triennial Energy
10		Efficiency Plan and associated attachments that
11		were filed on June 30th, 2023, and then modified
12		and filed on September 11th, 2023, that are
13		marked as "Exhibit 1"?
14	A	(Leménager) Yes.
15	Q	Were the Plan and attachments prepared by you or
16		at your direction?
17	A	(Leménager) Yes.
18	Q	Do you have any changes or updates to make at
19		this time?
20	A	(Leménager) No.
21	Q	So, do you adopt the Plan and attachments today
22		as they were written and filed?
23	A	(Leménager) Yes.
24	Q	Thank you very much. And moving to Brandy

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		Chambers. Ms. Chambers, will you please state
2		your name, your title, and the Company you work
3		for?
4	A	(Chambers) Brandy Chambers. I'm the Manager of
5		Regulatory and Planning for the Energy Efficiency
6		Group at Eversource.
7	Q	And what are the responsibilities of your role
8		with Eversource?
9	А	(Chambers) I oversee the development of the plans
10		in all three of our states that we operate in,
11		including benefit-cost modeling,
12		[Court reporter interruption.]
13	CONT	INUED BY THE WITNESS:
14	А	(Chambers) I support I oversee the development
15		of the plans in all three of our states,
16		including benefit-cost modeling and supporting
17		all relevant regulatory filings.
18	BY MS	S. CHIAVARA:
19	Q	And have you ever testified before this
20		Commission?
21	А	(Chambers) No.
22	Q	Regarding the June 30th Plan, did you file the
23		proposed 2024-2026 Triennial Energy Efficiency
24		Plan and the associated attachments that were

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		filed on June 30th, 2023, and then modified and
2		filed on September 11th, 2023, that are all
3		marked as "Exhibit 1"?
4	A	(Chambers) Yes.
5	Q	Were the Plan and attachments prepared in part by
6		you or at your direction?
7	A	(Chambers) Yes.
8	Q	And do you have any changes or updates to make at
9		this time?
10	A	(Chambers) No.
11	Q	So, do you adopt the Plan and attachments today
12		as they were written and filed?
13	A	(Chambers) Yes.
14	Q	Thank you very much. My last witness is
15		Ms. Yi-An Chen. Ms. Chen, will you please state
16		your name, your title, and the company you work
17		for?
18	A	(Chen) My name is Yi-An Chen. I am the Director
19		of New Hampshire Revenue Requirement for
20		Eversource.
21	Q	What are the responsibilities of your role in the
22		Company?
23	A	(Chen) I am responsible for coordination and also
24		implementation of the revenue requirement

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		calculation, and also the revenue and the
2		regulatory filing for Public Service Company,
3		doing business as Eversource Energy.
4	Q	Have you ever testified before the Commission?
5	A	(Chen) No, I haven't.
6	Q	Regarding your June 30th, 2023, testimony, did
7		you file testimony and corresponding attachments
8		submitted as part of the attachments to the Plan
9		that was filed on June 30th, 2023, marked as
10		"Exhibit 1"?
11	A	(Chen) Yes.
12	Q	Were the testimony and supporting materials
13		prepared by you or at your direction?
14	A	(Chen) Yes.
15	Q	Do you have any changes or updates to make at
16		this time?
17	A	(Chen) No.
18	Q	Do you adopt your testimony today as it was
19		written and filed?
20	A	(Chen) Yes.
21	Q	And does the System Benefits Charge you recommend
22		in your testimony result in just and reasonable
23		rates?
24	A	(Chen) Yes.

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] 1 MS. CHIAVARA: Thank you, Ms. Chen. 2 Those are all my witnesses. Thank you. 3 CHAIRMAN GOLDNER: Thank you. Attorney 4 Campbell. 5 MARY A. DOWNES, SWORN 6 CINDY L. CARROLL, SWORN 7 S. ELENA DEMERIS, SWORN 8 DIRECT EXAMINATION BY MR. CAMPBELL: 9 10 Good morning, Ms. Downes. Could you please state Q 11 your name, your title, and the company you work for for the record please? 12 (Downes) My name is Mary Downes. And my business 13 А address is 325 West Road, in Portsmouth, New 14 15 Hampshire. I'm the Manager of Strategy and 16 Compliance. And I'm responsible for overseeing 17 the administrative and regulatory requirements 18 associated with Unitil's energy efficiency 19 programs in Massachusetts and New Hampshire. 20 And have you ever testified before this 0 21 Commission? 2.2 А (Downes) Yes. 23 Q And did you file the proposed 2024 to 2026 24 Triennial Energy Efficiency Plan and associated

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1		attachments filed on June 30th, and modified on
2		September 11th, marked as "Exhibit 1"?
3	A	(Downes) Yes.
4	Q	Were the Plan and attachments prepared in part by
5		you or at your direction?
6	A	(Downes) Yes.
7	Q	Do you have any changes, corrections, or updates
8		to make at this time?
9	A	(Downes) I do.
10	Q	Could you please describe those updates?
11	A	(Downes) Yes. In the process of responding to
12		the Commission's request for information in the
13		case, we determined that we inadvertently
14		included residential lighting measures in the
15		electric portfolio's Residential Products
16		Program. These residential lighting measures
17		have been discontinued and will not be offered as
18		part of the 2024 to 2026 Plan.
19		As a result, Unitil's actual measure
20		offerings during the term will be different than
21		the planned measure mix.
22	Q	Thank you. And could I ask you to please
23		elaborate on how the actual measure mix that
24		Unitil will offer during the term will be

## [WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll|Demeris|Stanley|Culbertson|Woods]

1		different than the planned measure mix?
2	A	(Downes) Yes. Consistent with the other electric
3		companies, Unitil will not be offering any
4		residential lighting measures as part of its
5		Products Program, as was included in the planned
6		measure mix. The customer incentives associated
7		with those lighting measures in the model will be
8		allocated to other measures within the same
9		Products Program.
10	Q	And what's the expected impact of the
11		reallocation of rebates from residential lighting
12		to other measures?
13	A	(Downes) Not much. The lighting measures that
14		were inadvertently included in our Plan model
15		comprised 5.06 percent of the planned budget for
16		the ENERGY STAR Products Program, and less than
17		1.0 percent, or 0.97 percent, of that program's
18		benefits.
19		When compared to the portfolio as a
20		whole, the change has even less impact, with
21		lighting measures comprising only 0.49 percent of
22		the total portfolio budget, and just a small
23		fraction, 0.09 percent of portfolio benefits,
24		based on the modeling. Reallocating customer

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll|Demeris|Stanley|Culbertson|Woods]

	incentives from these residential lighting
	measures to other high-efficiency measures will
	result in minimal changes to portfoliowide
	benefits and BC ratios for the residential
	sector, in particular, and the portfolio as a
	whole.
Q	Thank you. And did the Company prepare any
	exhibits to explain the impact of removing and
	reallocating the discontinued lighting measures?
A	(Downes) Yes. These are included in Hearing
	Exhibits 6 and 7.
Q	And were those prepared by you or at your
	direction?
A	(Downes) They were.
Q	And could I ask you to please provide a brief
	description of the methodology you employed to
	reallocate the costs for the discontinued
	lighting measures, and the impact of that
	reallocation, as reflected in Exhibit 6 and 7?
A	(Downes) Yes. I took the customer incentives
	that had been associated with the discontinued
	lighting measures in the ENERGY STAR Products
	Program, and reallocated them proportionately to
	the other measures in that program for which we
	А Q Д

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll|Demeris|Stanlev|Culbertson|Woods]

1 had planned activity. Hearing Exhibit 6 reflects the revised 2 3 output from Unitil's electric BC model with the 4 discontinued lighting measures removed and their 5 costs reallocated. 6 Hearing Exhibit 7 provides a summary of 7 the impact of this reallocation on overall kilowatt-hour savings, benefits, and net 8 benefits. The planned costs and benefits -- I'm 9 10 sorry, the planned costs and performance 11 incentive remain unchanged from the original Plan, since costs are based on the fixed revenue 12 13 estimates, and design-level performance incentive 14 is equal to 5.5 percent of the planned budget. 15 Thank you, Ms. Downes. And do you adopt the Plan 0 16 and attachments today, with the inclusion of the 17 changes you've just described, as well as Hearing 18 Exhibit 6 and 7? 19 (Downes) Yes, I do. Α 20 Thank you. Ms. Carroll, could you please state 0 21 your name, your title, and the company that you 22 work for? 23 Α (Carroll) My name is Cindy L. Carroll. The 24 Company I'm employed by is Unitil Service

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll|Demeris|Stanley|Culbertson|Woods]

1		Corporation. And my title is Vice President of
2		Customer Energy Solutions.
3	Q	And what are the responsibilities of your role in
4		the Company?
5	A	(Carroll) My primary responsibilities are the
6		development, the implementation, and advancement
7		of Unitil's distribution business utility's
8		business expansion and economic development
9		programs, energy efficiency programs, and
10		critical customer management.
11	Q	Have you ever testified before this Commission?
12	A	(Carroll) Yes, I have.
13	Q	Did you file the proposed Triennial Energy
14		Efficiency Plan and the associated attachments
15		that were filed on June 30th, 2023, and modified
16		on September 11th, 2023?
17	A	(Carroll) Yes, I did.
18	Q	Were the Plan and attachments prepared in part by
19		you or at your direction?
20	A	(Carroll) Yes, they were.
21	Q	Do you have any changes, corrections, or updates
22		that you'd like to make at this time?
23	A	(Carroll) I adopt the corrections made by Ms.
24		Downes. But, apart from that, I do not have any

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1		additional corrections.
2	Q	Do you adopt the Plan and its attachments with
3		the inclusion of those changes?
4	A	(Carroll) Yes, I do.
5	Q	Thank you. I'm now going to turn to Ms. Demeris,
6		who is appearing remotely today.
7		Ms. Demeris, could you please state
8		your name, your title, and the Company that you
9		work for?
10	A	(Demeris) Yes. My name is S. Elena Demeris. I'm
11		a Senior Regulatory Analyst for Unitil Service
12		Corp.
13	Q	And what are your responsibilities of your role
14		in the Company?
15	A	(Demeris) I'm responsible for preparing
16		regulatory filings, pricing research, regulatory
17		analysis, tariff administration, revenue
18		requirement calculations, customer research, and
19		other analytical services.
20	Q	And have you ever testified before the
21		Commission?
22	A	(Demeris) Yes, I have.
23	Q	Did you file testimony and corresponding
24		attachments submitted as a part of the

1		carrorr bemerrs stanrey curbertson woods
1		attachments to the Plan filed on June 30th, 2023,
2		marked as "Exhibit 1"?
3	A	(Demeris) Yes.
4	Q	And was that testimony and supporting material
5		prepared by you or at your direction?
6	A	(Demeris) Yes, it was.
7	Q	Do you have any changes or updates to make at
8		this time?
9	A	(Demeris) Yes, I do. I found an error due to a
10		link on Bates Page 346, Northern typical bill
11		impacts, the first column, under "Winter" period,
12		"Change from prior period dollars per period" and
13		"Change from prior period percentage". R-5 is
14		correct, but the correct values for the other
15		rate classes are R-6 is "33 cents" and "0.07
16		percent"; G-40 is "\$2.26" and "0.08 percent";
17		G-41 is "22.85" and "0.09 percent"; and G-51 is
18		"14.50" and "0.1 percent".
19	Q	Thank you. And, subject to that correction, do
20		you adopt your testimony today?
21	A	(Demeris) Yes, I do.
22	Q	And does the System Benefits Charge you recommend
23		in your testimony result in just and reasonable
24		rates?

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] 1 (Demeris) Yes, it does. А 2 MR. CAMPBELL: Thank you, Ms. Demeris. 3 CHAIRMAN GOLDNER: Attorney Sheehan, 4 and Liberty. 5 MR. SHEEHAN: Thank you. This may 6 sound familiar. 7 ERIC M. STANLEY, SWORN TYLER J. CULBERTSON, SWORN 8 9 DIRECT EXAMINATION 10 BY MR. SHEEHAN: 11 Mr. Stanley, please state your name, title, and Q the company you work for? 12 13 А (Stanley) My name is Eric M. Stanley. I'm 14 employed by Liberty Utilities Service Corp., which provides services to Liberty Utilities 15 (Granite State Electric) Corp. and Liberty 16 17 Utilities (EnergyNorth Natural Gas) Corp. I'm 18 the Manager of Energy Efficiency and Customer 19 Programs at Liberty. And my business address is 20 15 Buttrick Road, Londonderry, New Hampshire, zip 21 code 03053. 22 Q What are your responsibilities as the Manager of 23 Energy Efficiency? 24 Α (Stanley) I'm responsible for program planning,

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		implementation, marketing, and reporting for the
2		Company's energy efficiency programs in New
3		Hampshire.
4	Q	Have you testified before this Commission before?
5	A	(Stanley) Yes.
6	Q	Did you file the proposed 2024-26 Triennial
7		Energy Efficiency Plan and associated attachments
8		on June 30, as modified on September 11th?
9	A	(Stanley) Yes.
10	Q	Were the Plan and amendment prepared in part by
11		you or under your direction?
12	A	(Stanley) Yes.
13	Q	Do you have any changes you want to bring to the
14		Commission's attention?
15	A	(Stanley) I do not.
16	Q	And do you adopt the Plan and the attachments
17		today as submitted and filed?
18	A	(Stanley) I do.
19	Q	Thank you. Mr. Culbertson, I can't see you, but
20		I know you're over there.
21		Please state your name, your title, and
22		the company you work for?
23	A	(Culbertson) I'm Tyler Culbertson. I'm the
24		Director of Rates and Regulatory Affairs for

	[WI]	TNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		Liberty Utilities.
2	Q	And what are your responsibilities as the
3		Director of Rates and Regulatory Affairs?
4	A	(Culbertson) I'm responsible for the rate-related
5		matters at Liberty (EnergyNorth Natural Gas) and
6		Liberty (Granite State Electric).
7	Q	Have you testified before this Commission?
8	A	(Culbertson) I have.
9	Q	And, contrary to what I wrote in the letter, Mr.
10		Culbertson, in fact, you prepared the testimony
11		that was filed on June 30, is that correct?
12	A	(Culbertson) Yes.
13	Q	The confusion was, Mr. Yusef got involved, and,
14		when he couldn't be available today, I was
15		thinking he drafted the testimony. But, in fact,
16		Mr. Culbertson, it's your testimony that's on
17		file, is that right?
18	A	(Culbertson) Yes.
19	Q	Do you have, and for the record that testimony
20		appears on Bates 035 of Exhibit 1. Do you have
21		any changes to make at this time?
22	A	(Culbertson) I do not.
23	Q	And do you adopt your testimony today as written
24		and filed?

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] 1 А (Culbertson) Yes. 2 Q And does the System Benefits Charge that you 3 recommend in your testimony result in just and 4 reasonable rates? 5 Α (Culbertson) Yes. 6 MR. SHEEHAN: Thank you. And, Mr. 7 Chairman, a request. Mr. Culbertson, and I 8 suspect the other rates witnesses, will play a very small role today. And, if possible, it 9 would be great to be able to release them at some 10 11 point to do other things. So, I make that 12 request. 13 Thank you. 14 CHAIRMAN GOLDNER: Thank you. And, 15 finally, the New Hampshire Electric Cooperative, 16 and Attorney Geiger. 17 MS. GEIGER: Thank you, Mr. Chairman. 18 CAROL M. WOODS, SWORN 19 DIRECT EXAMINATION 20 BY MS. GEIGER: 21 Ms. Woods, please state your name, your title, Q 22 and the company by whom you are employed? 23 Α (Woods) My name is Carol M. Woods. I work for New Hampshire Electric Cooperative. And my title 24

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] 1 is Energy Solutions Executive. 2 0 What are your responsibilities at NHEC? 3 А (Woods) My responsibilities include management 4 and planning and regulatory support for the 5 Company's energy efficiency programs. 6 Q Have you ever testified before this Commission? 7 (Woods) Yes. Α 8 And, with respect to the Triennial Energy Q 9 Efficiency Plan filed on June 30th, 2023, and 10 modified on September 11th, 2023, which has been 11 marked as "Exhibit 1", did you participate in making that filing? 12 (Woods) Yes, I did. 13 А 14 And were the Plan and attachments prepared in Q 15 part by you or at your direction? 16 (Woods) Yes. А 17 Q Do you have any changes or updates to make at 18 this time? 19 (Woods) No. А 20 Do you adopt the Plan and attachments today as 0 21 they were written and filed? 22 А (Woods) Yes. 23 Q Did file testimony and corresponding attachments 24 submitted as part of attachments to the Plan

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] 1 filed on June 30th, 2023? 2 Α (Woods) Yes, I did. 3 Q And were the testimony and supporting materials 4 prepared by you or at your direction? 5 Α (Woods) Yes. 6 Q Do you have any changes or updates to make to 7 your testimony at this time? 8 (Woods) No. А 9 Do you adopt your testimony today as it was Q 10 written and filed? 11 А (Woods) Yes. 12 Q And does the Systems Benefit Charge you 13 recommended in your testimony result in just and reasonable rates? 14 15 А (Woods) Yes, it does. 16 MS. GEIGER: Thank you. 17 CHAIRMAN GOLDNER: Before, I'll 18 interrupt briefly the flow here. Attorney Kreis, 19 you had mentioned in your opening statement that 20 you were having challenges with the links on the 21 PUC website. I asked the clerks to confirm, and 2.2 they confirmed that the links were working 23 yesterday, as well as today. And I've just 24 checked myself.

Carroll | Demeris | Stanley | Culbertson | Woods ] So, if you could check your own 1 2 machine. We show that the October 20th PO as 3 well as all the other documents are correctly 4 linked. 5 MR. KREIS: Thank you, Mr. Chairman. 6 I'll make sure that that's true on my computer. 7 CHAIRMAN GOLDNER: Yes. Please check. 8 Yes. MR. KREIS: I obviously have the 9 October 20th order. So, it's not a problem from 10 11 my perspective at all. 12 CHAIRMAN GOLDNER: Okay. Excellent. 13 Just for the rest of the parties, everything is 14 correctly working on the website. 15 So, very good. So, back to the flow. 16 And that, I think, completes direct, Attorney 17 Chiavara? 18 MS. CHIAVARA: We actually do have a 19 few questions of direct exam, very brief 20 questions. We'll keep it short. 21 CHAIRMAN GOLDNER: Of course. Please 22 proceed. 23 MS. CHIAVARA: Thank you very much. 24 BY MS. CHIAVARA:

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes|

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1	Q	Beginning first with Mr. Leménager. Could you
2		briefly explain and summarize the changes made to
3		the programs in the proposed Plan that's marked
4		as "Exhibit 1"?
5	A	(Leménager) Sure. I'd like to note that all
6		programs available in 2023 will be available in
7		2024 to 2026. No new programs are being proposed
8		as part of this Plan.
9		And, while minor in nature, there are
10		two program changes that will be occurring. One
11		is the ADR Program is moving from a pilot program
12		to a full program. And the other is the gas
13		utilities are offering a dedicated municipal
14		program, rather than serving municipal customers
15		through the C&I programs.
16		Each utility's portfolio of programs in
17		the Plan have a benefit-cost ratio greater than
18		1.0. And, when taken cumulatively, all six
19		utilities' programs provide a Granite State Test
20		BC ratio of 2.27.
21		Further, the utilities have maximized
22		all available funding within the proposed Plan,
23		which, from my understanding, is the definition
24		of "program and funding optimization", as

-

1		described in the current energy efficiency
2		statute.
3		And, then, system benefits accrue to
4		all customers as part of this Plan. And, while
5		participants in the programs benefit more
6		directly from the nonparticipants, all New
7		Hampshire businesses and residents can become
8		program participants each and every year, and
9		many do, as evidenced with the sustained
10		popularity of the programs.
11	Q	Could you also speak a bit about the variety of
12		cost-benefit values of the different programs?
13	A	(Leménager) Sure. So, the programs in and of
14		themselves have different BC ratios. But the
15		Plan is deliberately designed this way to account
16		for other objectives, in addition to the
17		cost-effectiveness of the Granite State Test.
18		So, collectively, the programs are required to
19		have a BC ratio greater than 1.0. And addressing
20		a variety of customer needs and barriers, and
21		ensuring access to the programs for all
22		customers, are also priorities. And a
23		diversified suite of programs helps address these
24		needs, and justifies the fact that certain

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1	programs can have different BC ratios than
2	others. And it's consistent with the current law
3	and current program offerings. That benefits per
4	unit cost are only one factor to be considered
5	when determining if program levels and priorities
6	have been optimized.
7	Additionally, the programs are also
8	responsive of a continuously evolving
9	marketplace. So, there's several factors that
10	are proposed as part of a Plan or acknowledged as
11	part of the Plan to continue to adapt the
12	programs to the evolving marketplace.
13	So, one is the phasing out of screw-in
14	light bulbs. Which, if you go into a Home Depot,
15	there is no such option anymore. If you're going
16	to buy a new bulb, you're going to get an LED

17

18 that option, as the market has largely evolved.

bulb. So, we've done away with incentivizing

Coupled -- we also have coupled the 19 20 Plan with ongoing review of Beyond Lighting. So, 21 as part of this process, we're also reviewing and 22 researching what other offerings should be incentivized, now that lighting is and has been 23 24 going away within the programs.

1		So, we also have continuous review of
2		potential new offerings, and technologies, and
3		delivery pathways, such as all-electric options
4		within the ENERGY STAR Homes Program.
5		And, then, we continue to review
6		information regarding federal funding, and how
7		our programs can potentially partner with subsets
8		of that funding, when available and where
9		appropriate.
10	Q	Thank you very much, Mr. Leménager. My next
11		question is for Ms. Downes.
12		Ms. Downes, the proposed Plan is
13		designed to be delivered over a three-year term.
14		Could you explain the need and the benefits for
15		that shift?
16	A	(Downes) Sure. The current law directs the
17		utilities to "prepare triennial energy efficiency
18		plans", which is what we had in mind when we
19		prepared the current Plan. Importantly, the
20		proposed three-year planning period is more
21		administratively efficient than three discrete
22		annual planning periods, which allows for a focus
23		on achievement of longer term goals, as well as
24		innovation and evolution of strategies that

1	overcome customer barriers to the adoption of
2	energy efficiency.
3	As proposed, the three-year planning
4	period will continue the high degree of
5	transparency, participation, and input from
6	stakeholders, including ongoing research and
7	evaluation overseen by the EM&V Working Group,
8	continuation of robust regulatory reporting, and
9	allowance for interim program updates that can be
10	requested by any party.
11	Most importantly, though, a three-year
12	planning period allows for increased certainty,
13	and more continuous and sustained program
14	offerings, which benefits customers and energy
15	efficiency market actors, such as contractors and
16	vendors, enabling the utilities to maximize
17	program accessibility and energy-efficient
18	outcomes.
19	Rather than arbitrarily ramping down
20	programs at the end of each calendar year to
21	approximate annual budgets, execution of program
22	goals over a three-year period will enable the
23	utilities to continually serve customers when
24	they need our help and support. The three-year

		-
1		term will allow energy efficiency contractors to
2		work throughout the year, which is especially
3		important in the winter season, when demand for
4		energy efficiency program services tends to be
5		greatest, and when undertaking annual planning
6		process is particularly disruptive to workflow.
7		A three-year planning cycle will avoid
8		lost opportunity, maximize the funding available
9		to programs, improve access to programs, and
10		optimize benefits, and other outcomes.
11	Q	Thank you, Ms. Downes. That was helpful.
12		Turning back to Mr. Leménager for just a moment.
13		Were there changes made to the
13 14		Were there changes made to the performance incentive for the proposed Plan?
	A	
14	A	performance incentive for the proposed Plan?
14 15	A	performance incentive for the proposed Plan? (Leménager) Yes. So, consistent with what was
14 15 16	A	performance incentive for the proposed Plan? (Leménager) Yes. So, consistent with what was described on Bates Pages 092 to 095 of the Plan
14 15 16 17	A	performance incentive for the proposed Plan? (Leménager) Yes. So, consistent with what was described on Bates Pages 092 to 095 of the Plan filing, minor adjustments were made to the
14 15 16 17 18	A	performance incentive for the proposed Plan? (Leménager) Yes. So, consistent with what was described on Bates Pages 092 to 095 of the Plan filing, minor adjustments were made to the existing PI framework to align for this
14 15 16 17 18 19	A	performance incentive for the proposed Plan? (Leménager) Yes. So, consistent with what was described on Bates Pages 092 to 095 of the Plan filing, minor adjustments were made to the existing PI framework to align for this three-year execution period. So, rather than
14 15 16 17 18 19 20	A	performance incentive for the proposed Plan? (Leménager) Yes. So, consistent with what was described on Bates Pages 092 to 095 of the Plan filing, minor adjustments were made to the existing PI framework to align for this three-year execution period. So, rather than determining PI against annual metrics within the
14 15 16 17 18 19 20 21	A	performance incentive for the proposed Plan? (Leménager) Yes. So, consistent with what was described on Bates Pages 092 to 095 of the Plan filing, minor adjustments were made to the existing PI framework to align for this three-year execution period. So, rather than determining PI against annual metrics within the Triennial Plan, PI will continue to be booked

1 goals. 2 Second, spending limitations will also 3 apply against the term's budgets, rather than 4 annual budgets. 5 And, then, while not a change to the 6 framework itself, the utilities are proposing to 7 include the ADR benefits, the Active Demand Response Program's benefits within the PI 8 framework, to help allow the utilities to be 9 measured not only for their spending in these 10 11 programs, but also the actual accomplishments and achievements to be measured against the results 12 13 of these programs as well. 14 And, then, one last change outside of 15 this PI framework, is Eversource had previously, 16 and through 2023, had earned a performance 17 incentive on SmartSTART loan repayments. And 18 Eversource is proposing to eliminate that 19 performance incentive in response to Commission 20 Order 26,621 from last year. 21 So, the PI changes that are proposed in 22 the Plan are consistent with the framework that 23 was in effect on January 1st, 2021, which, to my 24 understanding, is the directive of the law. And,

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] additionally, these changes are contained as Item 1 2 Number 10 in the Joint Party Stipulation marked 3 as "Exhibit 5". 4 MS. CHIAVARA: Thank you, 5 Mr. Leménager. That is all I have for the 6 utility witnesses. That's all we have for 7 direct. CHAIRMAN GOLDNER: Okay. 8 The Eversource witnesses or all the utility 9 10 witnesses? 11 MS. CHIAVARA: All utility witnesses. 12 CHAIRMAN GOLDNER: Okay. Nothing else. 13 Okay. Okay. Very good. So, we can now move 14 15 to any cross-examination of the witnesses, 16 beginning with the New Hampshire Department of 17 Energy? 18 MR. DEXTER: Thank you, Mr. Chairman. 19 I just have one quick area of inquiry, based on 20 what I heard this morning. 21 CROSS-EXAMINATION 22 BY MR. DEXTER: 23 0 Mr. Leménager, you mentioned that Eversource has 24 agreed to eliminate the performance incentive

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1		associated with the SmartSTART Program, is that
2		right?
3	A	(Leménager) Correct.
4	Q	Right. Now, that move to eliminate that
5		particular performance incentive was not included
6		in the original three-year Plan as filed in June,
7		and updated in September, is that right?
8	A	(Leménager) It was not in the Plan whatsoever.
9	Q	So, in other words, if I were to look at the
10		1500-page Plan and attachments that were
11		submitted, there is no mention of the SmartSTART
12		performance incentive, is that correct?
13	A	(Leménager) That's my understanding.
14	Q	Right. And where then would the Commission and
15		the Department see the elimination of the
16		performance incentive associated with SmartSTART?
17	A	(Leménager) So, I think it would be a
18		counterfactual within our performance incentive
19		filing. Each June 1st, we currently file our
20		performance incentive for the NHSaves programs,
21		as well as a separate page, including the
22		performance incentive for SmartSTART. That page
23		for the SmartSTART incentive will cease to exist
24		when we file our 2024 performance incentive.

	[WI]	<pre>INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]</pre>
1	Q	Thank you. So, and just to reiterate, there's no
2		change to the proposed Plan necessary as a result
3		of this agreement to eliminate the SmartSTART
4		performance incentive?
5	A	(Leménager) Correct.
6		MR. DEXTER: Thank you. That's all I
7		have.
8		CHAIRMAN GOLDNER: Thank you. The
9		Office of the Consumer Advocate?
10		MR. KREIS: Nothing from the OCA, Mr.
11		Chairman.
12		CHAIRMAN GOLDNER: Okay. Very good.
13		Let's move to Clean Energy New Hampshire, any
14		questions?
15		MR. SKOGLUND: Nothing from Clean
16		Energy New Hampshire. Thank you.
17		CHAIRMAN GOLDNER: Okay. The
18		Conservation Law Foundation?
19		MR. KRAKOFF: Nothing from Conservation
20		Law Foundation. Thank you.
21		CHAIRMAN GOLDNER: The Nature
22		Conservancy?
23		MS. HATFIELD: Nothing. Thank you.
24		CHAIRMAN GOLDNER: LISTEN Community

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] Services? 1 2 MR. TOWER: Sorry about that. Nothing 3 from us either. Thank you. 4 CHAIRMAN GOLDNER: Thank you. Sorry 5 about the microphone shortage back there. 6 And Southern New Hampshire Services? 7 MR. CLOUTHIER: Nothing from Southern New Hampshire Services. Thank you. 8 CHAIRMAN GOLDNER: Okay. Very good. 9 10 We can now move to Commissioner questions, 11 beginning with Commissioner Simpson. 12 CMSR. SIMPSON: Thank you, Mr. 13 Chairman. It's not often that we're asked to 14 15 adjudicate a proposal that shares such broad support. It's commendable to see the 16 17 collaboration between the coalition of parties 18 here today, including state agencies, utilities, 19 and advocates alike, as well as the public, as 20 represented in the comments that have been filed. 21 I'll note as well that I was pleased to 22 see the adoption of the ADR Program from a pilot. 23 I think demand flexibility is an essential 24 resource to better enable management of load and

1		costs.			
2	BY C	MSR. SIMPSON:			
3	Q	With respect to the market for appliances and			
4		products in New Hampshire, I'm curious to get			
5		your perspectives as the experts. What's the			
6		state of appliance availability that are not			
7		efficient? How do we enable a market where every			
8		appliance is efficient? Whether it offers active			
9		demand management flexibility, if there's smart			
10		integration within the device, how do we continue			
11		to transform the market?			
12	A	(Chambers) Thank you, Commissioner. I think			
13		we've seen, over the last several decades, that			
14		the appliance markets don't tend to transform			
15		absence the existence of standards to force them			
16		to be more efficient. And, so, that's why our			
17		incentives are needed. Absent those standards,			
18		lower efficiency options will be on the market,			
19		and consumers tend to prioritize the lower cost			
20		over the higher efficiency. And, so, our			
21		incentives help bridge that gap.			
22		Certainly, we have seen some success in			
23		other states, in other regions of the country, in			
24		establishing appliance standards that force			

1		everything in the market to be at that higher					
2		efficiency level. That is a pathway that is					
3		something the state could consider. You do					
4		occasionally run into problems with federal					
5		preemption when you try to do stuff like that.					
6		But that certainly would be the most direct way					
7		to force that sort of top-down efficiency.					
8	A	(Downes) I would just add that there are federal					
9		standards for appliances that are continually					
10		evolving that are generally under the authority					
11		of the federal Department of Energy. And					
12		there's a ENERGY STAR rating tends to be the					
13		highest tier or higher tier. And, so, you've got					
14		this sort of march of minimum efficiency, and					
15		then ENERGY STAR efficiency, and they kind of					
16		work in tandem.					
17		And we do a review annually of what the					
18		efficiencies are, whether new federal standards					
19		have been implemented, in which and whether					
20		new ENERGY STAR standards have been implemented,					
21		we change the minimum efficiency that qualifies					

for a rebate, and we change the -- if necessary, change the delta between the standard efficiency and the high efficiency, so that we claim the

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23

1		savings that is between the two.					
2		And, you know, there's market studies					
3		about how much penetration and saturation of					
4		certain efficiency ratings there are in the					
5		country, and regionally, and we keep an eye on					
6		those. As well as our vendors do that as well,					
7		when they work with us, to make sure that we're					
8		constantly pushing the envelope of what the most					
9		efficient products are.					
10	A	(Peters) One more thing to add. You mentioned					
11		the demand response programs and connected					
12		appliances. So, right now, thermostats are					
13		orimarily the demand response kind of in-home					
14		available opportunity. But we are keeping an eye					
15		on new offerings of connected appliances that are					
16		appearing in the marketplace.					
17		And we would need to evaluate over time					
18		whether any of them would be potential demand					
19		response program items. But that is something					
20		that we will be looking at over time as those					
21		enter the market.					
22	Q	Thank you for that. I'm a time-of-use rate					
23		customer, and I'm very mindful about when I am					
24		utilizing my home washing machine and dryer, my					

1		dishwasher, when I'm charging my car.
2		Can you elaborate on the integration of
3		time-of-use rates and automatic demand
4		management, as available in the products that
5		these programs incentivize today? How is that
6		marketplace evolving? What are you seeing in
7		terms of real functionality? And, then, within
8		your systems, within the utility, how are you
9		thinking about, when you update your systems, to
10		enable more active demand management, from the
11		utility's perspective?
12	A	(Peters) I'll start. I think some of that is a
13		little bit outside of my knowledge purview on the
14		efficiency programs. But you make an important
15		point, that there are a lot of connections
16		between all of these things, and they're growing
17		stronger over time.
18		I think, in terms of kind of automatic
19		demand response, that's not a place that we are
20		at yet. I think it's going to be an interesting
21		area of opportunity going forward.
22		So, we don't have anything integrated
23		into this Plan that really addresses that. But I
24		think it would be important for us, in the

Carroll | Demeris | Stanley | Culbertson | Woods ] Efficiency Departments, to be communicating with 1 2 our Rates and other departments. 3 And time-of-use rates, similarly, we 4 don't address a time-of-use rate objective in 5 this filing. But it's going to require a lot of 6 coordination across our utilities as those things 7 get looked at in other dockets, and making sure that we're integrating both pieces. 8 So, I'm not sure if any other witnesses 9 10 have comments on that. 11 (Chambers) I'll just say, I think our current Α Demand Resource Programs and time-of-use rates 12 are sort of two sides of the same coin, right, a 13 14 stick-and-a-carrot approach. 15 [Court reporter interruption.] 16 WITNESS CHAMBERS: I'm so sorry. Maybe 17 I should just stand up. 18 CONTINUED BY THE WITNESS: 19 А (Chambers) Our current Demand Response Programs 20 and time-of-use rates are two sides of the same coin, a carrot-and-a-stick approach. Even if you 21 2.2 were to move, as we're going to do with AMI and 23 time-of-use rates, and as that all evolves, 24 consumers still need help understanding how to

[WITNESSES: Peters | Lemenager | Chambers | Chen | Downes |

1		best manage their energy, in order to optimize						
2	their charging under a time-of-use rate.							
3	And, so, we would continue all the							
4		great relationships we have, we have device						
5		manufacturers and thermostat manufacturers to						
6		allow consumers to opt in to us controlling their						
7		devices, in order to make sure that they're not						
8		incurring unnecessary costs under a time-of-use						
9		rate structure.						
10	BY C	MSR. SIMPSON:						
11	Q	And maybe you might, and anybody on the panel,						
12		might elaborate on how the programs enable you to						
13		reach out to your customers more directly, and						
14		engage with them on these topics, educate, what						
15		are the options that are available to them? If						
16	you might elaborate, for different types of							
17		customer classes?						
18	A	(Chambers) Sure. Well, I think that the major						
19		advantage of having these programs sit with the						
20		utilities, because we already have that customer						
21		relationship, they are coming to us, they are						
22		saying "help me", "help me with this bill", "help						
23		me manage my energy use". And, so, we have a lot						
24		of natural touch points with our customer base						

1		already that allow us to do that type of						
2		education.						
3		And, then, of course, we also do very						
4		deliberate additional outreach and education on						
5		top of that, marketing campaigns. We'll send						
6		emails to our customer base. We do postcards, we						
7		do bill inserts, that sort of thing?						
8	A	(Downes) Unitil and Liberty have behavior						
9		programs as well, and that's another means of						
10		communicating with folks about their energy use.						
11		So, it's an additional messaging that gives						
12		hints, and such as "do your laundry at night",						
13		"wash in cold water". You know, I think those						
14		kinds of things are becoming more common and more						
15		integrated into the energy efficiency programs,						
16		but also into the Company's awareness of customer						
17		communication as well.						
18	Q	Is that the Home Energy Reports Program?						
19	A	(Downes) That's correct, yes.						
20	Q	And that's a program that Liberty and Unitil,						
21		both gas and electric, offer, correct?						
22	A	(Downes) Yes. And I will say that, you know,						
23		Eversource can speak to this, too, they also have						
24		communication outreach to their customers.						

1	Q	Uh-huh.					
2	А	(Downes) What Liberty and Unitil are doing					
3		differently is that we're we've got a					
4		treatment and a control group that allow us to					
5		identify the actual savings resulting from the					
6		intervention of the Home Energy Reports going to					
7		the treated, you know, the treatment group of					
8		customers. So, that allows us to claim the					
9		savings in the energy efficiency programs.					
10	Q	So, from those reports, you're actually					
11		collecting data, analyzing it, interpreting the					
12		results, and then implementing a change into how					
13		you're communicating with those particular					
14		customers in the future?					
15	A	(Downes) It's not necessarily that complicated.					
16		It's really looking at the usage of a treatment					
17		group, which is receiving the Home Energy					
18		Reports, and a control group, which is data, you					
19		know, statistically the same, but is not					
20		receiving the interventions and measuring the					
21		difference over a period of time, over a billing					
22		period.					
23		There is the vendors for the program					
24		is very sophisticated, it's Oracle, which is able					

	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]						
1		to do some of that analysis. We just had a					
2		meeting the other day about how we're going to be					
3		rolling out a new design and a couple of tweaks					
4		to the intervention starting at the beginning of					
5		next year.					
6		So, yes, it's a constant sort of					
7		evolution of how to best message, keep things					
8		fresh, not allow them to go stale. And these are					
9		learnings and interventions that I also speak to					
10		other folks at the Company about. So, there's					
11		definitely learning that goes across departments.					
12	Q	Is there a vision to expand that program past the					
13		control group?					
14	A	(Downes) We have folks who drop out of the					
15		treatment group, and then we have to replace them					
16		with folks who are not in the treatment group					
17		now.					
18	Q	In the treatment group, not the control group?					
19	A	(Downes) Yes. Exactly. So, there's a tension					
20		there, because there are probably more that					
21		more energy savings that could be had by					
22		expanding the group. But, then, you would lose					
23		the statistical ability to measure what savings					
24		you're getting. So, it's a bit of a tension					

1		there. So, it is definitely something that, you						
2		know, we consider when we re-up [sic] the						
3		program, yes.						
4	Q	And what type of information is unique from those						
5		reports? Like, how does it vary from an email						
6		that I get from my Nest, that looks at my monthly						
7		usage or temperature? Or, from my sense, you						
8		know, what's unique in those reports? What are						
9		you trying to communicate to customers?						
10	A	(Downes) So, I would hazard a guess that you may						
11		be more aware of your energy use and interested						
12		in that than the average person, just a guess.						
13		And, so, it may not differ a whole lot from what						
14		you're getting from those.						
15		The difference is that you are paying						
16		very close attention, because you're interested,						
17		and you have a professional, you know, background						
18		in it, whereas most people do not. And, so,						
19		they're opening a piece of you know, opening a						
20		message and saying "Oh, I hadn't thought about						
21		using my washing machine at night", whereas I'm						
22		guessing you have already figured that out.						
23	Q	And that's really the goal, to engage more						
24		people?						

1	A	(Downes)	Yes.	Exactly.
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2	A	(Stanley) Yes. One of the key differences							
3		between the reports that Unitil and Liberty are							
4		issuing to their customers for that program, as							
5		compared to the messaging you might be getting							
6		from your smart thermostat separate from this							
7		program, is we're providing comparative messaging							
8		of your usage, compared to a peer group. And the							
9		premise of the program is that, by providing you							
10		that comparative analysis, it will be motivating							
11		to you to change your behavior, because you're							
12		seeing directly how you compare to your peers.							
13		And that's a key driver of influence for the							
14		program.							
15		So, I suspect that's a key difference							
16		from information that you might not be							
17		receiving							
18	Q	Uh-huh.							
19	A	(Stanley) from your smart thermostat device on							
20		its own.							
21	Q	Thank you. So, the Plan discusses multi-family							
22		buildings with more than four units. You know, I							
23		think about some of the most vulnerable							
24		populations, income-eligible individuals.							

[WITNESSES:	Peters L	emenager	Chambers Chen	Downes
Carrol	l Demeris	Stanlev	Culbertson Woo	ds]

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1		How are those multi-family buildings
2		served under the Plan?
3	A	(Peters) Sure. So, there are a couple different
4		ways that multi-family buildings could be served.
5		The first is through the income-eligible
6		programs, as you noted. Housing authorities
7		typically qualify for income-eligible services,
8		as well as any building where 50 percent or more
9		of the residents are income-qualified,
10		income-eligible residents. We will serve that
11		building through the income-eligible programs.
12		So, that service is 100 percent incentive, and is
13		delivered through our partnerships with Community
14		Action Agencies across the state.
15		On the nonincome-eligible residential
16		side, there are two pieces to it. First, some of
17		those buildings have commercial meters for joint
18		space for kind of a commercially metered heating
19		in some cases for gas buildings. And those
20		commercially metered aspects of multi-family
21		buildings are served through the C&I program
22		offerings.
23		We have added in this Plan an ability
24		to further serve multi-family buildings through

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1		our Residential Home Performance offerings. In
2		the past, Home Performance, which is the
3		Residential Weatherization Program, primarily
4		focused on one- to four-family homes. That was
5		partially to meet a kind of federal ENERGY STAR
6		designation for Home Performance. That federal
7		"Home Performance" kind of registered trademark
8		has gone away, actually. And, so, in this Plan,
9		we are proposing to treat multi-family
10		residential buildings through a very similar
11		approach to our one- to four-unit for
12		weatherization. So, a contractor would go in and
13		do an audit, and make a proposal, and we would
14		provide incentives, based on the units, for those
15		multi-family buildings.
16	Q	And it sounds like there's a distinction between
17		residential and C&I customer types?
18	A	(Peters) Uh-huh.
19	Q	Is that dependent on the number of units in a
20		multi-family building?
21	A	(Peters) It's dependent upon the metering. So,
22		the funding sources, whether it's from the C&I
23		Program or the Residential Program, kind of gets
24		tied to the meter, because that's how they're

[WITNESSES:	Peters Lemenager Chambers Chen Downes	
Carrol	Demeris Stanlev Culbertson Woods]	

i		Carroll Demeris Stanley Culbertson Woods
1		paid in. We do try, though, to coordinate
2		internally, so that the customer is not trying to
3		kind of figure out "Well, what's commercial?"
4		"What's residential?" That's done with really
5		good communication with our vendors. So,
6		typically, it's one contractor, or a couple
7		contractors that we work with, that will go in,
8		and they can help coordinate on the back end, is
9		kind of how we do those incentive payments, while
10		trying to make it as streamlined as possible for
11		the customer.
12		It is an area that requires
13		coordination. I think that's something we
14		continue to hope to improve upon, both between
15		gas and electric companies and commercial and
16		residential programs. But, I think, you know,
17		it's something that's important for the customer
18		to be as streamlined as possible, and for us to
19		work on doing that coordination on the back end.
20	Q	And, when you say "metering", is that identical
21		to the type of customer, whether it's a
22		commercial customer or a residential customer?
23		So that the costs that are being recovered to
24		provide the services through the System Benefits

	[WII	<pre>INESSES: Peters Lemenager Chambers Chen Downes      Carroll Demeris Stanley Culbertson Woods]</pre>
1		Charge, that they're allocated appropriately?
2	A	(Peters) That's correct. It's about the rate
3		code that they are on.
4	Q	Okay. Thank you. How would you suggest that we
5		broaden access to equitably impact the program
6		for C&I budget sectors, as well as residential?
7		You know, is there an allocation that you
8		struggle with? How do we have the greatest
9		impact for these particular types of customers?
10	A	(Peters) Are we kind of sticking with
11		multi-family customers in the allocation?
12	Q	Yes.
13	A	(Peters) I don't think at the moment that there
14		is an issue or concern with allocation of budget
15		for these properties. I do think it's a good
16		opportunity, in this Plan, we're going to start
17		doing more residential multi-family properties,
18		with the expansion of the Home Performance
19		offering. So, we may learn some things about how
20		much opportunity is out there, as we start to
21		reach out and market to these buildings.
22		I think, less than budget allocation,
23		an important consideration is going to be
24		building up the contractor network, who is kind

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1		of focused on serving multi-family buildings.
2		The energy audits can be a little bit different,
3		because all the units are connected. They're
4		working sometimes with condo associations. So,
5		there are some delivery aspects that are new,
6		that we're going to work with our contractors on.
7		But I think the budget allocation
8		should be supportable, and, again, commit [sic]
9		upon us behind the scenes to make sure we're
10		assigning the right costs to the commercial rates
11		and the residential rates.
12	A	(Stanley) And I would say, for the multi-family
13		sector, the bigger friction point or challenge
14		for the programs, is where you have a dynamic
15		between the tenants in the building, if they're
16		paying the utility bill, versus the building
17		owner, if they're not paying the utility bill
18		directly, they are typically less motivated to
19		make enhancements to the building, if it's not
20		going to materialize into energy savings to them
21		directly.
22		So, that's typically the barrier that
23		we face in serving the multi-family market.
24	Q	That's an interesting point. How do we ensure

	[WI]	<pre>INESSES: Peters Lemenager Chambers Chen Downes      Carroll Demeris Stanley Culbertson Woods </pre>
1		that, in those cases, where it's the customer
2		paying the bill, that they receive the benefit,
3		as opposed to the landlord? How do we ensure
4		that they're retaining the benefit?
5	A	(Stanley) Well, in those cases where the customer
6		is paying the utility bill, but they're not the
7		owner of the building, they're not the one who
8		can have decision-making authority over the
9		project being completed. If that project was to
10		be completed, the customer, who is paying the
11		utility bill, they are getting the benefit from
12		the resulting energy efficiency measures that are
13		installed. They're going to see a lower energy
14		bill from that.
15		Again, the challenge is convincing the
16		building owner to make those investments.
17	Q	And, in your experience, how have you dealt with
18		those challenges? How have you resolved issues
19		where maybe a landlord was not amenable to an

20 upgrade or a new appliance that the customer 21 rightly qualified for?

22 A (Stanley) It's trying to depict the value of the 23 services that they're going to be receiving that 24 benefits the property overall, and that enhances

1		the value of the property. And, if that provides
2		them a long-term a longer-term value for that
3		structure moving forward, as tenants move in and
4		move out, in terms of what they can offer as a
5		property.
6		So, it's a challenge. It typically
7		requires higher incentives to convince the
8		customer to move forward, or the building owner
9		to move forward.
10	A	(Downes) I know that this is not only a challenge
11		with residential properties, but with commercial
12		properties, where there's a split incentive as
13		well, between the tenants of, say, a strip mall
14		and the owner of that strip mall. If the tenants
15		are paying the electric bill, there's not a lot
16		of incentive for the owner of the building to
17		make the upgrades. And, so, the incentive being
18		"Hey, there's a NHSaves program that can help
19		improve the building and lower the electric or
20		natural gas cost for your tenants, and we will
21		help you identify a contractor to come in and do
22		that work."
23		So, it is I mean, it's a known
24		barrier and a known challenge across the world of

	[WI]	<pre>INESSES: Peters Lemenager Chambers Chen Downes      Carroll Demeris Stanley Culbertson Woods]</pre>
1		energy efficiency that we, you know, work to
2		overcome through education and upfront
3		incentives.
4	Q	Okay. Thank you. Thinking about new
5		construction, there's been a lot of development
6		in New Hampshire over the last few years. I'm
7		curious to get your perspective. What have you
8		seen working with developers, what have you seen
9		working with individual customers, who are
10		building new homes, building new properties?
11		What's the engagement process been like to
12		educate, with respect to more efficient products
13		and services that could enhance the properties,
14		and ensure, over the long run, a more efficient
15		customer?
16	A	(Peters) So, our ENERGY STAR Homes New
17		Construction Program is kind of designed to do
18		just that, and it focuses a lot on that builder
19		relationship. So, rather than incentivizing the
20		homeowner, who may not even, like, the building
21		hasn't been built yet, you don't know who the
22		homeowner is going to be, you want to incentivize
23		and work with the builder, to make sure that
24		those are built as efficiently as possible from

the ground up.

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2 So, we take an approach that is very 3 focused on relationship-building. We work a lot 4 with the Home Builders Association here in this 5 state, to make sure we're getting the word out to 6 builders. We've seen a lot of uptake from the 7 builder community over the past number of years. 8 This program has won an ENERGY STAR, I think, ten years in a row, perhaps, award. It's one of our 9 10 most awarded programs for those builder 11 relationships specifically.

12 And the incentive structure is, you 13 know, obviously, the construction of a new 14 building is a very costly enterprise. So, the 15 incentive structures here are really to get the 16 builders to kind of take that step up on 17 efficiency level. So, they have a lot of 18 investment going into the property that is their own investment. And the incentives in the 19 20 program are really intended to get them to be 21 aware and take the action to increase the 22 insulation levels, go for ENERGY STAR 23 certification, go for Passive House 24 certification, provide them with the kind of

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		resources and understanding they need to get
2		those certifications. And a small incentive
3		level to do that, too.
4	Q	Have there been changes to the ENERGY STAR
5		standards for new construction over the last few
6		years? Have there been changes in building codes
7		that have an impact? You know, how do you stay
8		abreast of those changes? How do you communicate
9		with the customers who are in the process of
10		constructing new properties?
11	A	(Peters) Certainly. So, as the state's building
12		code evolves, we need to integrate that kind of
13		base-level building code into the program design,
14		so that we are we are always incentivizing to
15		higher levels than builders would do anyway.
16		And the ENERGY STAR certifications have
17		also been increasing. So, whenever there's a new
18		kind of ENERGY STAR certification for new
19		construction, we are looking at that, and making
20		sure that we are incorporating those higher
21		levels into the program as well.
22	Q	Okay. Thank you. A question for Ms. Woods. I'm
23		very curious about the Co-op's Transactive Energy
24		Pilot Program. And I'd be interested in

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		learning, is there an interplay between these
2		programs and the Transactive Energy offering?
3		Whether they enable each other? How customers
4		might participate in both? What are the
5		opportunities that exist for your customers, and
6		so on?
7	A	(Woods) So, our Transactive Energy Pilot
8		[Court reporter interruption regarding
9		the use of the microphone.]
10		WITNESS WOODS: I may have turned it
11		off, instead of on. Sorry.
12	BY T	HE WITNESS:
13	A	(Woods) So, over the past couple of years, the
14		Co-op has worked to develop a Transactive Energy
15		Pilot. That's not something that's part of the
16		energy efficiency programs.
17	BY CI	MSR. SIMPSON:
18	Q	Uh-huh.
19	A	(Woods) I'm not really going to be able to speak
20		too in detail about it. But I guess I would say
21		is it's a very limited pilot. It is, you know,
22		currently, you know, it's really designed to not
23		work necessarily collaboratively with the energy
24		efficiency programs, because it's, you know,

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] we've really kind of designed it to be -- I just 1 2 want to make sure I'm going to be --3 Q Take your time. 4 Α (Woods) So that the purpose of that pilot is to 5 kind of work with our members to have kind of 6 their specific devices that work more smoothly 7 with it. So, a battery, or an EV charger, things like that, that are not necessarily currently 8 looked at in the energy efficiency programs. 9 10 And, so, for someone to participate at 11 this point, they need to be working with an 12 aggregator, who is going -- and I guess one thing 13 I would say is, you know, getting, I think Brandy 14 mentioned it earlier, is that, you know, 15 educating members and consumers on, you know, 16 looking at, you know, when they're using their 17 power is different than what people are really 18 used to, which is just an average rate, to say "I 19 turn my lights on, I turn my lights off." And 20 that, you know, to get people to pay that level 21 of attention is challenging. It's kind of the 22 carrot-and-the-stick approach. That you have, 23 you know, there can be a big downside if you're 24 not paying attention.

[WITNESSES:	Peters Lemenager Chambers Chen Downes	
Carrol	Demeris Stanlev Culbertson Woods]	

1		Carroll Demeris Stanley Culbertson Woods]
1		So, I guess what I would say is, you
2		know, currently, there is no intersection really
3		between our energy efficiency programs. And I
4		would say, going forward, things, you know,
5		connected devices certainly will provide
6		opportunities for that. But, you know, it's
7		really pretty specific.
8	Q	Okay.
9	A	(Woods) So, I guess and, so, I can't really
10		get too in-depth with more than that. Because,
11		like I said, it's a very limited pilot for us
12		right now. And we are we really need to be
13		spending time looking at that before it rolls out
14		more.
15	Q	Thank you. Appreciate that response. And I just
16		have one more.
17		And I'll tip off that I'd be curious
18		from the other parties, if they have a response,
19		the Consumer Advocate, DOE, any of the other
20		parties in the room, once they are on the stand.
21		I'm wondering about unique discount
22		rates for certain customer groups, such as
23		income-eligible customers. When I think about
24		the challenges they face, I think we have a

1		responsibility to uniquely consider the factors
2		that influence equitable participation in these
3		programs. And I wonder if the utilities have a
4		perspective on that? If they're if they have
5		experience implementing different discount rates
6		for income-eligible customers in other
7		jurisdictions? Any thoughts on that?
8	A	(Peters) I don't actually know of a different
9		discount rate that's being applied to
10		income-eligible customers. We do have different
11		program offerings, and, in some cases, allow for
12		the benefit-cost ratio for income-eligible
13		programs to be lower, as long as the whole
14		portfolio is carrying a positive benefit-cost
15		ratio.
16	A	(Chambers) Can I clarify what you mean by
17		"discount rate"?
18	A	(Peters) Yes. Okay.
19	Q	So, when you probably best if I leave that to
20		my colleagues.
21	A	(Chambers) Do you mean in cost-benefit testing or
22		like in the rate that they pay, like a discounted
23		electricity rate?
24	Q	No, in the cost-benefit. When you evaluate a

1		our our beaute beaute pour berebour woodb
1		particular project for a customer, and you apply
2		a discount rate to that measure, is there an
3		interest or a thought in having different
4		applications of discount rates for a customer
5		group, like income-eligible?
6	A	(Chambers) Thank you for that clarification. I
7		am not aware of any jurisdiction where the
8		discount rate that is used to net present value
9		the benefit stream associated with the energy
10		efficiency measures is differentiated by sector.
11		But, certainly, there are, in all of
12		the jurisdictions I work in, different benefit
13		streams, different additional benefit streams
14		that we quantify for the low-income sector, in
15		recognition of the greater needs of that sector,
16		and the more wide-ranging benefits that can be
17		achieved by decreasing the energy burden on that
18		sector.
19		And, so, in New Hampshire, the way that
20		looks is we have non-energy impacts under the
21		Granite State Test that are applied just to the
22		income-eligible sector, to try to quantify some
23		of those additional benefits. And it does give a
24		little bit of a boost to the benefit-cost ratio

	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	for that sector.
2	Q But you're not aware of that being leveraged,
3	that paradigm, in other jurisdictions?
4	A (Chambers) I have never seen someone use
5	different discount rates.
6	CMSR. SIMPSON: Okay. Okay. All
7	right. I appreciate all the responses.
8	That's all I have at this time, Mr.
9	Chairman. Thank you.
10	CHAIRMAN GOLDNER: Okay. I think what
11	we're do is we'll begin with Commissioner
12	Chattopadhyay, go for about fifteen minutes, and
13	then take a short break and return. So, just for
14	planning purposes, we'll get as far as we can in
15	fifteen minutes, and then take a break.
16	CMSR. CHATTOPADHYAY: Good morning.
17	BY CMSR. CHATTOPADHYAY:
18	Q So, Commissioner Simpson was asking about how do
19	participants or ratepayers participate in the
20	Energy Efficiency Plan. And there was some
21	discussion about, you know, that things are
22	different for C&I and residential customers.
23	Can you describe how the reach-outs
24	differ between those two categories? Like, when

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1		you're trying, if I let's say somebody is
2		interested in pursuing one of the programs,
3		depending on whether I'm a residential customer
4		or a commercial customer, how would the
5		experience be different?
6		And, please, whoever is willing to take
7		that question, feel free to respond.
8	A	(Chambers) So, I think that we try to offer as
9		many participation pathways as possible in order
10		to best meet customers where they are. So, for
11		both residential and commercial customers, one of
12		the simplest ways to participate is our
13		prescriptive rebate pathways. You buy a product,
14		you either submit the rebate form online or via
15		mail, we write you a check to cover the cost
16		of the incremental cost of that product. From
17		there and, also, again, all customers can
18		participate in that pathway.
19		From there, there is some
20		differentiation by sector. In particular, for
21		our largest C&I customers, I think most of the
22		utilities, speaking at least for Eversource, we
23		employ what he call the "Account Executive"
24		model. So, we have in-house staff that

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1	personally reach out to our largest customers,
2	and work with them to develop long-term energy
3	efficiency plans. I think you've seen some of
4	the press on our MOU that we signed with Lindt
5	for a multi-year energy efficiency project.
6	[Court reporter interruption.]
7	CONTINUED BY THE WITNESS:
8	A (Chambers) Lindt Chocolates. So, that would be
9	sort of the gold standard of what we would be
10	trying to do with that, that outreach model.
11	But, again, we meet customers where they are.
12	And, so, if they're just interested in doing one
13	project with us, we do that. If we can get them
14	to sign on for a multi-year, we do that.
15	But we really try, for those largest
16	customers, to do a little bit more hand-holding,
17	because their projects tend to be more complex
18	and need more of our oversight.
19	BY CMSR. CHATTOPADHYAY:
20	Q I understand your point about it's, speaking for
21	residential customers, you know, that these
22	prescriptive or, you have they have the
23	ability to go buy things and, you know, get the
24	benefit out of it.

	[WI]	<pre>INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]</pre>
1		But is there anything else that you do
2		to reach out to the residential customers
3		separately?
4		I mean, you talked about the Home
5		Energy Reports, but they are more like providing
6		information. I'm talking about the statewide
7		energy programs. And, you know, so, can you
8		throw some light on that?
9	A	(Stanley) I'll start, I'm sure others can add
10		more information.
11		But there's a variety of initiatives we
12		do. Whether it's from and this pertains to
13		residential/nonresidential customers, whether
14		it's more mass markets, communications, something
15		more akin, and you mentioned, the Home Energy
16		Reports, which is very customer-specific.
17		We also emphasize, in both sectors,
18		residential/nonresidential, the importance of
19		engaging with trade allies, who, in many cases,
20		they're the salesperson, they're the person
21		engaging with customers, the residential customer
22		directly, to introduce our programs and to help
23		actually sell a job.
24		For our natural gas customers, for

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1	example, typically, the sales point of
2	introducing our equipment rebates for an upgraded
3	heating system, water heating system, it's not
4	necessarily the utility, it's actually their
5	contractor that they're engaging with when
6	they're put in the situation where they need to
7	have an upgrade.

8 So, a key focus for our programs is 9 building relationships with those trade allies, 10 with those contractors, so that they're familiar 11 with our programs, they understand the process of participation, they understand the value of the 12 incentives, and how that can help them sell jobs, 13 and that they're presenting that information 14 15 effectively to customers to participate in our 16 programs.

17 We have customers who contact us 18 directly regularly, who ask us questions about 19 how they can reduce their energy bill. We give 20 them information about our programs. But, 21 ultimately, we're not necessarily the entity 2.2 installing the equipment for them. They have to 23 work with someone else, a contractor. So, that's 24 where it's very important for us to build up

1	
1	relationships with those contractors, who are
2	that front-end working with the customer, in
3	order to educate customers about our program
4	offerings and how they can participate. And
5	that's a key part of our programs being
6	successful is that relationship. So, that's an
7	element that's important.
8	Brandy Ms. Chambers, sorry,
9	mentioned the Key Account relationship function
10	with our largest customers. That structure also
11	applies to municipalities. So, our
12	municipalities, even though we have small
13	municipalities, we take a similar approach, in
14	having a very personalized one-on-one
15	relationship with our municipal customers, where
16	we can review their portfolio of properties. We
17	can bring them up to speed on what they could
18	take advantage of, in terms of how they can
19	reduce their energy usage across all their sites.
20	And that's an important function for us, in terms
21	of disseminating information about our programs,
22	and getting an engagement and participation.
23	Small business customers, it's very
24	challenging, because energy may or may not be a

1		priority to them. Again, a focus on trade allies
2		is very important. Working with equipment
3		distributors, supply houses, where a customer
4		might move forward with buying a certain piece of
5		equipment, making sure that, when they're in that
6		position of buying a new widget or whatnot for
7		their facility, that at those supply houses those
8		entities are giving them information about our
9		programs, informing them about what they could
10		take advantage of. Because, oftentimes, those
11		customers, those small businesses, they're not
12		aware of what they could take advantage of. And,
13		so, it's important to be present in a lot of
14		places, because customers are in a lot of places.
15		So, that's some additional perspective.
16		I'm sure my colleagues could add more
17		information, if they'd like.
18	A	(Peters) I'll add just a little more. I agree
19		completely with everything that's been said
20		already.
21		Just in terms of overall marketing, we
22		jointly do kind of "brand awareness" marketing in
23		the state. So, NHSaves, we want to make sure
24		that people know that NHSaves exists, that it is

1	a place to go for energy information, which will
2	then kind of lead them to our more specific
3	program offerings. So, you may see a billboard
4	once in a while, you may see an NHPR sponsorship.
5	We do a good amount of social media marketing,
6	which is very cost-effective. So, people kind of
7	see that "NHSaves", and they associate it with
8	energy savings, and contacting us for program
9	participation.
10	In addition, each utility and each
11	program does more direct and specific marketing
12	to our customers. So, for example, we can use
13	the monthly billing cycle and newsletter as an
14	opportunity to reach out directly, individually,
15	to our customers.
16	Perhaps, a program is wanting to spur,
17	we'll do like a special offer on dehumidifiers at
18	some point during the year through our online
19	marketplace, to kind of drive additional
20	adoption.
21	Another example, at Eversource, we
22	wanted to increase participation in our Home
23	Performance Program this summer. And, so, we
24	actually did some internal research, and we sent

	[WIT	<pre>INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]</pre>
1		out a mailer to all homes that were built between
2		1940 and 1980. They tend to be very ripe for
3		opportunity for efficiency improvements in that
4		kind of vintage of home. And, so, we did a
5		direct mailing to those customers with
6		information about the program, and asking them to
7		contact us.
8		So, there are a lot of methodologies.
9		You could do something similar with certain types
10		of small businesses. Maybe there's an offering
11		for refrigeration, and we reach out to all the
12		small supermarkets in the state, something like
13		that.
14		So, it can be both very customized, or
15		very broad, and we try to do a range of both, to
16		make sure that both awareness and, then, kind of
17		individual action to participate are included.
18	A	(Downes) I would just add one thing. That the
19		Products Program, which is where people can go,
20		and they're buying a piece of equipment, where
21		we're encouraging them and incenting them to buy
22		the most efficient piece of equipment that they
23		can. That's sort of the entry level. So, we go
24		from that with residential customers, all the way

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes|

[WITNESSES:	Peters Lemenager Chambers Chen Downes	
Carrol	Demeris Stanlev Culbertson Woods	

1		to a home upgrade, basically, insulation, air
2		sealing. And, then, you know, additional
3		feedback and advice to the customer about what
4		else they could do, replace this older fridge,
5		this second freezer you got in the basement, it's
6		not, you know, it's not got anything in it, you
7		should probably we have a recycling program
8		for that. So, that's a much more in-depth,
9		on-site, customer-specific set of interventions
10		that are that the savings of which are very
11		customized as well. And, so, it's not a
12		cookie-cutter thing. It's like this house is
13		going to be different than this house.
14		So, as everyone has been trying has
15		been saying, we try to reach the customer at
16		whatever place they're at, in terms of
17		interacting with an energy-efficient or, an
18		energy-using, you know, appliance, or their
19		entire home, we're trying to encourage them to do
20		the most efficient thing possible, and so that we
21		capture as many customers at wherever they're at
22		as possible.
23	Q	Thank you. So, before we take the break, I'm
24		going to change the topic a little bit.

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] 1 Whoever is the expert here, in terms of 2 the BC models that was submitted, or whoever are 3 the experts, feel free to chime in. 4 I, I mean, obviously, given my 5 training, I am focused on that modeling itself. 6 So, the first thing I'm going to ask is, the 7 importance of the BC ratio. So, if somebody was thinking about an economic activity that they 8 want to pursue, then they would sort of look at 9 10 the benefits resulting from it, and divide it by 11 what that agent -- economic agent has to spend, to get a sense of whether the ratio is greater 12 13 than 1.0 or less than 1.0. 14 So, if it's greater than 1.0, you would 15 agree that that agent would find it worthwhile 16 going ahead with the activity, correct? 17 А (Chambers) Yes. I think that would generally be 18 true. 19 Q Okay. 20 А (Downes) I would actually -- it depends. And not 21 to argue, but it depends on who the actor is. 22 So, for many of our --Okay. So, can I -- can I -- let's assume that 23 Q 24 actor is nonaltruistic.

1	A	(Downes) Nonaltruistic, okay. Well, no, not
2		necessarily. Because, if you're a firm with
3		multiple projects, limited capital budget, you
4		have to compare one investment to another. So,
5		even though both might be cost-effective, you're
6		going to
7	Q	But, bottom line, it still has to be greater
8		than B over Cs should be greater than 1.0,
9		right?
10	A	(Downes) It should be, but that doesn't guarantee
11		action.
12	Q	I understand. But that's the bottom line?
13	A	(Downes) Sure.
14	Q	Yes. So, okay. So, with respect to energy
15		efficiency, when I look at my benefits, I'm going
16		to look at my, whoever the agent is, will look
17		at whoever the ratepayer is, will look at the
18		incremental amount you're paying through the
19		electric bills, so let's take an example of
20		electricity here, and would also look at how much
21		that person is paying from his own pocket or her
22		own pocket, right? So, that would be the cost.
23		And then compare that with the benefits it's
24		going to see from it, to decide whether to

1		proceed with it or not. Will you agree with
2		that?
3		Again, there might be choices, that's
4		what you're looking for, the best alternative,
5		and I'm just using the economist's term. So, you
6		will go with minimum at the minimum, that the
7		ratios should be greater than 1.0, and you would
8		go for the best alternative.
9	A	(Downes) Yes. There are other real-world
10		considerations about whether the equipment is
11		available, whether you can find a contractor,
12		whether you know how to pick a contractor,
13		whether you have the staff on-site that can do
14		it. So, there's other considerations.
15	Q	Okay. Understood.
16	A	(Downes) Yes.
17	Q	Sometimes it's whether your wife is letting you
18		do it. No, I'm sorry.
19		[Laughter.]
20	BY CI	MSR. CHATTOPADHYAY:
21	Q	So, there are many considerations.
22	A	(Downes) Or husband.
23		CMSR. CHATTOPADHYAY: Chairman Goldner,
24		whenever, we can take a break, I'll come back

1	again.
2	CHAIRMAN GOLDNER: This looks like a
3	good time for a break. Let's return at ten of.
4	And, then, just for headlights, we'll
5	probably go to a little after noon, take maybe a
6	30-minute break, and then come back again. So,
7	if you need to get lunch or something, we can
8	allow more time, of course, if needed. But we'll
9	try to keep it going today to get through the
10	process as quickly as we can.
11	So, off the record, returning at ten
12	of.
13	(Recess taken at 10:39 a.m., and the
14	hearing resumed at 10:53 a.m.)
15	CHAIRMAN GOLDNER: Okay. We'll go back
16	on the record, and resume with Commissioner
17	Chattopadhyay's questions.
18	BY CMSR. CHATTOPADHYAY:
19	Q So, I'm going to be sorry. I will be I'm
20	going into the BC models, to make sure I'm
21	understanding everything. But some of it will
22	also I know that it will come from the Energy
23	Efficiency Plan itself.
24	So, is my understanding correct that

1		the energy cost savings of 675 million is not
2		necessarily calculated in the BC models, but it
3		just takes the savings from there, and then uses
4		it to calculate that amount differently, right?
5	A	(Leménager) Correct. The 675 million is not from
6		the BC modeling.
7	Q	Okay. And, based on the responses I've gotten,
8		you had confirmed that that is entirely benefits
9		that will be accruing to participants?
10	A	(Leménager) Yes. That value is an estimate of
11		the avoided energy costs for participating
12		customers.
13	Q	Can you confirm that, in the BC models, when
14		you're trying to capture the benefits, they are
15		also entirely that accruing to participants?
16	A	(Chambers) No. The benefits that are calculated
17		within the benefit-cost model
18	Q	Yes.
19	A	(Chambers) accrue to the system as a whole,
20		which means that they accrue to both participants
21		and nonparticipants.
22	Q	And can you separate them out? I mean, what goes
23		to the participant and what goes to the
24		nonparticipants?

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1	A	(Chambers) No. The models are not set up to do
2		that. So, for example, if we take the avoided
3		capacity benefit stream, that benefit stream is
4		looking at the ISO-New England region as a whole,
5		and the average cost to build a new unit of
6		generation capacity. And we are saying we offset
7		ten megawatts of capacity, for example, it's not
8		possible to determine what portion of that
9		accrues to participating New Hampshire customers
10		versus all New Hampshire customers. You know,
11		the rate structures and the allocation factors
12		utilized by the ISO are too complicated to easily
13		be incorporated into a benefit-cost model.
14	Q	Can you, speaking for just the avoided energy
15		supply cost, are those only accruing to the
16		participants?
17	A	(Chambers) There are two categories of avoided
18		energy costs. One of which is DRIPE, the Demand
19		Reduction Induced Pricing Effect. The DRIPE
20		benefits would accrue to all ratepayers.
21		But I think you are correct that the
22		energy benefits, not inclusive of DRIPE, would
23		accrue to the participating customers.
24	Q	Okay. Is there a way for you to roughly indicate

1		how much of the total benefits is the avoided
2		energy supply costs? And I'm assuming the energy
3		savings that are reflected, those are the ones
4		that went into the calculation of the \$675
5		million separately, but the savings that you're
6		talking about there, you are confirming,
7		associated with the avoided energy supply costs,
8		are for the participants?
9	A	(Chambers) So, the 675 was calculated using a
10		different stream.
11	Q	Yes. So,
12	A	(Chambers) A totally different stream.
13	Q	Right now, I'm talking about now.
14	A	(Chambers) Yes.
15	Q	And, so, they go
16	A	(Chambers) You can clearly see, in the
17		benefit-cost model, on the "Calculations" tabs,
18		the energy supply cost benefits separate from the
19		other benefits.
20	Q	How does the energy sorry how does the
21		avoided energy supply costs compare with the
22		total benefits? Is it a big portion?
23	A	(Chambers) I don't know off the top of my head.
24		We could take that as a record request.

	[WI]	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1	Q	Would you agree that, with the models themselves,
2		you would be able to figure it out?
3	A	(Chambers) Yes.
4	Q	Okay. You were talking about the non-energy
5		benefits as well. Just briefly, explain to me
6		that how was that calculated? To the best of
7		my probing, it's based on some sort of a
8		percentage, like, 25 percent off, that's correct,
9		right?
10		But is that I know that there was
11		one category which had, like, \$405, roughly. So,
12		what I'm just trying to get a sense of, it was
13		kind of you didn't you didn't go granular, you
14		just assumed a percentage and calculated that,
15		correct?
16	A	(Downes) It's not actually a percentage. The
17		only so, there are non-energy benefits, such
18		as water savings, that I believe are included, so
19		for faucet aerators and whatnot, that the water
20		savings is incorporated as part of the model, as
21		part of the benefits. The only non-energy
22		impacts, or NEI, that are included in the primary
23		Granite State Test accrue to income-eligible
24		customers who have had their homes weatherized.

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		And there was an adder, not a percentage, of I
2		believe it is \$405 per customer, who has been
3		weatherized, per year, that is added to the
4		overall benefit stream in the primary Granite
5		State Test.
6		There are no other similar types of
7		adders or percentages for any of the other
8		programs or sectors.
9	Q	Okay. Where did that \$405 number come from?
10	A	(Downes) This was a calculation that was
11		developed by the energy I'm sorry the
12		Evaluation the EM&V Working Group, the
13		Evaluation, Measurement & Verification Working
14		Group. After the conclusion of an in-depth study
15		by a third party evaluator on all non-energy
16		impacts, in order to develop some understanding
17		and some elaboration of what had previously been
18		a straight adder. And the \$405 was a
19		conservative estimate on the part of the ${\tt EM\&V}$
20		Working Group, as to the benefits that would
21		accrue to a weatherized home in an
22		income-eligible customer's premise.
23	Q	Speaking about the GST, do you have a sense of
24		what benefits, including the one that you just

	[WI]	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		talked about, which is the income-eligible ones,
2		what percentage of the benefits are going to the
3		participants?
4	A	(Downes) I don't have a sense of that off the top
5		of my head, no.
6	A	(Chambers) I would also note
7	Q	And you don't have to give me a percentage, I'm
8		just okay. Is it predominant?
9	A	(Downes) I don't think I think we've looked
10		into this, and it is not really possible to
11		separate out the benefits to participants and
12		nonparticipants.
13	Q	Can you separate out the avoided energy supply
14		cost, plus this benefit that you're talking
15		about, which is for the participants, meaning the
16		income-eligible ones? Those two, relative to the
17		total benefit, can you tell me what that is?
18	A	(Chambers) We could take that as a record
19		request. But I would note that that \$405 does
20		not accrue exclusively to the participant.
21		So, when we have done these types of
22		studies in other jurisdictions, and I believe
23		informed the development of that 405, there are
24		benefits in there that accrue to the broader

	[WI]	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		system. For example, a big part of it is health
2		and safety, reduced emergency room visits. That
3		cost doesn't necessarily accrue to the
4		participant, that might accrue to Medicaid or
5		Medicare, or the broader system.
6		So, even that 405, we can tell you,
7		certainly, in the model, what the total value of
8		that is. But that does not accrue exclusively to
9		participants.
10	Q	So, let me understand you. So, with respect to
11		the income-eligible portion, you're saying
12		benefits that are captured in the model, they
13		accrue to both participants and nonparticipants?
14	A	(Chambers) That's correct.
15	Q	Okay. I'm just trying to make sure. Are there
16		benefits to the nonparticipants that have not
17		been captured adequately? Are there ways to
18		are you of the opinion that there might be better
19		ways to calculate the benefits accruing to the
20		nonparticipants, so that that gets counted in the
21		calculation of the benefits?
22		I'm just trying to understand, because
23		you cannot separate them out, because you haven't
24		really thought through it fully. Number two,

1		maybe a little bit for more effort into it would
2		help you to look at the benefits that the
3		nonparticipants are getting that have not been
4		captured. And, so, you will get a better sense
5		of the benefit-to-cost ratios overall, if that's
6		what was done.
7		So, I'm just trying to understand where
8		things are.
9	A	(Chambers) So, I think you're asking two
10		different questions there.
11	Q	Yes.
12	A	(Chambers) One is, "Could we do more work to try
13		to determine what accrues to, from the existing
14		benefit streams, how much accrues to participants
15		versus nonparticipants?" We could try. But I
16		just don't think it's possible to do that, and
17		have a numerically robust result. It's just a
18		very challenging exercise.
19		And the second question is, "Are there
20		more benefit streams that we haven't yet
21		quantified?" I think, certainly, we are always
22		open to looking at what other benefits these
23		programs are generating that maybe we don't have
24		a value for yet.

[WITNESSES:	Peters	Lemenager	Chambers Ch	nen Downes
Carroll	Demeri	s Stanlev	Culbertson	Woods]

i		<u>Carroll Demeris Stanley Culbertson Woods]</u>
1	A	(Downes) I would just add that the Granite State
2		Test, in being developed, the report that
3		resulted from that identified hard-to-quantify
4		market impacts that the Commission, that you all
5		asked us to investigate last year, which we did.
6		And it resulted in two studies, one on market
7		barriers and one on economic impacts. And
8		there's a great deal of information in there
9		about hard-to-quantify impacts from the programs
10		that are outside of the Granite State Test, but
11		still exist. But the Granite State Test is what
12		we have presented in the case.
13	Q	I understand. I'm just trying to be better
14		informed here. And, in the same vein, like you
15		have mentioned, it's you haven't looked at
16		separating the benefits that go to the
17		participants and the nonparticipants. And you
18		are saying that it's a difficult exercise.
19		But would you, you know, would it be
20		okay to look at that in the future? I mean, like
21		there may be a way to do it. And also consider
22		other benefits, the one that you mentioned which
23		are hard to quantify, but looking at what other
24		states are doing, how other analysts are

	[WI]	<pre>TNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]</pre>
1		approaching it, is that something you will be
2		willing to look at, like, in the future?
3		I think it's I'm trying to get more,
4		a greater comfort level, how that the benefits
5		are calculated. And I understand your point
6		about GST, it is what it is. But just for my
7		own.
8		And you don't have to answer, if you
9		don't know the answer right away. But I'm
10		curious whether you're willing to?
11	A	(Chambers) Certainly, we're always willing to
12		have a conversation.
13	Q	Okay.
14	A	(Chambers) But I think we would want to be sure
15		that that was done in a robust way, with
16		stakeholder involvement, as the development of
17		the original Granite State Test was.
18	Q	Okay. Are the benefits captured in the numerator
19		of the BC ratio is higher for TRCT, compared to
20		GST?
21	A	(Chambers) That's correct.
22	Q	Okay.
23	A	(Chambers) There are additional benefit streams
24		captured in the TRC.

-

1	Q	Okay. For a particular year's energy efficiency
2		programming, so, let's say 2024, just as an
3		example, the costs reflected in the GST, would
4		you agree that they're largely incurred by
5		nonparticipants?
6	A	(Downes) No. The costs are the utility
7		expenditures, which are funded by all ratepayers,
8		except for those in the
9	Q	So, ultimately, the ratepayers are paying for it,
10		right?
11	A	(Downes) Yes.
12	Q	Yes. I'm asking whether that cost is
13		predominantly paid by the ratepayers who are not
14		participating in the programs?
15	A	(Downes) It's paid for by all ratepayers equally.
16		So, to the extent that there are
17	Q	You are not giving me any new information. I
18		know it's paid by everyone. And it's the SBC
19		rate. I'm just asking
20		MR. CAMPBELL: Commissioner
21		Chattopadhyay, I apologize. I don't think Ms.
22		Downes was through with her response.
23		CMSR. CHATTOPADHYAY: Okay. I'll let
24		you continue.

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1		MR. CAMPBELL: And, just for purposes
2		of the record, you could please let her finish.
3	CONT	INUED BY THE WITNESS:
4	А	(Downes) To the extent that there are fewer
5		participants than nonparticipants, then, yes,
6		nonparticipants would be paying more than
7		participants.
8	A	(Chambers) In any given year. But, over time,
9		the idea is that most ratepayers would become
10		participants.
11	A	(Downes) And programs are designed to encourage
12		as broad participation as reasonably possible.
13	BY CI	MSR. CHATTOPADHYAY:
14	Q	Okay. For TRCT, that is not necessarily true, or
15		is it still true that the costs are predominantly
16		paid by the nonparticipants, the way you
17		described it?
18	A	(Downes) I don't know.
19	Q	Okay.
20	A	(Chambers) Well, the cost recovery is not
21		impacted by which cost-effectiveness test we're
22		using. The cost recovery mechanism is identical.
23		It
24	Q	I know, but I'm saying

1		[Court reporter interruption.]
2	CONT	INUED BY THE WITNESS:
3	A	(Chambers) The cost recovery mechanism, and which
4		ratepayers are funding the programs, is not
5		impacted by which benefit-cost test we're looking
6		at.
7	BY C	MSR. CHATTOPADHYAY:
8	Q	I understand. I'm just trying to ratepayers
9		are paying the cost. Trying to get a sense of
10		who pays what? And, for some of the
11		ratepayers are participants, the others aren't
12		participants, okay. And, with respect to the
13		TRCT, because participants' costs are also part
14		of the costs, I don't I'm not sure whether it
15		still holds that the the non-participants pay
16		most, or that's what I'm trying to understand.
17	A	(Chambers) I understand the question now.
18	Q	Yes.
19	A	(Chambers) So, the additional costs that are
20		incorporated as part of the TRC Test, as compared
21		to the GST, are entirely participant costs. They
22		are customer costs associated with the measures
23		incentivized.
24	Q	Do you know what percent it is of the total?

	[WI]	TNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1	A	(Chambers) I don't.
2	Q	You don't?
3	A	(Chambers) Not off the top of my head.
4	Q	Okay. But it's simply the participants' costs
5		relative to the Total Resource Costs, right?
6	A	(Chambers) That's correct.
7	Q	One could calculate it?
8	A	(Chambers) Yes.
9	Q	Okay. So, I'm going to change the topic a bit.
10		So, there was a response to one of the questions
11		that was sent out, which showed that the which
12		was comparing the incentives to the Total
13		Resource Cost. And do you agree that the
14		incentives, as a percentage of the Total Resource
15		Cost, for example, for 2022, differs across
16		different utilities?
17	A	(Stanley) I would expect so, because we all serve
18		different types of customers, with different
19		projects that are completed. So, there's going
20		to be variances, if you look at our total
21		projects completed.
22	Q	And I'm talking about the residential measures
23		that the utilities responded about. So, maybe I
24		should

		Carrorr Demetrs Stantey Carbertson Woods				
1	A	(Stanley) It depends on I'm sorry.				
2	Q	Go ahead.				
3	A	(Stanley) It may depend on which program. If				
4		that pertained to, let's say, just the ENERGY				
5		STAR Products Program, then the TRC that ratio				
6		would be the same for all the utilities at a				
7		measure level. But, if you're talking about a				
8		program such as the Home Performance with ENERGY				
9		STAR Program, there would be variances, in terms				
10		of the projects completed. So, you might see				
11		some differences between the utilities to some				
12		degree.				
13	Q	And it's and I also noted that those				
14		percentages, going back all the way to 2018 to				
15		2022, those percentages more or less remained				
16		kind of flat for Eversource and Liberty, but it				
17		fell quite a bit for Unitil. I'm just curious,				
18		what is going on?				
19	A	(Downes) I'm afraid I don't have sufficient				
20		information to respond to your question.				
21		[Chairman Goldner and Cmsr.				
22		Chattopadhyay conferring.]				
23	BY C	MSR. CHATTOPADHYAY:				
24	Q	So, there was a record request, it was PUC				

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] 2-002-04, and Unitil had responded, with Excel 1 2 files, as well as, you know, as a pdf. MR. CAMPBELL: Commissioner 3 4 Chattopadhyay, if I could? 5 I apologize for interrupting. But I 6 just want to put it on the record that it's 7 Unitil's position that the PUC record requests are not part of the evidentiary record in this 8 9 proceeding. 10 However, if Ms. Downes can answer the 11 question, she's certainly free to go ahead and do 12 so. BY THE WITNESS: 13 (Downes) I'm looking over the shoulder at my 14 А colleague's Excel spreadsheet, and I'm afraid I 15 still don't have enough -- I don't understand the 16 17 specificity of your question enough to be able to 18 answer. 19 [Chairman Goldner and Cmsr. 20 Chattopadhyay conferring.] 21 BY CMSR. CHATTOPADHYAY: 2.2 Q Do you have the Excel files? 23 Α (Downes) I believe so. 24 0 And can you look at the tab "2022"?

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	A	(Downes) Yes.
2	Q	So, if you, just using a very rough
3	A	(Stanley) I'm sorry to interrupt. Are you
4		referring to Unitil-Electric or Unitil-Gas?
5	Q	Unitil-Electric, sorry. I should have been
6		clear. So, if you just it's a simple way to
7		look at it. So, if you look at the Column F?
8	A	(Downes) I'm seeing "Volume of Incentives
9		Achieved"?
10	Q	Yes.
11	A	(Downes) Okay.
12	Q	So, if you just add them up all the way, and then
13		also try to get the TRC per measure, multiply it
14		by the number of measures, and create another
15		column maybe, you will notice that the total
16		amount there would be higher than what the sum
17		would be for Column F, okay?
18		So, I'm just I'm trying to be as
19		general as possible. So, you could get a
20		percentage of what those incentives are relative
21		to the Total Resource Cost. And, because we're
22		trying to do it on-the-fly, I think I'm better
23		off not going there, okay.
24		Would you, subject to check, accept

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]		
1		that the percentages for 2018, and then 2019,		
2		2020, 2021, they have been sort of going down?		
3	A	(Downes) The percentage of incentive to Total		
4		Resource Cost"?		
5	Q	Yes.		
6	A	(Downes) By measure or overall?		
7	Q	Overall. And, you know, obviously, by measure,		
8		it has to happen.		
9	A	(Downes) I haven't done the math.		
10	Q	Yes.		
11	A	(Downes) So, I would want to check that.		
12	Q	Okay.		
13	A	(Downes) But I would also note that the measure		
14		mix or the types of measures that are offered		
15		each year changes.		
16	Q	Uh-huh.		
17	A	(Downes) And the volume of productivity or		
18		rebates per measure also changes each year. And		
19		sometimes the rebates may change, the TRC may, in		
20		fact, change. I don't have all of that		
21		information at my fingertips.		
22	Q	Okay.		
23	А	(Downes) But there is a reasonable path to say		
24		that the ratio, it would be expected to change		

-

1		over time.			
2	Q	And my question was I mean, I was assuming			
3		that you had all sort of worked together, but, I			
4		know, that's a wrong assumption. The reason I'm			
5		asking is, for the other utilities, it has			
6		remained the same. But I think your explanation			
7		is it could, because of how different measures			
8		have come in, brand new, or some have dropped			
9		out, and all of that.			
10	A	(Downes) Correct.			
11	Q	So, just trying to understand that.			
12	A	(Downes) Correct.			
13	Q	Okay.			
14	A	(Downes) Can I clarify please?			
15	Q	Sure.			
16	А	(Downes) Whether is the record request still			
17		standing or not?			
18	Q	No, it's not standing.			
19	A	(Downes) Okay. Thank you.			
20	Q	I'm just I'm trying to keep it as general as			
21		possible.			
22	A	(Downes) Thank you.			
23	Q	In some of the cells, and now, again, talking			
24		about Unitil, I noticed the TRC is smaller than			

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1		the incentive. And that didn't happen for the
2		other utilities at all, for the entire 2018
3		through 2022.
4		So, for example, if you go to 2022 for
5		Unitil, if you go to Row 21, the TRC per measure
6		is smaller than the Incentive per measure. And,
7		likewise, if you go to Row 26, the TRC per
8		measure is definitely lower than the Incentives
9		per measure.
10	A	(Downes) Yes.
11	Q	What is going on? Is that a mistake or there's a
12		reason for it?
13	A	(Downes) I would have to speculate, which I'm
14		hesitant to do. And this information is based on
15		reporting. So, we're pulling the information out
16		of our benefit-cost model reporting. So, there
17		either is a mistake, and it was transposed
18		incorrectly from the benefit-cost model to this
19		Excel document. Or, it's possible that the
20		standard rebate for a measure is "X", say "\$40",
21		but that, in reality, we had a large volume where
22		we divided the total rebate by the number of
23		whatever the measure was, dehumidifiers, and got
24		the precise rebate per unit, and that's what we

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] reported, and that it was out-of-synch with what 1 2 the standard rebate was. 3 But I am definitely speculating. But 4 that does occasionally happen, where there are 5 multiple measures for a particular rebate that 6 don't match the actual rebate that is in the 7 standard model. CHAIRMAN GOLDNER: If I can jump in 8 9 quickly, Commissioner Chattopadhyay? CMSR. CHATTOPADHYAY: 10 Yes. 11 CHAIRMAN GOLDNER: Ms. Downes, it seems 12 like we're in a -- it sounds like you're not 13 comfort with the answers. We have a couple of 14 options available. 15 We can -- if you need some time during 16 a break, maybe to check some things out, to more 17 directly address Dr. Chattopadhyay's questions, that would be fine. We could return to those 18 19 questions on the 31st, giving you some time to do 20 some research. 21 But I just want to make sure that 2.2 Commissioner Chattopadhyay's questions are 23 answered. And I know that there's some technical 24 backbone to those questions that you might need

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] further research. 1 2 MR. CAMPBELL: Yes. And, Chairman 3 Goldner, if I may? 4 CHAIRMAN GOLDNER: Yes. 5 MR. CAMPBELL: I mean, certainly, Ms. 6 Downes can speak for herself. But I would 7 suggest that trying to do it on-the-fly, at a break, might be a little bit challenging, --8 CHAIRMAN GOLDNER: A little too fast. 9 MR. CAMPBELL: -- given the nature of 10 11 the questions. So, I think your suggestion to come back to it on the 31st is a sensible one. 12 13 CHAIRMAN GOLDNER: Okay. Thank you. 14 Thank you, Attorney Campbell. That sounds fine. 15 Yes. 16 BY CMSR. CHATTOPADHYAY: 17 Q So, and since we are talking about 2022, I'm just 18 going to flag that a similar situation for 2019, 19 2020, 2021, for at least one cell, okay, in each 20 of them. 21 And, for me, it's just a little bit 22 baffling why is that. So, the real question for 23 me is, should that -- is that even possible, that 24 the TRC per measure is greater than the

1		incentive sorry smaller than the incentive
2		per measure?
3	A	(Chambers) As a general rule, that is possible.
4	Q	That is what?
5	A	(Chambers) That is possible, yes.
6	Q	Can you explain?
7	A	(Chambers) We, as a matter of good design, target
8		our incentives to be lower than the TRC. But
9		there are certain measure types where that
10		incentive still isn't moving the needle for a
11		customer. And we feel we need an even higher
12		incentive to move the customer to the efficient
13		option. And the reason that is, is because the
14		barriers that prevent customers from adopting
15		efficient equipment are not only monetary. There
16		are other barriers. The customer may just not
17		like the way the equipment looks as much, it may
18		not have the same features that they want.
19		And, so, you may need to not only
20		overcome the cost difference between the base
21		model and the efficient model, but, in fact, give
22		customers a little bit extra reason to choose the
23		efficient model, because they feel like they're
24		giving something else up that isn't more

1		qualitative.			
2	Q	But that cost is, the way this is reflected here,			
3		is not borne by the utilities or the ratepayers?			
4		I'm just not understanding. The Total Resource			
5		Cost, that should be part of the payments being			
6		made by the ratepayers. So, how does			
7	A	(Chambers) No, no, no. So, again,			
8	Q	That can I finish? So, it's not really making			
9		sense to me that, for example, for Unitil, for a			
10		dehumidifier recycling, its TRC is zero, and the			
11		incentive is \$30. I think I'm just trying			
12		to I'm not sure I followed what you're saying.			
13		And the other question I have is, that			
14		this not this is only happening for Unitil,			
15		and not happening for other utilities.			
16		So, I think I would leave your			
17		suggestion to go back and try and explain it to			
18		us later would be appreciated.			
19	A	(Downes) We'll do that.			
20	Q	Are there measures where the incentives are sort			
21		of standardized, regardless of which utility are			
22		we talking about?			
23	A	(Stanley) Absolutely, yes. Particularly,			
24	Q	Could you give some examples?			

[WITNESSES:	Peters I	lemenager	Chambers Ch	nen Downes
Carroli	l Demeris	SIStanlev	Culbertson	Woods]

		Carrorr   Demerrs   Stanley   Curbertson   Woods					
1	A	(Stanley) Particularly, in the ENERGY STAR					
2		Products Program. So, incentives, such as for					
3		energy-efficient or, ENERGY STAR rated					
4		refrigerators, ENERGY STAR clothes dryers, ENERGY					
5		STAR rated clothes washers, natural gas					
6		energy-efficient furnaces, boilers, smart					
7		thermostats. Those are a few examples.					
8	A	(Peters) Could I make an addition there? Thank					
9		you.					
10		There are also some programs where					
11		perhaps in the model the incentive amount is not					
12		the same for each utility, but the approach is					
13		the same. And the example I'm thinking of is the					
14		Home Performance Program. We're providing a 75					
15		percent incentive up to a cap for each customer.					
16		But, based on kind of the prior experience and					
17		the type of homes in each service territory, that					
18		estimate of what the 75 percent incentive may be,					
19		it numerically could be different for each					
20		utility, but the approach in program delivery of					
21		75 percent is the same.					
22	Q	That is helpful, because I noticed that going					
23		through the numbers.					
24		So, following Commissioner Simpson's					

[WITNESSES:	Peters Lemenager Chambers Chen Downes	
Carrol	Demeris Stanlev Culbertson Woods]	

1		question, and this is a very general question out
2		of curiosity, given the funding here, is it
3		possible to even think about, for example, going
4		for price responsive demand response or
5		implementing more distributive clean energy and
6		things like that, so that you're able to get to
7		better benefit-to-cost ratios?
8		And I'm not talking about now, I'm
9		talking about in the future. And would that be
10		something that the utilities would be willing to
11		consider, or is it not even possible?
12		I'm just that's why I said, it's a
13		very
14	A	(Leménager) So, I think we're constantly
15		analyzing the market, and reviewing what, not
16		only what technologies are coming, but what other
17		jurisdictions are doing as well, what's working,
18		what's not working. And part of our expansion of
19		ADR in this Plan is to also look at "what's the
20		greater market potential in New Hampshire for
21		ADR?"
22		It's been more or less constant for the
23		past few years, since we've offered it. So, now,
24		with the expansion, and with the technology

[WITNESSES:	Peters Lemenager Chambers Chen Downes
Carroll	Demeris Stanley Culbertson Woods]

		Carroll Demeris Stanley Culbertson Woods]
1		becoming a little bit more prevalent in the
2		market, what is the actual potential here? But
3		we wanted to be deliberate in expanding these
4		programs. We didn't want to overpromise and
5		under-deliver. And, at the same time, with the
6		funding being fixed, by going more aggressively
7		into a program, you're necessarily taking from
8		another program. So, the idea was to be
9		deliberate, ensure that we're able to expand the
10		program successfully, and be cognizant of
11		balancing the current market needs and demands in
12		other programs.
13		But, to get to your question, yes, we
14		would be interested in continuing to monitor what
15		technologies are coming, what can we do, what can
16		we incorporate, and, for that matter, what
17		doesn't make sense also.
18	Q	Again, a general question. In terms of these
19		measures where you have incentives, do the
20		utilities also look at whether we can reduce the
21		incentives and try to reach out to more customers
22		with energy efficiency? That comes to mind. Or
23		have you thought about it? Or, at least are
24		willing to consider in the future, depending on

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1		how the landscape changes?
2	A	(Stanley) Certainly. I think, in general, we
3		would like to give out as an incentive as little
4		as possible to capture a participant. That's our
5		goal overall. We don't want to have to pay more
6		to capture a participant if it's unnecessary.
7		However, our programs, we've had a long
8		history of offering these programs. We
9		understand what incentive levels for certain
10		activities has required to capture participation.
11		We monitor programs across other jurisdictions to
12		see what is working elsewhere or not working.
13		We have to evolve our offering
14		sometimes during the year, potentially raising
15		incentives, based on low participation. In some
16		cases, we lower incentives, depending upon too
17		high participation, where the rate of
18		participation per spend per customer wouldn't
19		allow us to achieve the energy goals or achieve
20		the cost-effectiveness that we need to achieve.
21		So, that's something that we're
22		constantly having to do. And, it's necessary,
23		the market conditions are consistently changing.
24		We went through a cycle a few years ago

[WITNESSES:	Peters Lemenager Chambers Chen Downes
Carroll	L Demeris Stanley Culbertson Woods]

		Carroll Demeris Stanley Culbertson Woods]
1		with COVID, where we increased incentives for
2		many of our programs, because of concern about
3		lower demand, which we initially saw. And, then,
4		we saw a spike in demand for certain programs,
5		where we've had to quickly pull back incentive
6		levels, because demand was too high. So, that's
7		something that we have to take into account.
8		And, yes, in general, our goal is to
9		put as least amount of money in front of the
10		customer to capture a participant as needed.
11	A	(Leménager) And I also want to add, too, there's
12		a balancing act between increasing or maximizing
13		the number of participants, with also providing a
14		suite of programs that is accessible to all
15		customers. And different projects provide
16		different depths of savings. More comprehensive
17		projects may cost more or have a higher dollar
18		incentive, but may provide greater savings per
19		project, and provide a better overall solution
20		for the customer, and for the programs as a
21		whole, even if it is different from trying to
22		strictly maximize number of participating
23		customers.
24	0	Yes. The thrust of my question wasn't just

24 Q Yes. The thrust of my question wasn't just

	[WI]	<pre>INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]</pre>
1		focused on maximizing number of customers. But
2		it was really about also maintaining the
3		benefit-to-cost ratios at levels that are good.
4		But my question was really, are there
5		ways to, in the future, depending on how the BC
6		ratios might play out, whether you would be
7		willing to play with the incentives in a way to
8		ensure you move to programs that have better
9		benefit-to-cost ratios? But, also, perhaps save
10		money by lowering incentives and reaching out to
11		programs where you get a better, you know, bang
12		for the buck.
13		So, it's like that's how that's why
14		I was asking.
15	A	(Stanley) I would just add that we've done this
16		over time, where we've introduced tools, such as
17		financing for customers, which and revolving
18		financing programs, which allows us to
19		essentially offer more of an incentive to the
20		customer, without just having it be fully upfront
21		capital, where that money, once we provide that
22		incentive to the customer, it's gone to the
23		customer. We've had a very successful on-bill
24		financing program, for example, where that's

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1	revolving money. The customer participates, it
2	helps them move forward with their project that
3	they otherwise wouldn't be able to move forward
4	with. And they pay the program back over time,
5	where that money can then be offered to other
6	participants to take advantage of the programs in
7	the future.
8	So, that's been we've expanded that
9	program in recent years. And that has been a key
10	offering for specific market segments, such as
11	municipalities. That's been a key segment that
12	that's been successful at.
13	And also, some other programs where
± 0	
14	it's been difficult to get participation in some
14	it's been difficult to get participation in some
14 15	it's been difficult to get participation in some years, such as our Home Performance Program,
14 15 16	it's been difficult to get participation in some years, such as our Home Performance Program, where we're trying to encourage customers to
14 15 16 17	it's been difficult to get participation in some years, such as our Home Performance Program, where we're trying to encourage customers to weatherize their home. In some years, it's very
14 15 16 17 18	it's been difficult to get participation in some years, such as our Home Performance Program, where we're trying to encourage customers to weatherize their home. In some years, it's very difficult to sell that program. Not so much
14 15 16 17 18 19	it's been difficult to get participation in some years, such as our Home Performance Program, where we're trying to encourage customers to weatherize their home. In some years, it's very difficult to sell that program. Not so much recently, because energy prices have been a lot
14 15 16 17 18 19 20	it's been difficult to get participation in some years, such as our Home Performance Program, where we're trying to encourage customers to weatherize their home. In some years, it's very difficult to sell that program. Not so much recently, because energy prices have been a lot higher. But, in years where energy prices were a
14 15 16 17 18 19 20 21	it's been difficult to get participation in some years, such as our Home Performance Program, where we're trying to encourage customers to weatherize their home. In some years, it's very difficult to sell that program. Not so much recently, because energy prices have been a lot higher. But, in years where energy prices were a lot lower, it was difficult to capture activity

1		without just having to offer a higher, again, a
2		one-time incentive payment.
3	Q	In looking at the program pending, typically, we
4		noted that the going from Quarter 1 through
5		Quarter 4, Quarter 4 is where a lot of money is
6		spent. Is there a reason behind it?
7	A	(Stanley) This has been a dynamic I've been
8		involved in our efficiency programs for many
9		years, this is and different jurisdictions,
10		this is a typical dynamic. I think, in New
11		Hampshire, where we've operated under 12-month
12		calendar periods typically, with budgets where
13		goals are at that 12-month period, a lot of the
14		activity then gets driven into that cycle
15		normally.
16		I think we typically encounter, though,
17		customers where, certainly on the commercial
18		side, their planning horizon or budget cycle
19		lines up more with them completing projects
20		towards the end of a calendar year, typically, in
21		many cases. Municipalities, again, we see that a
22		lot.
23		So, there's historically been this
24		"hocket stick" dynamic with activity, in terms of

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1		when it comes in. We don't like that. We don't
2		prefer that. We would prefer a steady, flat line
3		of activity quarter for quarter. But that's
4		that's been an ongoing challenge.
5		And we've tried different mechanisms
6		over time to flatten that hockey stick, whether
7		it's offering periodic incentives, so it
8		encourages customers to participate earlier in a
9		calendar year, rather than towards the end of the
10		year. Because, unfortunately, we see a lot of
11		projects that get planned in Q4, that ends up not
12		completing in Q4, they get either deferred or
13		canceled to the following year. And that impacts
14		our program performance, our ability to meet the
15		goals that we have set.
16		So, that's a challenge for us. And
17		we're ambitious to try to minimize that "hockey
18		stick" effect as much as we can.
19	Q	Do the other utilities have any thoughts on that?
20	A	(Downes) No, Eric captured it quite well. And we
21		have seen this in our Massachusetts affiliate as
22		well. It's a pretty common issue, that stuff
23		gets pushed towards the fall you identify
24		projects earlier in the year, they take a while

1		to come to fruition, winter comes.
2		This is one of the primary reasons why
3		we are looking forward to a true, you know,
4		three-year horizon with the planning structure.
5	A	(Woods) Can I
6	A	(Stanley) I will also add, too, that there are
7		some programs where the activity is just seasonal
8		in nature. So, certainly, for Liberty and
9		Unitil-Gas, I would not to speak for
10		Unitil-Gas, but the nature of many of our
11		services are heating-related equipment oriented
12		to reduce natural gas usage. And we just see
13		more customers are motivated to take action when
14		it's during the winter period, maybe when winter
15		is coming, or starting such as this time where
16		we're at now on the calendar.
17		So, we do see seasonality with certain
18		offerings. That does impact when activity is
19		booked into the programs and aligning within the
20		Q4 period.
21	Q	Have you looked at
22		CMSR. SIMPSON: I think you had one of
23		the witnesses
24	BY C	MSR. CHATTOPADHYAY:

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1	Q	I'm sorry.
2	A	(Woods) I just wanted to add, I mean, I think we
3		just need to remember that New Hampshire is
4		certainly a service economy. And that we, in the
5		Co-op service territory, very frequently see our
6		businesses are very busy serving tourists over
7		the and not really thinking about completing
8		projects. And, so, a lot of projects do happen,
9		you know, when in the off-season, which tends
10		to be towards the end of the year, in addition to
11		other comments that were made.
12	Q	Thank you. Do you know of any jurisdiction where
13		they do sort of the best job in dealing with
14		smoothing out the spending? Have you looked at
15		anything like that?
16	A	(Stanley) Again, I'll reiterate where I
17		personally will have commonly seen this trying to
18		be addressed is by offering more time-limited
19		incentive offers, that's intended to drive the
20		customers to make a decision either sooner or to
21		complete a project earlier than they would
22		otherwise, that's typically what I see has been
23		most commonly tried. And I can't speak to how
24		effective that is.

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1		I know, in our experience, that can be
2		effective. But, ultimately, there could be
3		operating matters for the customer, say, a
4		commercial business, where there might be time
5		restrictions on when they can spend money or when
6		they're going to make decisions. Or, oftentimes,
7		what we're encountering mostly now are challenges
8		with a contractor access, supply access. Where a
9		customer might intend to complete a project in
10		September or October or August, but they might
11		not be able to get the necessary resources to
12		complete that project in that time period.
13		So, I think we've all the utilities,
13 14		So, I think we've all the utilities, I would guess, have seen that dynamic recently,
14		I would guess, have seen that dynamic recently,
14 15		I would guess, have seen that dynamic recently, where there's just been supply issues or
14 15 16		I would guess, have seen that dynamic recently, where there's just been supply issues or contractor availability issues that prevent us
14 15 16 17	Q	I would guess, have seen that dynamic recently, where there's just been supply issues or contractor availability issues that prevent us from, again, kind of flattening that "hockey
14 15 16 17 18	Q	I would guess, have seen that dynamic recently, where there's just been supply issues or contractor availability issues that prevent us from, again, kind of flattening that "hockey stick" effect as much as we'd like.
14 15 16 17 18 19	Q	I would guess, have seen that dynamic recently, where there's just been supply issues or contractor availability issues that prevent us from, again, kind of flattening that "hockey stick" effect as much as we'd like. On Bates Page 034 of the Energy Efficiency Plan,
14 15 16 17 18 19 20	Q	I would guess, have seen that dynamic recently, where there's just been supply issues or contractor availability issues that prevent us from, again, kind of flattening that "hockey stick" effect as much as we'd like. On Bates Page 034 of the Energy Efficiency Plan, there's a discussion about the "precedents of
14 15 16 17 18 19 20 21	Q	I would guess, have seen that dynamic recently, where there's just been supply issues or contractor availability issues that prevent us from, again, kind of flattening that "hockey stick" effect as much as we'd like. On Bates Page 034 of the Energy Efficiency Plan, there's a discussion about the "precedents of allowing utilities to spend up to 120 percent of

[WITNESSES: Peters | Lemenager | Chambers | Chen | Downes | Carroll | Demeris | Stanley | Culbertson | Woods ] 1 Q Has there been occasions where you had to go 2 beyond 120 percent? 3 Α (Leménager) Yes. 4 0 And what was the experience with the process? 5 I'm just, again, out of curiosity. Like, did you 6 come to the Commissioners to, you know, because 7 you can do it without notification up to 120? 8 Α (Leménager) Yes. 9 You went above 120, what was the experience? Q 10 (Leménager) If a program is over 120 percent, a А 11 notification letter must be filed with the Commission. 12 13 Q Yes. (Leménager) And the funding overage needs to come 14 А from somewhere. So, it historically has come 15 16 from other programs within that sector, --17 Q Yes. 18 (Leménager) -- that may not be spending up to А 19 their full budget, or may have been allocated 20 from other portions of another program's budget, 21 such as marketing or another subsegment within 22 another program. 23 But the only time, if a particular 24 program is over 120 percent, is we would request

1		permission if we were trying to move funds from
2		one sector to another. That's not automatically
3		allowed, where we would have to ask the
4		Commission's permission. To, for example, if a
5		residential program was over 120 percent, and we
6		would be asking to move C&I funding to fill that
7		gap. That's not allowed automatically.
8	A	(Downes) That's also very uncommon.
9	A	(Leménager) Yes.
10	A	(Stanley) I can add, for Liberty, we've had
11		examples in our commercial/industrial sector
12		where we plan to spend, let's say, \$3 million in
13		our Large Business Program, and two and a half
14		million dollars in our Small Business Program.
15		And the actual activity that came in was more
16		skewed to, say, Small Business versus Large
17		Business, or vice versa, we've had examples over
18		the years where we've notified the Commission
19		that the distribution between the programs was at
20		the level where we needed, in order to serve
21		customers and the demand that we had, we needed
22		to shift funds between those programs. Because
23		what we had predicted for participation in that
24		specific year was different than what actually

	[WII	<pre>INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]</pre>
1		materialized.
2	Q	And, in implementing that flexibility, you're
3		also conscious of the benefit-to-cost ratio, I'm
4		assuming?
5	A	(Stanley) Yes. So, it has implications. So, in
6		that example I gave for Liberty, if we had if
7		we were shifting funds that were intended for
8		Large Business projects being completed, but were
9		instead serving Small Business customers, there
10		could be implications to the cost-effectiveness
11		of the portfolio.
12		So, we have to keep that in mind when
13		we when we are determining whether we want to
14		take on more projects or activity in a program
15		versus another, because that is an implication.
16	Q	So, over the last three years, something like
17		that has happened?
18	A	(Stanley) Yes. I'd have to I'd have to go
19		back through our records when we've issued
20		notifications to the Commission. But it does
21		happen occasionally over the years. It has
22		happened over the years for us.
23	Q	How about the other utilities, over the last
24		three years?

1 А (Leménager) We've had at least one, yes. 2 Ο Okay. 3 Α (Downes) Yes. It's fairly typical for one 4 program to go over and be, you know, --5 Q Okay. 6 А (Downes) -- made up by another. But we file 7 these letters with the Commission, I believe 8 they're in the docketbook. 9 Q For programs or measures that receive 10 performance incentives, please identify the 11 program that has the least performance incentive 12 for historical performance over the last year? 13 I'm just, again --(Downes) As you know, the performance incentive 14 А is calculated at the portfolio level. 15 16 Uh-huh. Q 17 А (Downes) So, we don't actually know or calculate 18 performance incentive at the program level. 19 Okay. Q 20 (Downes) So, that's not answerable. Α 21 But, at the portfolio level has something, which Q 22 one was the lowest? 23 Α (Downes) There is no distinction among the 24 programs, in terms of their cost-effective --

1		sorry their performance incentive. We don't
2		calculate it.
3	Q	No, I understood. But, I'm saying, what about at
4		the portfolio level?
5	A	(Leménager) So, the metrics to judge performance
6		incentive are not program by program. It's total
7		benefits of kW savings for summer peak and winter
8		peak separately. And it's all rolled up at the
9		portfolio level, because that's how the PI is
10		calculated.
11	Q	Oh, okay. So, thank you. So, if the actual
12		performance is 65 percent of Plan performance,
13		what happens? And how what happens to the PI?
14	A	(Leménager) If the performance is it depends
15		on the metric. So, certain metrics have 75
16		percent minimum thresholds, and other metrics
17		have 65 percent minimum thresholds.
18	Q	Okay. So, let's say the one that has a minimum
19		of 65 percent, then what happens? Like, what do
20		you do with the how do you calculate the PI?
21	A	(Leménager) If one metric were to meet the 65
22		percent threshold, and in and of itself, then the
23		minimum amount of performance incentive eligible
24		would be earned on that metric, and no other

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		metrics.
2	А	(Downes) So, if you miss the if you miss the
3		threshold, you earn no PI on that component.
4	Q	But, up to 65, does your PI dollar amount
5		changes?
6	A	(Downes) Under 65 five percent, you get zero. If
7		you hit
8	Q	No, no. I'm saying "65 and plus". So, go from
9		the other direction.
10	A	(Downes) Sure. And it's generally 75 percent is
11		the threshold. If you are at 75.1 percent,
12	Q	Yes.
13	А	(Downes) then you will multiply 75.1 percent
14		times the component percentage.
15	Q	Okay.
16	A	(Downes) And, then, you'll apply that to the
17		spending, to get the PI associated with it. So,
18		you'll get you'll get 75 percent. It's
19		scaled.
20	Q	Got it. There was discussion about, you know,
21		incentives are for exemplary performance. So,
22		how is that even, like, for 75 percent, or for an
23		example where 65 is used, what is that "exemplary
24		performance"? I'm just not sure.

	[WII	<pre>INESSES: Peters Lemenager Chambers Chen Downes      Carroll Demeris Stanley Culbertson Woods </pre>
1	A	(Leménager) So, the
2	Q	How do you characterize it as, "exemplary
3		performance"?
4	A	(Leménager) Sure. So, the approved framework,
5		which was reinforced by HB 549, was collectively
6		and unanimously designed, proposed, and agreed to
7		on what determined the minimum percentages for
8		each metric, and what were the maximum as well on
9		the other flip-side of the equations, and what
10		metrics to look at, and defining success along
11		those lines of which metrics and what thresholds,
12		and also agreeing what "exemplary performance"
13		would be determined as, by having those metrics
14		unanimously agreed to and the percentages.
15		I also want to note that the difficulty
16		of a goal comes into play on determining what
17		percentage. For example, 100 percent of an easy
18		goal is different from 65 percent of a different
19		standard. So, the goals that we have in place
20		are difficult. The programs have our
21		experience has allowed us to consistently be able
22		to deliver these programs, and effectively
23		deliver these programs. And the success of the
24		programs really speaks to how well we're able to

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1		consistently provide results and performance.
2		I would explain that what we have in
3		place, and the metrics and the thresholds we
4		have, do define "exemplary performance".
5	Q	So, when you say it's "collectively decided",
6		there was a process that you went through with
7		the other stakeholders and came up with that
8	A	(Leménager) Correct.
9	Q	that understanding? Okay.
10	A	(Leménager) Yes. The working group.
11	A	(Peters) And can I just sorry.
12	Q	Please.
13	A	(Peters) To reinforce one point, we're not
14		earning 100 percent of the performance incentive,
15		we're not earning the planned incentive, unless
16		we are actually achieving 100 percent of the
17		goal, at 100 percent of the budget. And, so,
18		even if we start earning at a 75 percent
19		threshold, the structure is meant to encourage
20		that continued achievement and performance until
21		we get to 100 percent, or even beyond. It's
22		incentivized to kind of push performance to 100
23		percent and beyond, if possible.
24		So, it's a scaled structure, that

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		acknowledges a minimum threshold to start, but
2		then you can get up to 100 percent. And, if you
3		do really, really well, you can go a bit beyond
4		it.
5	Q	So, since you went there, if you go beyond, so,
6		let's say you have 120 percent, is that then
7		the 5.55, the overall percentage, you get a
8		bigger number?
9	A	(Peters) Yes.
10	A	(Leménager) Yes. Each metric is so, each
11		metric you can go up to, in terms of incentive,
12		up to 125 percent of goal.
13	Q	Okay. Okay.
14	A	(Leménager) You can keep going beyond that, but
15		the incentive is capped.
16	Q	Is capped?
17	A	(Leménager) Yes.
18	Q	Okay.
19	A	(Stanley) Can I add that the percentages, the 75
20		percent is referenced, the 125 percent as a max,
21		the Working Group at the time, and others can
22		speak to this more fully than me, took into
23		account a review of other jurisdictions where the
24		performance incentive mechanism worked for those

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1		utilities or program administrators. So, the
2		intent was to align the methodology for New
3		Hampshire with other best practices for similar
4		type programs and similar type goals and
5		objectives.
6	A	(Downes) One last point. It's very important to
7		have an understanding of the objectives and goals
8		from the public policy point of view in
9		developing plans. So, yes, we're judged on our
10		performance, in terms of what we actually earn.
11		But, in order to, you know, design a program and
12		a suite of offerings that is responsive to public
13		policy, you kind of need to know what the PI
14		structure is going in. And that was the intent
15		of the Working Group, and then the subsequent
16		order approving the PI framework, was to say
17		"This is what we find important. This is what we
18		want the utilities to achieve. Go develop plans
19		and execute on them according to these
20		objectives." And, so, that's what we've done.
21	Q	The performance incentive dollars, they are paid
22		by the ratepayers?
23	A	(Stanley) Yes.
24	Q	And where do they reside? I mean, which rates?

	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	Is it part of the SBC, no?
2	A (Downes) Yes.
3	A (Stanley) They're part of that, yes. Sorry.
4	Q Go ahead. Sorry.
5	A (Stanley) Yes. The performance incentive funding
6	is part of the total program funding stream
7	[Court reporter interruption.]
8	WITNESS STANLEY: I'm sorry. I'll
9	start again, I don't know where.
10	CONTINUED BY THE WITNESS:
11	A (Stanley) I'll say, the performance incentive
12	funding comes from the overall program funding
13	stream from the System Benefits Charge, the Local
14	Distribution Adjustment Charge for the gas
15	utilities, any incremental or, the ISO-New
16	England forward capacity market funding, the
17	Regional Greenhouse Gas Initiative funding. So,
18	it's part of the total funding that the utilities
19	have for operating the programs.
20	BY CMSR. CHATTOPADHYAY:
21	Q At Bates Page 094 of the Energy Efficiency Plan,
22	there was a statement that said "PI can be earned
23	only if the BC ratio is at least 1.0." So, I'm
24	just trying to make sure here, number one, in

1		calculating the BC ratios, are the PI dollars
2		accounted for in the cost?
3	A	(Downes) In the benefit-cost model, there's a tab
4		reflecting the performance incentive framework.
5		And there is sorry, I've got a hair in my
6		mouth. There is a benefit-cost ratio in that tab
7		that does very clearly incorporate the
8		performance incentive in the denominator.
9	Q	Yes. I think I've seen that worksheet. But my
10		question is, in the GST and the TRC, do the costs
11		include the PI dollars or not?
12	A	(Downes) There are multiple ways of reflecting
13		the benefits and the costs at various levels.
14	Q	I'm just asking about how it's captured in the
15		GST, the primary test, and the TRC, which is the
16		secondary test? I'm just I'm asking whether
17		the PI dollars are part of the cost or not? I
18		mean, it's
19	A	(Downes) It's not a "yes" or "no" question,
20		unfortunately. It is in some calculation of the
21		Granite State Test. But, at the program level,
22		it is not, the performance incentive is not
23		incorporated, because we don't have we haven't
24		developed a mechanism, there is no mechanism, and

	[WI]	INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1		no one is proposing a mechanism, to include the
2		performance incentive at the program level.
3		But, at the portfolio level, it is
4		included, and that is it is included as the
5		test of whether we've met the threshold of 1.0 or
6		not.
7	Q	So, the number "2.27", does that include the PI
8		dollars in the cost or not?
9	A	(Downes) I'm not sure of what you're referring.
10	A	(Stanley) Yes.
11	A	(Downes) Sorry.
12	Q	It does?
13	A	(Stanley) Yes.
14	Q	Thank you. But the way I'm reading that, so, you
15		might still end up choosing to go ahead and
16		pursue a program that has a BC ratio of greater
17		than 1.0, just a little bit, but with the
18		inclusion of the PI cost, the benefit-to-cost
19		ratio for that program would be maybe less than
20		1.0. And I understand the point about looking at
21		the portfolio and not looking at separate
22		programs. But that's possible, right?
23	A	(Stanley) If I understand your question
24		correctly, maybe I'll repeat it back.

\_

1	Q	Okay.
2	А	(Stanley) If there's a program offering where the
3		actual performance of that program's benefit-cost
4		ratio is just slightly above 1.0, but, at a
5		portfolio level, if you when you include the
6		performance incentive earnings, does it draw the
7		portfolio benefit-cost ratio below 1.0? Yes,
8		that is a hypothetical, I suppose.
9	Q	Yes. But I think my question I should have
10		framed it better. Let me begin again.
11		So, on Bates Page 094 of the Plan
12		states that the "PI can be earned only if the BC
13		ratio is at least 1.0." Which BC ratio are we
14		talking about?
15	A	(Stanley) The portfolio benefit-cost ratio.
16		That's
17	Q	Which will include the PI costs?
18	A	(Chambers) Correct.
19	A	[Witness Stanley indicating in the affirmative].
20	Q	Okay. Thank you. That's what I was trying to
21		understand.
22		So, if everything else was held
23		constant, if the budget planned on programs
24		overall was higher, the amount of PI dollars

		Carrorr Demetrs Stantey (Carbertson Woods)
1		received by the utilities would be higher, right?
2	A	(Downes) The PI is calculated, once you determine
3		the percentage of each component, it's multiplied
4		by the spending, yes, by the utility's program
5		spending.
6	Q	So, the answer is "yes", like the way I framed
7		the question? Okay.
8	A	(Downes) I restated it, to make sure I wasn't
9	Q	Okay.
10	A	(Downes) misunderstanding your question.
11	Q	Okay. If the so, I'm going to go into social
12		discounting now. If the nominal inflation rate
13		and the prime rates or, the prime rate, both
14		of them are altered in the BC models, how long
15		does it take to update them and, you know, run
16		the model and get the new B-over-C ratios?
17	A	(Chambers) A matter of minutes.
18	Q	A matter of minutes? Okay. Going to the source
19		that the BC models had indicated for the
20		inflation rate, you had compared Quarter 1 of
21		2023 with 2022, correct?
22	A	(Stanley) That's correct.
23	A	(Chambers) Correct.
24	Q	And Quarter 1 would be January through March?

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] 1 А (Chambers) Correct. 2 Q The prime rate came from whatever the level was 3 on 1st of June, is that correct? (Stanley) Yes. 4 Α 5 Q Okay. If you were updating the numbers -- and 6 let me put it differently, sorry. 7 So, clearly, for the inflation rate, 8 you have relied upon Quarter 1, and the prime rate has come from Quarter 2. Correct? 9 (Chambers) Yes. But, in both cases, they were 10 А 11 the most up-to-date information available. 12 Q I understand that. But would you agree that it's 13 better to actually have the numbers from the same 14 period? 15 Α (Chambers) It's something we can consider. 16 So, if you were, because you're talking like Q 17 going from, so, in June, you didn't have the 18 inflation numbers, the quarterly inflation 19 numbers, because FRED, that's how they report it. 20 Of course, there's are other sources of inflation 21 rates that are even monthly available, for 22 example, Bureau of --23 [Court reporter interruption.] 24 BY CMSR. CHATTOPADHYAY:

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	Q	For example, the Bureau of Labor statistics. But
2		the point I'm trying to make, if you could wait,
3		let's say, in August, to the best of my
4		reconciliation, the Quarter 2 prime sorry
5		inflation rate was already there, you know, at
6		FRED, on FRED's webpage. So, do you know what
7		the number is right now, the inflation rate, for
8		that period?
9	A	(Chambers) I don't. But I will just say, we
10		needed a number to include in the June filing.
11		So, we couldn't wait until August. I mean, you
12		could potentially choose a prime rate that was
13		from Q1 in order to align, but you can't wait for
14		the Q2 inflation rate.
15	Q	Or, was it too hard to update just the numbers?
16	A	(Chambers) It's not hard. But, at some point,
17		you need to fix your claim. You need to design
18		
19	Q	I understand. But it's I think we are talking
20		end of October now, and we had enough time to
21		updating the models. You did it for other
22		reasons. But, you know, we could have gotten the
23		right numbers from Quarter 2 for both prime rates
24		and the inflation rate. That's all I'm saying.

	[WI]	<pre>INESSES: Peters Lemenager Chambers Chen Downes      Carroll Demeris Stanley Culbertson Woods]</pre>
1		I mean, and they would be better aligned that
2		way.
3	A	(Chambers) We could do that.
4	Q	Yes.
5	A	(Chambers) But I, again, caution that it's not
6		optimal to be continually updating the numbers
7		within the filing as the filing occurs. It's
8		better to agree upon and fix certain inputs at
9		the time of the initial filing and keep things as
10		steady as possible.
11	А	(Downes) Which is consistent with how we have
12		also always done it, and had no reason to do it
13		differently this time.
14	Q	I understand that point. I'm just just, to
15		me, when I look at it, it looks off. So, it's
16		probably better to wait, and you're talking about
17		filing the Plan in beginning of July or end of
18		June. Yes, there may be a need to revisit those
19		numbers and update it one time. It doesn't take
20		too much time, like you have described, just for
21		the sanity of it.
22		So, do you so, you have actually,
23		the utilities had responded, and the rate right
24		now, using the same source that was included in

	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1	the BC modeling, the inflation rate is 3.48
2	percent, okay? And the prime rate, if it was
3	at that time, it was 8.25, more appropriately, if
4	you were using the entire quarter, now that the
5	data is there, it's, if you're going to be
6	averaging it, the number would be, I think, 8.16
7	percent.
8	I'm just so, it's I would feel
9	more I would like to see what using those two
10	numbers do to the discount rate, social discount
11	rate, and how it impacts the benefit-to-cost
12	ratios?
13	A (Chambers) Uh-huh.
14	CMSR. CHATTOPADHYAY: So, I'm going to
15	be adding that as a record request, if it could
16	be done quickly.
17	MS. CHIAVARA: Pardon me. I'm sorry,
18	Commissioner. That's not part of the proposal
19	that's in front of the Commission. That's not
20	part of the Plan that we've proposed. So, I
21	would just note that that's not really part of
22	the record being considered today.
23	MR. KREIS: Likewise, members of the
24	Commission, that kind of record request, first of

	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	all, I'm not sure I know what a "record request"
2	is, but a late-filed exhibit about that would be
3	subject to the set of standing objections that I
4	interposed at the beginning of the hearing this
5	morning.
6	CHAIRMAN GOLDNER: So, a question for
7	Eversource then.
8	If there were an error in your Plan, in
9	your proposal, how would Eversource deal with
10	such an error?
11	MS. CHIAVARA: I think corrections to
12	the Plan have been made in the past, and can
13	certainly be made. But that would be made on the
14	utilities' part to correct something that should
15	have been proposed originally. So, it would be
16	aligning something it would be a correction to
17	align something with what should have been
18	proposed originally.
19	This question is more along the lines
20	of asking us to propose something else, which we
21	haven't proposed. And, so, I'd say that that's
22	outside of the scope of the inquiry here.
23	CHAIRMAN GOLDNER: So, we'll take at
24	the break, we'll discuss as a Commission. But,

[WITNESSES:	Peters Lemenager Chambers Chen Downes
Carrol	l Demeris Stanlev Culbertson Woods]

1	if the time periods are not aligned, that's a
2	potential I would call that a "potential
3	error". So, that's, I think, the thought
4	process, in terms of considering rerunning the
5	numbers, is just simply because an error was made
6	in the original run.
7	So, we can we'll talk about it
8	offline as well. I just wanted to make sure I
9	understood your position before we leave.
10	MS. CHIAVARA: Okay. Thank you.
11	CHAIRMAN GOLDNER: Attorney Kreis, any
12	comment that you might have, before we break?
13	MR. KREIS: I think my position is
14	identical to Ms. Chiavara's. Obviously, the
15	utilities can and should correct errors to the
16	Plan that they submitted.
17	But, you know, my position about the
18	discount rate question is that the discount rate
19	proposed by the utilities is essentially the one
20	the Commission is obliged to adopt. And
21	discussion of what other discount rates might be
22	applicable in some other situation, they just are
23	not germane to the current proceeding.
24	CHAIRMAN GOLDNER: Yes, just, I think,

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as a clarification, I think, to Commissioner
Chattopadhyay's point, the request from
Commissioner Chattopadhyay wasn't to change the
formula, the prime rate, less the rate of
inflation, and for something else, a flat rate or
a weighted average cost of capital, or something
like that. It was simply to align the time
periods in the current calculation, that was the
request.
MS. CHIAVARA: And that clarification
is helpful. I think Ms. Chambers probably put it
best, when she said, you know, "at a certain
point we have to pick numbers to put in a plan,
so that you guys have enough time to consider
it."
And, so, I don't know that it would be
considered an error, so much as it may be an
update. But I wouldn't say it's incorrect for us
to have submitted to select a certain
inflation and discount rate and submit it at a
certain time, because we've got to snap the line
at some point.
CHAIRMAN GOLDNER: Exactly. And I
think all the Commissioners understand that.

_	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	When you're snapping the line, and you have to
2	snap it, you know, well prior to the submission
3	date, I think that's well understood.
4	But the dates could have been aligned,
5	for example, in the first quarter, just align the
6	prime rate and inflation in the first quarter,
7	and that way you snap it off in the same time
8	period.
9	And, normally, in a steady state
10	environment, that wouldn't even be an issue,
11	right? We wouldn't be here talking about if
12	things were steady state. But, as everyone's
13	probably noticed, the rate of inflation has been
14	bouncing around quite a bit, the prime rate has
15	been bouncing around quite a bit, and they're
16	moving in opposite directions. So, that, I
17	think, creates a little bit of an unusual
18	situation in this particular setting.
19	So, let me check in with Commissioner
20	Chattopadhyay on the remaining questions. We
21	could either break now, Commissioner
22	Chattopadhyay, if this is a logical place, or we
23	can continue for another ten minutes or so. Do
24	you have a preference?

Carroll | Demeris | Stanley | Culbertson | Woods ] CMSR. CHATTOPADHYAY: No. I mean, it 1 2 doesn't matter. I can get back to the same 3 questions I would asked anyway. So, we can take 4 a break now. 5 CHAIRMAN GOLDNER: Okay. So, let's 6 take a break. And let's return at 12:45 with 7 Commissioner Chattopadhyay's questions. And, 8 then, I'll follow that with some questions 9 relative to the changes in program offerings, to sort of begin a new vein. 10 11 So, off the record, and we'll return at 12 12:45. 13 (Lunch recess taken at 12:13 p.m., and 14 the hearing resumed at 12:51 p.m.) 15 CHAIRMAN GOLDNER: Okay. We'll go back 16 on the record, and resume questions with 17 Commissioner Chattopadhyay. 18 CMSR. CHATTOPADHYAY: So, I'm going 19 back to the previous issue, I think it's 20 important not to mix one variable with the other 21 variable that come from different periods. And 22 it's, therefore, to me, it's important that I 23 have the analysis done for Quarter 2 of 2023, you 24 use the inflation number from there, from that

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes|

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1	quarter, as well as the prime rate from that
2	quarter.
3	And I know that in the filing, in the
4	BC models, you have two sources that are shown
5	there. And just use those sources and
6	recalculate the social discount rate, and then
7	run the model. They should be done together.
8	So, that's something that's very
9	important for me, like having numbers from
10	different periods, that doesn't make sense.
11	CHAIRMAN GOLDNER: And I'll just
12	mention for the record, for the legal folks here,
13	the record request will aid the Commission in
14	making its determination whether the discount
15	rate was properly calculated. If a symmetrical
16	application of discount rates, or other
17	symmetrical way to calculate changes in BC ratio
18	for any program, such that it does not pass, then
19	the issue of whether an error occurred may be
20	necessary to address.
21	In the first instance, the record
22	request will aid the Commission in determining
23	whether the use of the discount rate would make a
24	difference at all. I, therefore, ask that the

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] 1 model be rerun, so the Commission can see whether 2 the result would change the Plan proposal. 3 [Record request noted.] 4 CHAIRMAN GOLDNER: Okay. Please 5 proceed, Commissioner Chattopadhyay. 6 BY CMSR. CHATTOPADHYAY: 7 Q So, what is the discount rate that is being 8 applied to cost? 9 (Chambers) So, the costs --Α 10 In the B --0 11 (Chambers) In the BC model? А 12 Q In the BC models, yes. 13 А (Chambers) The only costs that require 14 adjustments are the program costs for the two 15 outer years, --16 Uh-huh. Yes. Q (Chambers) -- 2025 and 2026. 17 А 18 Q Yes. 19 (Chambers) That is being -- that's adjusted by Α 20 the nominal discount rate. 21 Or the prime rate, right? Q 22 А (Chambers) Correct. 23 Q Why is the real discount rate not being applied 24 there as well? You apply the real discount rate

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1		for the benefits, but not for the cost. Can you
2		explain it?
3	A	(Chambers) Yes. So, the program costs are in
4		nominal dollars in our tables. When we develop
5		our budgets, we develop them in nominal dollars.
6		So, they are only adjusted by the nominal rate.
7		The benefit streams that come from the
8		Avoided Energy Cost Supply Study are not in
9		nominals, and they're appropriately adjusted by
10		the real rate.
11	Q	In the calculation of the benefits, for example,
12		just let's say the avoided energy supply cost,
13		when you rely upon the report, the original
14		numbers are coming from which year, 2021?
15	A	(Chambers) The AESC?
16	Q	Yes.
17	A	(Chambers) Has been net present valued to the
18		year in which it is released, yes.
19	Q	And, so, when you went from 2021 to 2024, how did
20		you what was the method?
21	A	(Chambers) I believe, I would need to check with
22		the analyst underneath that did this, but I
23		believe that the AESC interface tool allows you
24		to select

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1	Q	And can you be a little closer to the mike?
2		Sorry.
3	A	(Chambers) So, on the "Avoided Cost" tab of our
4		model, the nominal 2021 avoided costs are
5		adjusted forward to 2024.
6	Q	Using, first, what discount rate? What interest
7		rate? So, you first go into the future, and then
8		you apply the real discount rate to all of the
9		numbers from 2024, all the way through whichever
10		year is relevant, correct?
11	A	[Witness Chambers indicating in the affirmative].
12	Q	So, what is the discount rate you're using to go
13		from 2021 to 2024?
14	A	(Chambers) Give me one moment.
15		[Short pause.]
16	BY T	HE WITNESS:
17	A	(Chambers) That's done just using the inflation
18		rate.
19	BY C	MSR. CHATTOPADHYAY:
20	Q	Using?
21	A	(Chambers) The inflation rate.
22	Q	And, for the cost, when you looked at the nominal
23		dollars, you would assume they're also they're
24		also reflecting inflation?

1		Carrori Demerrs Stanley Curbertson Woods
1	A	(Chambers) That's correct.
2	Q	And, yet, you're treating the costs and the
3		benefits differently when you're discounting
4		them? Is that I'm just trying to get an
5		understanding, that's all. That's correct,
6		right?
7	A	(Chambers) That's right.
8	Q	Do you have any thoughts on my thinking that the
9		societal focus of the benefit-to-cost ratio
10		should require both costs and benefits be
11		discounted by the same rate? And, if not, please
12		explain why?
13	A	(Chambers) So, I think I would characterize this
14		as saying that they are fundamentally discounted
15		by the same rate.
16	Q	Need to be a little bit closer to the mike,
17		sorry.
18	A	(Chambers) Fundamentally, they are being
19		discounted by the same rate. It's the prime
20		rate. It's the nominal discount rate. It's just
21		that our costs already account for inflation.
22		So, that adjustment is required to be made when
23		we're looking at the cost versus the
24		[Court reporter interruption.]

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1	CONT	INUED BY THE WITNESS:
2	A	(Chambers) when we're looking at the cost
3		versus the benefit.
4	BY CI	MSR. CHATTOPADHYAY:
5	Q	Okay. I mean, I didn't get the answer that
6		I'm the question was different, but, anyway.
7		If you have looked at the quality data
8		for inflation rates and prime rates, would you
9		have an opinion on what the social discount rate
10		would have been in, let's say, 2022, third
11		quarter?
12		Would it be negative or positive?
13	A	(Chambers) There was a period of time, during the
14		impacts of the COVID-19 pandemic, that the
15		methodology we currently used would have resulted
16		in a negative real discount rate.
17	Q	Okay. The utilities had, I think it's Bates
18		Page 104 of the Energy Efficiency Plan, it's
19		Attachment B, that shows how many customers are
20		availing different programs, right?
21	A	(Leménager) Correct. In part, yes.
22	Q	And those numbers are given in the last column?
23	A	(Leménager) Yes.
24	Q	Can you do you have a sense of how many

	[WI]	INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		customers/ratepayers are there with all of, you
2		know, you can do it separately for each of the
3		utilities, but, overall, how many ratepayers are
4		there in New Hampshire, under New Hampshire
5		utilities? Do you know?
6		[Multiple witnesses conferring.]
7	BY T	HE WITNESS:
8	A	(Leménager) For Eversource, we have about 540,000
9		customers.
10	A	(Downes) I would just say that these values of
11		customer counts are in the "Benefit-Cost Model
12		Look-Ups" tab. They may be slightly out they
13		may not reflect the current number exactly, but
14		they're roughly accurate.
15	BY C	MSR. CHATTOPADHYAY:
16	Q	You're talking about all customers, right?
17	A	(Downes) Yes.
18	Q	Okay.
19	A	(Downes) By sector.
20	Q	Thank you. And, okay. So, it's true for each of
21		the utilities, it's in the BC model?
22	A	(Downes) Yes.
23	Q	Can you give me a specific reference, is it
24		possible?

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1	A	(Downes) It's in the "Look-Ups" tab, and it's
2		towards the bottom.
3	A	(Stanley) I can tell you. It's Row 246 of the
4		"Look-Ups" tab, as Ms. Downes
5	Q	Row 246
6		[Court reporter interruption - multiple
7		parties speaking.]
8		CMSR. CHATTOPADHYAY: Sorry.
9	CONT	INUED BY THE WITNESS:
10	А	(Stanley) Thank you. Yes. You can find the
11		customer counts for each utility and their
12		respective benefit-cost models in Row 246 of the
13		"Look-Ups" tab.
14	BY CI	MSR. CHATTOPADHYAY:
15	Q	Are the numbers also available for, let's say,
16		residential customers?
17	A	(Stanley) Yes. That same row differentiates
18		residential, income-eligible, and
19		commericial/industrial customers.
20	Q	Okay. Thank you. How many low-income customers
21		are projected to participate under New Hampshire
22		Utilities' EE programs in 2024?
23	А	(Peters) 934, per Bates Page 105, there's a table
24		with customer counts there. That's for the

	[WI]	INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		electric utilities, sorry. And the gas
2		utilities, another 235.
3	Q	Okay. And they are more or less similar for the
4		next two years, they go up a little bit maybe?
5	A	(Peters) Looks like they go up a bit each year:
6		2025, 997 and 248; 2026, 1,044 for electric and
7		254 for gas.
8	Q	Given that 20 percent of the funding is expended
9		on income-eligible customers, I'm really
10		interested in knowing, are there ways to reach
11		out to more customers, by playing with, let's
12		say, the performance incentives, and having more
13		money to spend on other customers? Have you
14		thought about it or, you know, it's really, if
15		you look at the total number of customers, this
16		is a small percentage. But I also, having looked
17		at EAP, like, I think that helps 30,000 customers
18		or so.
19		So, I'm very curious whether the
20		companies are willing to, in the future, not now,
21		think about how to reach out to more customers,
22		changing different variables, if possible?
23	A	(Stanley) I'll just note that income-eligible

24 customers, they can participate in any of our

1	programs, and often do, while but we might not
2	track that information to classify that, let's
3	say, a participant in our ENERGY STAR Products
4	Program was an income-eligible customer. So, for
5	tracking purposes, we're not identifying that for
6	that program's participation, but they very well
7	could.

8 We have some income-eligible customers who don't want to classify themselves as an 9 10 "income-eligible customer". They might be 11 eligible for our Home Energy Assistance Program, but they might not want to go through the steps 12 to, again, be part of that offering. And we're 13 not -- but we're not tracking that level of 14 detail. We're not doing income verification for 15 16 every participant in our residential offerings.

17 But, to your point, yes, we are 18 considering, for all of our programs, how we can 19 evolve our programs to serve more customers, how 20 we can capture more savings. So, that's a 21 standard approach that we take seriously, and 22 consider in the Plan that we put together and 23 present to the Commission. 24 А (Peters) I would just add to that that, for

1	income-eligible specifically, these are more
2	expensive projects, because we're paying 100
3	percent of the cost for these customers. So, we
4	do have to balance, if you're going into a home
5	of an income-eligible customer, our approach has
6	always been "We want to do as much as possible in
7	that home while we're there." It's also a timing
8	issue for the customer, it interrupts their daily
9	life to have a contractor coming in/coming out.
10	And, so, we don't really want to be doing that
11	multiple times. We want to go in, we want to
12	identify all the work there is to do, and do it
13	during that job.

And, so, that approach does potentially result in kind of fewer projects per year, but they're more comprehensive projects per year. And we try to balance that out across the portfolio.

19I know some of the utilities, in the20income-eligible program, have done some smaller21offerings, mailing kits to customers that can22help with smaller weatherization items, as a way23to reach more people at a lower cost, while still24providing those intense projects. And, across

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the portfolio, we try to balance that. Some
program offerings are kind of deeper, costlier,
more comprehensive, and some are kind of a more
broad-based, less expensive way to get to more
customers. It's important to us to have that
variety and that choice.

7 But I do take your point. We consistently, as Mr. Stanley noted, kind of look 8 at the portfolio, "Are there changes we should 9 10 make?" "Are we, you know, prioritizing depth 11 versus breadth?", I guess, is a way you could talk about it. We try to balance that very 12 13 carefully, but something we can continuously 14 look at.

(Downes) I'd finally add that we are undertaking 15 Α 16 a study right now to look at opportunities in low 17 and moderate income residential properties that 18 will help to replace residential lighting, as one 19 of the sort of most straightforward ways of 20 providing energy and cost benefits to customers. 21 And, so, we're looking forward to the results of 22 that, and we'll apply whatever learnings come 23 out, in terms of recommendations. We'll apply 24 what's able to be applied to programs during the

	1	
1		term.
2	Q	Thank you for the clarifications there. A
3		question back to Mr. Stanley.
4		I think I'm making I'm trying to
5		make sure I understood you correctly. So, there
6		are income-eligible customers who are also
7		embedded in the other numbers, that's what you
8		were trying to say?
9	A	(Stanley) Yes. Yes. Certainly, and most
10		notably, would be our Products Program, because
11		of the high volume of participants we serve
12		within that program. We just don't directly
13		identify them as "income-eligible" or
14		"nonincome-eligible" participants, because
15		there's no income verification step for somebody
16		to, say, get a clothes washer rebate. Or,
17		previously, when we were incentivizing LED bulbs
18		at a high rate, those customers could very easily
19		participate, and we wouldn't be able to identify
20		whether they are or not.
21		And we do interact with some customers,
22		for example, in our Home Performance Program,
23		where customers where we would determine that
24		they could be eligible for the low-income

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1		program or, Home Energy Assistance Program,
2		and the customer actually refused and said "No, I
3		don't want to participate in that." So, we have
4		seen that occur.
5		So that it's just a dynamic with
6		customer behavior that, just looking at our
7		filing and interpreting that we're only serving
8		income-eligible customers through this number,
9		that 900 or so number that you referenced, I
10		think that's not a complete representation of how
11		much we're actually serving that audience.
12	Q	That clarification is very helpful. Will the
13		utilities be okay with, in the future, providing
14		the break-up of the customers based on the rate
15		classes?
16	A	(Downes) Beyond what we're doing now, just to
17		clarify?
18	Q	Yes. Right now, you're not doing it based on the
19		rate classes. You're doing it residential and
20		you're doing it so, I'm just curious, whether
21		it's possible to know when whoever the
22		participant is, what rate class they are in? And
23		this is more for the future, not
24	A	(Downes) Sure. There are this is a data

1		question.
2	Q	Yes.
3	A	(Downes) Much of our programming is, as was
4		explained earlier, not undertaken directly by
5		utility staff, but is contracted out to
6		contractors, HVAC contractors, you know,
7		builders, you get the idea. And, so, any data
8		that we have to report out has to initiate with
9		them. And, therefore, anything that we would do
10		would have to require additional training and
11		database adjustments and collection that would be
12		somewhat imposed on the contractors to provide to
13		us.
14		It can be done, I think. I'll speak
15		for Unitil, it could be done. We have to weigh
16		"what is the benefit that's going to result from
17		that extra level of effort and cost to gather
18		that information, clean it, report it, have it
19		audited?"
20		And, so, I would the answer to the
21		question is, we could consider that, but there
22		are also costs.
23	A	(Stanley) Can I add? I mean, for all our
24		programs, we get account numbers for

[WITNESSES:	Peters	Lemenager	Chambers	Chen I	)ownes
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1	participants. So, as much as we have that, we
2	have a way of, ultimately, if we needed to,
3	identify back what the rate class the customer
4	was in. We have some customers that they change
5	rate classes over time. Some programs, it's a
6	little bit easier to identify what rate class
7	they're in, say, a commercial customer, depending
8	upon usage.

9 So, it's feasible from a forecasting 10 perspective. It would be harder to do that from 11 a Plan perspective, to project how many 12 participants per rate class. Because, again, that's not something that we've taken into 13 account outside of just the sector level of what 14 15 customer rate somebody is in, because that hasn't been a criteria of eligibility outside of being a 16 residential or a nonresidential customer. 17

18 But, in terms of, again, reporting 19 historical activity, theoretically, we could do 20 that. We have the customer account numbers. 21 Yes. I think, obviously, I haven't thought Q 22 through it fully, that's why I was asking. Even 23 the historical numbers would be very helpful. 24 And, so, going forward, the next time around,

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1		just tracking that I think is helpful.
2		You mentioned "cost". Do you, at this
3		point, have a sense whether it's a very costly
4		endeavor, or is it, just like you were
5		describing, it's about having the identifiers and
6		being able to track that?
7	A	(Stanley) Yes, that's a big part of the
8		challenge, is linking our systems together to
9		capture that information. Because it's not a
10		a rate class, isn't, per se, a criteria of
11		eligibility right now, it would require a deeper
12		level of integration between our energy
13		efficiency tracking system and our customer
14		billing system to capture that integration from a
15		reporting standpoint.
16		So, I can't speak to the time or
17		complexity. I just know that, if we had to do
18		the exercise, say, tomorrow, it would be a
19		lengthy process to execute, because of just the
20		steps we'd have to go through. And, again, some
21		of the customer information does change over
22		time. There are circumstances where a customer's
23		rate changes. So, we would have to keep that in
24		mind, in terms of the information that we would

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1		see in the reports.
2	А	(Woods) Can I just add one thing? I guess, just
3		from the Co-op's perspective, I know that our
4		rate structure is different. And I am not
5		familiar with the other utilities, what your
6		structures are. But I know, you know, depending
7		on what you're looking to do with the
8		information, that it may not be an
9		apples-to-apples across the board, that you could
10		actually look at the information from a
11		30,000-foot level.
12		So, I just know, like, our rates are
13		not the same, our classifications, than the other
14		utilities.
15	А	(Downes) And just a reminder, that we currently,
16		our three programs within the Commercial &
17		Industrial sector, are Large Business Solutions,
18		Small, and Municipal. And, so, we do we do
19		look at the size, the usage of the customer, in
20		determining which of the programs they are most
21		appropriately served by. So, there is some
22		distinction there between Large and Small, and
23		Municipal customers on the C&I side.
24		And, then, on the Residential side,

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		really we're just distinguishing between market
2		rate or nonlow-income-eligible, and the rest of
3		the Residential class.
4	Q	So, this is really sort of what I'm hearing is
5		this can be a "work in progress", but there are
6		elements that need to understood before we can
7		even think about it.
8		Do you know whether, in the other
9		jurisdictions, for some of the companies here,
10		something like that is done or not done for
11		energy efficiency customers, if you know?
12	A	(Downes) To Ms. Woods' point, there isn't
13		consistency on how rates are structured from one
14		utility to the other. So, it would be my
15		experience in Massachusetts is that is not
16		typically done by rate class, it's done by
17		customer class, as we do here.
18		But the further question is would be
19		"To what end would the information or the data be
20		put?"
21	Q	So, I mean, you're probably assuming too much
22		that I care about consistency, that's not what
23		I'm just in terms of knowing, within the
24		utility, what is the within quotes, the

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1		"demographics", okay. So, that's all I was
2		trying to understand. So, I mean, all of you are
3		different utilities, I perfectly understand that.
4		So, there was, in the OCA testimony,
5		there was discussion about "federal funding being
6		available." Are the utilities willing to talk to
7		other parties and see whether how best you can
8		extract, you know, the dollars from there and
9		pursue more activities in the future?
10	A	(Downes) Absolutely. We've already been in
11		discussions with the New Hampshire Department of
12		Energy. And we keep a close eye on the
13		availability. We actually have secured some
14		we haven't secured, the utilities haven't, but we
15		have partnered with others who have secured
16		federal funding for projects that will leverage
17		NHSaves dollars.
18		So, we absolutely are eager to be a
19		part of that, that equation.
20	Q	Any other utilities? No?
21	A	(Peters) We agree. Yes.
22		CMSR. CHATTOPADHYAY: You agree, okay.
23		So, that's all I have. Thank you.
24		CHAIRMAN GOLDNER: Okay. So, I'm going

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1	to focus on RSA 374-F:3, VI-a, (d)(5).
2	But, first, I'd like to thank the
3	utilities for providing such excellent witnesses
4	today, and helping provide these answers from
5	such excellent and knowledgable witnesses. And
6	the signage, by the way, the over-50 signage that
7	you provided. That's helpful for my distance.
8	So, Commissioner Chattopadhyay has an advantage.
9	He's a little closer.
10	BY CHAIRMAN GOLDNER:
11	Q So, I'll just read the relevant part of that
12	statute. It says: "On July 1st 2023, the joint
13	utilities shall petition the commission to
14	approve changes to program offerings for the
15	three-year period", the operative words there
16	being "changes to program offerings".
17	So, what I'd like to know, from the
18	analyst's point of view, is that how did you,
19	when you were working up the Plan and your
20	request for Commission approval, how did you
21	define "changes to program offerings"? And what
22	I mean by that, is that budgetary changes,
23	administrative changes, program structure, rebate
24	subsidies? What constitutes a "change to program

1		offerings"?
2	A	(Leménager) So, we worked with our legal teams to
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3		develop a definition, a working definition of
4		"program changes". And we largely understood the
5		definition of "program changes" to be reflective
6		of actual programs that we're offering; so, the
7		ADR Programs, for example, or the Municipal
8		Programs. And those were the two changes that
9		we've made, the two program changes that we've
10		made within this Plan proposal, by converting
11		Active Demand Response from a pilot program to a
12		full program; and then also the gas utilities
13		creating a stand-alone or a dedicated Municipal
14		Program offering, rather than having those
15		customers served through their C&I programs.
16	Q	Are those is Active Demand Response a program
17		or a measure or a project, or what exactly is the
18		terminology you're using with respect to Active
19		Demand Response? When I think of a "program",
20		I'm thinking of "HEA"?
21	A	(Leménager) Yes. So, HEA is one of our programs.
22		Active Demand Response has been a pilot program,
23		and continues to be a pilot program today. We're
24		proposing for that to be a full program.

	[WII	<pre>INESSES: Peters Lemenager Chambers Chen Downes      Carroll Demeris Stanley Culbertson Woods]</pre>
1	Q	A full program. So, separate from the other, I
2		think, seven?
3	A	(Leménager) Yes. And it's still tracked
4		separately today as a pilot. However, the costs
5		have been included in our PI structure, but the
6		actual results of those programs, because it's
7		been a pilot, have not been included. We're
8		proposing to be measured on the actual
9		performance on those efforts.
10	Q	Okay. So, I'm going to read from the Petition.
11		And it says that "As noted in the Plan's
12		Executive Summary, all changes to the Plan are
13		largely budgetary or administrative, with program
14		structure and offerings largely remaining
15		unchanged. Changes include the creation of a
16		dedicated Gas Municipal Program, instead of
17		funding gas municipal projects through C&I
18		programs, conversion of the Active Demand
19		Response pilots to full programs, targeted
20		efforts for electric baseboard heat conversions,
21		and the addition of a multi-family pathway within
22		the Home Performance Program", and it goes on
23		from there.
24		So, is that is that the totality of

	[WI]	<pre>INESSES: Peters Lemenager Chambers Chen Downes     Carroll Demeris Stanley Culbertson Woods]</pre>
1		the utilities' request today?
2	A	(Leménager) So, you mentioned a couple of what I
3		would consider "pathway updates". So, just
4		genuine generally refreshing the programs,
5		keeping them relevant for current marketplace
6		dynamics.
7		So, with the "Home Performance"
8		nomenclature now no longer applying, we, as Ms.
9		Peters mentioned earlier, we had to adapt or were
10		able to adapt our Home Performance offerings to
11		enable multi-family programs of greater than five
12		units.
13		We also have been exploring a ENERGY
14		STAR Homes all-electric offering within the
15		ENERGY STAR Program ENERGY STAR Homes Program,
16		with the development of I think it's "ENERGY STAR
17		Homes Next Generation" is the terminology. We've
18		explored how do we incorporate that as well.
19		So, it's been an update of everything
20		we're doing, which we do with every filing we
21		make. But the actual program changes are the
22		ones that you've listed, where the ADR Program
23		from a pilot to full program, and that
24	Q	Yes, I think that's, definitionally, for me,

	[WI]	TNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		that's different. So, if you're adding a
2		program, then you should, and you did, break it
3		out as a separate program.
4		But this says "changes to program
5		offerings". So, I would count that, a new
6		program, as a "change to program offerings", I
7		would say that.
8		But I would also say, because "program
9		offerings" is plural, I would say that, if you
10		had a new washing machine program, or you had
11		a or, "measure", rather, within the program,
12		like, if you're changing things within the
13		program, are you suggesting that those are
14		invisible? That it's only, if you add a new
15		program, that you would disclose that here?
16	A	(Downes) I would just say that we have always had
17		the flexibility, within the NHSaves programs, to
18		remove measures that are no longer
19		cost-effective, or that where a code change made
20		them no longer, you know, necessary to offer.
21		Or, if we have another measure that we found out
22		about through another affiliate or another
23		program, that is cost-effective and that we think
24		customers would like, we will add that. And that

[WITNESSES: Peters | Lemenager | Chambers | Chen | Downes | Carroll | Demeris | Stanley | Culbertson | Woods ] goes through a review process by Implementation 1 2 and by Evaluation, to make sure that the savings 3 assumption and whatnot are incorporated into the 4 Technical Reference Manual. 5 So, those are not what -- those have 6 not historically been considered at that degree 7 of granularity by the Commission. And we add or take away, depending on what is happening in the 8 marketplace. And that's a level of flexibility 9 that makes the programs operable and successful. 10 So, I would not posit that we are 11 12 asking you to review that level of granularity, 13 and approve or disapprove it. And I think that's the challenge, because we are 14 Q 15 in a new statutory environment. Government not 16 moving particularly fast. So, it's now two years 17 old. But it's relatively new, it's not 20 or 30 18 or 50 years old. 19 And I think what you're saying, and I 20 just want to repeat back to you, I think what 21 you're requesting today, and I'm just going to 22 read from the Petition: "A dedicated Gas 23 Municipal Program, instead of funding gas 24 municipal projects through C&I programs", and

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1		"the Active Demand Response pilots into full
2		programs."
3		That's what you're requesting in your
4		Petition for approval of today, is that correct?
5	A	(Downes) I think that, yes, that's fair. And
6		there's a lot of material that we filed. And,
7		so, I suggest that those are the changes that we
8		thought were necessary to bring to your
9		particular attention.
10	Q	And, so, let's focus on those two for a moment,
11		and just make sure that we're squared away on the
12		Companies' Petition and what you're requesting us
13		to approve.
14		So, can you can you walk us through,
15		let's just take the gas program the Municipal
16		Gas Program first, walk us through exactly what
17		you're requesting? I just want to understand,
18		because these are it's just like twelve words
19		strung together.
20	A	(Downes) Sure.
21	Q	So, I want to understand, what exactly are you
22		seeking from us?
23	А	(Peters) Can I I apologize. Just before we
24		kind of dive into that, I just do want to

[WITNESSES:	Peters	Lemenager	Chambers C	Chen Downes
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1		clarify, what we're asking for approval of is the
2		Plan in its entirety that we've proposed. And,
3		as Mary noted, these are the primary program
4		changes that we wanted to make sure you were
5		aware of and talk about. But there are also some
6		other associated, you know, things in the Plan.
7		So, I don't want to defer answering
8		your question. But I just wanted to note that
9		it's a comprehensive Plan that we're asking
10		approval for.
11	Q	I appreciate that comment. I'm right now just
12		concerned on the particular statute, and the
13		Commission's authority for approval within that
14		statute. And making sure that what we're being
15		asked to approve, we understand. So that,
16		when if and when we approve it, we know what
17		it is we're approving. So, that's the spirit of
18		the line of questioning.
19		So, yes. If we could get back to
20		exactly what is it that you're requesting with
21		this dedicated Gas Municipal Program?
22	A	(Stanley) To start, for the gas utilities'
23		Municipal Program that we proposed adding for
24		this Plan, they're currently, in the previous

	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	Plans, was a dedicated municipal offering for
2	electric customers.
3	And the gas utilities thought it was
4	important to have uniformity, in terms of
5	structure, between electric and gas. And it
6	wasn't as if we weren't serving municipal
7	customers historically, we would just process
8	those energy savings opportunities with municipal
9	customers between our Small and Large Business
10	gas programs. So, depending upon the usage
11	profile, we would either bucket a project within
12	Large Business or Small Business.
13	But, again, we thought it was important
14	to have uniformity to help us when we're engaging
15	with our municipalities. There wasn't some
16	confusion about "Well, sometimes, if I
17	participate with the electric utility, I'm being
18	serving through this Municipal Program offering.
19	But, when I work with the gas utility, it's
20	called something different." We thought it would
21	be important to create uniformity.
22	The actual services that will be part
23	of the program are no different than what we've
24	offered in the past. So, it's the same types of

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1	measures, it's the same types of incentives. The
2	process for the customer is, for all intent and
3	purposes, identical to what it's been. It's more
4	or less an accounting change on the utility side,
5	and a different marketing representation of how
6	we, again, package the offering to customers.
7	So, it's consistent, again, between
8	electric and gas. There isn't any type of
9	confusion in the marketplace about the gas
10	utilities not serving municipalities, because
11	there was a perception from some that maybe we
12	weren't serving municipalities, but we
13	historically were. So, that was the impetus for
14	the change.
15	But, in terms of the customer
16	experience, in terms of the incentives that
17	customers can take advantage of, they're
18	identical to what they were in the past, there's
19	no difference in the savings calculations than
20	what they were in the past. It's, for all intent
21	and purposes, the same offering. It's just an
22	accounting change on the utility side.
23	So, that, at a high level, would be how
24	I would describe what has been done and propose

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		to the Commission.
2	Q	So, I think, in Exhibit 1, it's Page it's
3		Page 40 in the document, but let me get the Bates
4		page.
5		So, Bates Page 044, Section 3.3, you
6		call out the Municipal Program. And, so, really,
7		I think what you're describing, Mr. Stanley, is
8		this is just a carve-out. It's the same program
9		as it was before, you're just now spiking out the
10		Municipal Program as a separate program, to
11		provide, I think, better visibility.
12		Is that what's happening here? There's
13		no other changes, I think is what you said?
14	A	(Stanley) Correct. And what it does do, by
15		creating this separate, dedicated program
16		offering, is it creates more certainty for
17		municipalities on the gas side, now that there's
18		a dedicated budget.
19		So, a theoretical example, if there was
20		high demand for nonmunicipal municipalities in
21		our gas portfolio, there's now a fixed budget for
22		municipalities that they can kind of plan and
23		count on being available to them. So, it holds
24		the gas utilities accountable to serving that

[WITNESSES: Peters | Lemenager | Chambers | Chen | Downes | Carroll | Demeris | Stanley | Culbertson | Woods ] 1 sector in the programs during this coming 2 three-year period. Whereas, before there could 3 have been a chance where municipalities weren't 4 served. 5 Although, I will say municipalities 6 have historically, year-over-year, been a 7 frequent and regular participant in our gas 8 programs. So, again, the services that we're 9 proposing aren't different. It's just how we're 10 accounting for it. 11 Thank you. That's helpful. And did you say that Q 12 this was previously in the Large Business 13 Program, the Small Business Program, or it 14 could -- it could go either way? 15 А (Stanley) It could have gone either way. I would 16 say, in general, most of these municipal projects 17 typically fell within our Small Business Program, 18 at least for Liberty Utilities. I would imagine 19 it's similar for Northern, I'm sorry, or 20 Unitil-Gas. But, yes. 21 So, I understand your logic of you sort of carved Q 22 this out, and we're calling it a new thing, a new 23 program, for lack of a better description. But 24 you're really changing the other two programs,

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1		too, because you carved something out. So,
2		subtraction or addition, I think I would qualify
3		as a "program change". Would the utilities
4		disagree with that assessment?
5	A	(Stanley) Well, what's being offered to the in
6		what's our Small Business and Large Business
7		Program isn't different. So, we're still
8		offering the same services. It's just the
9		customer profile of who might participate,
10		municipalities wouldn't be first in line within
11		those programs.
12		I will note that, within the electric
13		program municipal offerings, the structure of how
14		that works is, if the municipal budget is fully
15		subscribed, any additional municipal projects can
16		be served through the Small and Large Business
17		Programs. So, we would we would carry that
18		same approach here on the gas utility side as
19		well, meaning, in other words, if we expended
20		Liberty-Gas expended the full municipal budget in
21		2024, if there were additional municipalities
22		that wanted to participate, we would service
23		those municipalities either through the Small or
24		their Large Business Programs, and that would be

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1		consistent with how it's handled currently in the
2		Electric Municipal Program.
3	Q	Wouldn't that be subject to the 120 percent limit
4		that we were talking about before? If you have a
5		program, you have certain restrictions on what
6		you can and can't do in that program. So,
7		wouldn't you be subject to the 120 percent? And,
8		then, if you wanted to move money, you would, you
9		know, you would go through the appropriate
10		process to move that money?
11	A	(Stanley) If we wanted to move money into the
12		Municipal Program, that is correct.
13	Q	Or out? Or out, right?
14	A	(Stanley) Or out.
15	Q	If you need more, right. So,
16	A	(Stanley) I would say, in the Electric Municipal
17		Program offering, the funding stream is actually
18		dedicated through Regional Greenhouse Gas
19		Initiative funds. So, we technically don't move
20		funding from that to the Large and Small Business
21		Programs on the electric side.
22		But, to your point about the 20 percent
23		cap, et cetera, the 120 percent of budget spend,
24		theoretically, yes, that's how we would handle

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] those scenarios. 1 2 Q Okay. And can you just, for maybe the easiest 3 question you'll get all day, but how many 4 programs do we have now? 5 I'm losing track of the number. I've 6 got the Table of Contents in front of me. And 7 I'm not sure I'm counting correctly. Can you just list off the programs that 8 are in the Energy Efficiency Plan as of right 9 10 now? 11 (Leménager) Sure. For the electric programs, we А have HEA; we have ENERGY STAR Homes; we have Home 12 13 Performance; ENERGY STAR Products; Large C&I; 14 Small C&I; Municipal; and now proposed as a full 15 program, we have Active Demand Response for both 16 Residential and C&I as a full program. 17 Q So, that would be two, I guess? 18 (Leménager) Two --Α Two different --19 0 20 А (Leménager) They would be reported as two 21 separate lines within Residential and Commercial. 22 And, then, for Liberty and Unitil, they have 23 their Home Energy Reports Behavioral Programs as 24 well.

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes| Carroll | Demeris | Stanley | Culbertson | Woods ] 1 Q And that's, again, a separate program? 2 А (Leménager) Yes. That sort of thing, right. But Eversource, as I 3 Q 4 recall, doesn't have such a program? 5 Α (Leménager) Correct. 6 Q Okay. Now, for the task of counting: One, two, 7 three, four, five, six, seven, eight, nine. So, 8 I count ten for everyone but Eversource, and Eversource has nine, is that right? 9 10 А (Downes) The New Hampshire Electric Co-op does 11 not have a behavior program either. 12 Q Oh, oh. Now, I have to count again. So, that's 13 nine for the Co-op as well? 14 [No verbal response]. А 15 Okay. 0 16 (Downes) Not to confuse matters, but we also have Α 17 non-energy saving offerings, such as education 18 and workforce development, that are just 19 activities that we don't consider, but they are 20 not -- and they don't save energy. 21 So, I don't -- the definitions of 22 "program" versus "non-energy saving program", I 23 think, just to be fully forthcoming. 24 CHAIRMAN GOLDNER: No, you're not the

	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	only one who's confused. I'm struggling with
2	this, because we talk about "changes to program
3	offerings" in the statute, and I'm trying to
4	understand what that means, in terms of the
5	Commission's role and authority. And I know
6	you've consulted with your lawyers and you're
7	giving me the best answer you can.
8	I do happen to have in front me the
9	brief from the Joint Utilities and the OCA, but
10	it doesn't, unless the OCA or the Joint Utilities
11	would like to illuminate us further, it doesn't
12	talk about this definitional issue, it just says
13	"That's what the Commission is supposed to do."
14	So, what we're struggling with is "What
15	are we supposed to do?"
16	MS. CHIAVARA: And this is in regards
17	to what a "program offering" is, right?
18	CHAIRMAN GOLDNER: Yes.
19	MS. CHIAVARA: What comprises a
20	CHAIRMAN GOLDNER: What comprises a
21	"change in program offerings"?
22	MS. CHIAVARA: What is the je ne sais
23	quoi of program offerings?
24	CHAIRMAN GOLDNER: I can read that as a

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1	"measure".
2	MS. CHIAVARA: So, this is where I
3	would default to the expertise of the folks up
4	there in the box and at the table to my left
5	here. I understand what Ms. Downes was saying,
6	is that, you know, we do have the we,
7	historically, had the leeway to swap measures
8	out, because they don't necessarily rise to a
9	programmatic change. The measures come in and
10	out; the program structure stays the same.
11	So, I think the way that we were
12	interpreting it was, if a feature or a component
13	of the program, or a structural a structural
14	aspect to the program was to change, like, how
15	municipal programs get classified, or what budget
16	they come out of, then that would be a
17	programmatic change. But things at the
18	subprogram level and below, would be just sort of
19	utility discretionary. That would just be, I
20	guess, program management and program execution,
21	and it wouldn't necessarily be a plan change.
22	And I think what the law is referring to is
23	programmatic changes, to the extent they affect
24	what the Plan looks like and the structure of the

1 Plan. 2 CHAIRMAN GOLDNER: And I'll just share 3 where I'm struggling. 4 So, it seems like, if you're spending 5 \$20 million on a particular program, and you 6 decide "You know what, this is a great program. 7 We want to spend 25 million or 30 million", or, 8 conversely, you want to spend less. Then, isn't 9 that a change? It seems like that would be something 10 11 you would want to disclose, to say "Hey, we've 12 got this exciting new program. We want to spend 13 more money here." 14 Because there's a budget, you have to subtract off somewhere else, I totally 15 understand. But that seems like a change to me? 16 17 MS. CHIAVARA: A budgetary change? 18 Again, and this is where I would look to my left, 19 because these guys are going to know better if 20 budgetary change is. I think it would have to do a lot 21 22 with -- part to do with historical practice. And 23 I know that certain budgetary changes do warrant 24 a notification to the Commission, and approval,

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1	in certain cases.
2	But I guess it would I guess the
3	degree of the budgetary change would probably
4	have some effect on that, would have some
5	bearing, because it would have some impact on the
6	other programs, because we have finite funding.
7	CHAIRMAN GOLDNER: Yes. And I only ask
8	you, because they referred me to you.
9	MS. CHIAVARA: Right. Yes, I know.
10	I'm doing a great job with
11	CHAIRMAN GOLDNER: I'm looking in the
12	middle right now.
13	MS. CHIAVARA: just making a circle
14	here, yes.
15	CHAIRMAN GOLDNER: Maybe Ms. Peters can
16	answer, because you're right in the middle.
17	WITNESS PETERS: I am in the middle.
18	I would just say that I think we have
19	our energy savings programs that we just
20	discussed. As part of the Plan submission, we
21	have to, in the Plan, update the budgets, because
22	we've got statutory language that also directs us
23	as to how much SBC we can collect, and that's a
24	number that we need to make sure that we

Carroll | Demeris | Stanley | Culbertson | Woods ] incorporate, along with our other funding 1 2 sources. So, we have to reflect budgetary --3 planned budgetary changes in the Plan as part of 4 those program updates. 5 And, then, to the items that Ms. Downes 6 was noting, we do call those out within some of 7 the tables in the attachments, if you look at Attachment B, it kind of lays out the energy 8 savings programs, this is on Bates 105 and 106 9 10 for 2024. You can see the energy savings 11 programs. But you can also see a number of 12 13 company-specific programs, not all of which have 14 energy savings attached to them, and that's where some of that education or workforce comes in. 15 16 And we track the spending and the budgets on 17 those, you know, to make sure that we've got 18 transparency. Those are included in our 19 quarterly reporting and all our annual reporting. 20 So, it's important to lay those out 21 within the Plan, and what the budgets are going 2.2 to be, so that the Commission can understand kind 23 of all of those different buckets, along with the 24 primary energy savings programs.

[WITNESSES: Peters | Lemenager | Chambers | Chen | Downes |

[WITNESSES: Peters | Lemenager | Chambers | Chen | Downes | Carroll | Demeris | Stanley | Culbertson | Woods ] I don't know that that completely 1 2 answers your question. But that's kind of how 3 those pieces were coming together, in my mind 4 anyway. 5 CHAIRMAN GOLDNER: Okay. That is --6 that is helpful. 7 BY CHAIRMAN GOLDNER: 8 I just, you know, I just want to give the 0 utilities an opportunity to comment. Because, 9 when you say "changes to program offerings", and 10 11 you change the rebate on something, or you have a 12 new washing machine program, or whatever it is, 13 it sort of seems like a "change to program 14 offerings". 15 And I'd like to get your comments on 16 that conclusion, or proposed conclusion? 17 Α (Peters) So, I would say that all of those 18 various measure offerings are kind of -- they're 19 what builds the Plan. So, essentially, we are 20 asking for your approval of the entire Plan, 21 inclusive of the measures that we have included 2.2 in the BC models. And we, typically, when we do our quarterly reporting, if we have determined 23 24 the need to make a change to a measure, we

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1		include those in the quarterly reports, so that
2		we are kind of, again, informing and being
3		transparent with the Commission about changes
4		that may happen at that kind of very granular
5		level.
6	A	(Downes) I'm sorry to interrupt. But we aren't
7		seeking we're not expecting the Commission to
8		dive so deep as to understand the cost-effective
9		analysis of washing machines that we've decided
10		is worthy of being included in the program. The
11		EM&V Working Group and, you know, the subject
12		matter experts involved in the execution of the
13		Plan are carrying that work out at that level.
14		And I don't think any of us have expected the
15		Commission to dive so deep into it. So, it is
16		available to you, and that Technical Reference
17		Manual includes all of that information.
18		But, to Kate's point, I think what
19		we're looking for is, in order to proceed, is an
20		approval of the Plan, as proposed, and we have
21		highlighted all of it, right, and we've
22		highlighted those things that are changes, so
23		that they can be brought to your attention.
24	Q	Okay. Yes. No, my interest is in being in

[WITNESSES:	Peters Lemenager Chambers Chen Downes
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1		compliance with the statute. So, that's the line
2		of questioning here is to understand what a
3		"change to a program offering" is or isn't.
4		Because, if the "change to a program offering" is
5		a measure, then we're obligated, by law, to
6		review and approve that. So, that's why I'm
7		asking.
8	A	(Leménager) Yes. And, if I could just add, the
9		measure offerings that we have updated roll up to
10		the subprogram level, which then roll up to the
11		program level. And that's where we're defining
12		or have defined the "program offerings", or the
13		actual programs that we listed off, that's the
14		programmatic layer that we understand to be the
15		review. Where everything else below that is
16		really program management, and kind of best
17		practice, where being able to independently
18		update and drop measures that shouldn't be
19		getting incentives or update incentive levels as
20		needed, is really a management-level adjustment,
21		to be able to help execute the programs
22		effectively.
23	A	(Stanley) Can I say, though, to that point,
24		that's not just done by the utilities on its own,

[WITNESSES:	Peters Lemenager Chambers Chen Downes
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1		in terms of adding a measure, for example.
2		That's done in concert with the EM&V Working
3		Group with stakeholders to review those new
4		measures, to validate whether they are
5		cost-effective, to validate whether we're using
6		appropriate assumptions for them to be included
7		in the program offering.
8		If there is a change that happens
9		during the year, and as mentioned earlier by Ms.
10		Peters, that we, and it's committed to in our
11		Plan, I can't cite the page number, that we would
12		report those updates to the Commission on a
13		quarterly basis as part of our regular quarterly
14		reporting. And that has historically been the
15		process now for a number of years.
16	Q	And one of the things that we observed with the
17		filings was that there were a number of measures
18		that were under 1.0, and in some cases well under
19		1.0. And I'm sure there are reasons for keeping
20		those moving.
21		Can you walk us through some of those
22		reasons why you would take a measure that was
23		less than 1.0 and continue with it, or a

less than 1.0 and continue with it, or a

24 subprogram, either way?

1	A	(Chambers) Sometimes there are measures that we
2		retain in order to have sometimes maybe we
3		view them as a "loss leader", right? It's a
4		measure that's important to get in with a certain
5		group of contractors or a certain type of
6		customer. It's important to offer that measure,
7		so then we can get the customers into the program
8		and offer them other more cost-effective
9		measures.
10		Sometimes we retain a measure that's
11		important within a greater group of measures.
12		For example, if we say to the market, you know,
13		"We incentivize high-efficiency water heaters",
14		that may be a certain type of indirect water
15		heater, falls a little bit below 1.0, it could be
16		more detrimental to the whole market to add that
17		confusion, and have them be like "Well, I'm not

18 sure what qualifies or what doesn't", it's easier 19 to just have the package altogether as a whole, 20 all of our water heaters screened.

21 So, those are the types of decisions 22 that would be, is to retain a measure that's 23 below a 1.0.

24 Q Okay, that's helpful. Could you give maybe an

1		example or two of a loss leader, something that
2		you could share, to help us understand what you
3		mean by that?
4	A	(Peters) I would say that the initial Energy
5		Audit visit to a customer home. So, in the Home
6		Performance Program, we go out, we do the initial
7		assessment for the customer. There is a cost to
8		that assessment. The customer pays a portion of
9		it, they pay \$100, but that's not the full cost.
10		If the customer decides not to move forward with
11		a project, for whatever reason, that cost does
12		not have any energy savings associated with it,
13		unless the contractor was able to install some
14		small measures, like showerheads or something
15		small while they're there, which they try to do.
16		So, that Energy Audit itself would probably not
17		pass a 1.0.
18		But, if enough customers take that
19		audit and choose to do measures, we're getting
20		significant energy savings from that program
21		overall.
22		And, so, the initial audit is one of
23		those examples, I think.
24	Q	And this is, I'm going to try to stay out of the

Carroll | Demeris | Stanley | Culbertson | Woods ] weeds, but I'm going to dive in there for just a 1 2 second. 3 Α (Peters) Uh-huh. 4 0 So, there was -- a "faucet aerator" was talked 5 about before, "showerheads". I kind of don't get 6 what the energy savings are with respect to those 7 products? 8 (Peters) They're water heating savings. Α 9 Water. How does it save water heating? I guess Q 10 you're letting less go through the device, and, 11 so, therefore, you heat less water? 12 А (Peters) Correct. 1.3 Okay. Thank you. Well, that was a quick trip Q 14 through the weeds. Excellent. 15 CHAIRMAN GOLDNER: Okay. Let me just 16 check here. 17 So, I'm going to go a little out of 18 order here. But I just want to check with 19 Attorney Chiavara. 20 So, the requested relief here, relative 21 to the statute (d)(5), is just those two programs 22 we talked about, Gas Municipal Program and Active 23 Demand Response, that's the relief requested 24 under that portion of the statute?

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes|

Carroll | Demeris | Stanley | Culbertson | Woods ] 1 MS. CHIAVARA: I will echo what was 2 said before, is that, yes, the utilities proposed 3 and highlighted those programmatic changes that 4 changed from between this Plan and the previous 5 Plan. But we are asking for approval of the 6 entire -- the Plan in its entirety. 7 CHAIRMAN GOLDNER: Okay. I'm just trying to make sure that the Commission is in 8 compliance with the statute? 9 10 MS. CHIAVARA: According to (d)(5), was 11 it? 12 CHAIRMAN GOLDNER: Yes. And it's 13 VI-a(d)(5). MS. CHIAVARA: Yes. And I think, I see 14 15 what you're saying, and I think that, in 16 approving the programmatic changes, say, based on 17 approval for the whole Plan went through, I think 18 that would be entirely consistent with the 19 statute. 20 CHAIRMAN GOLDNER: Okay. Thank you. Ι 21 think the last question on this topic, and then 22 I'm going to move over to the cost-effective 23 topic here in a bit, and then go back to my 24 fellow Commissioners. And I'm still on (d)(5).

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes|

[WITNESSES:	Peters   Lemenager   Chambers   Chen   Downes	
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1	I'm trying to understand how the
2	Commission, or Commissions in the future, are to
3	know what the baseline is. So, if we're talking
4	about "changes to program offerings", one needs
5	to know what the foundation of the baseline is
6	before one approves a change to a program
7	offering.
8	So, how are how is this Commission,
9	or future Commissions, supposed to know what the
10	baseline is and what it is that they're
11	approving?
12	MS. CHIAVARA: That is a very fair

MS. CHIAVARA: That is a very fairquestion.

14 I think it's, and I think we've been 15 working it out a little bit in real-time, I think 16 it comes down to the difference between program management and program execution, and those 17 things that the utilities deem to be "structural 18 programmatic changes". So, changes at the Plan 19 20 and program level, so that things that impact the Plan as a whole. Because the Plan, as component 21 2.2 parts, they all work together, they're all, like, 23 interconnected.

And, so, I think a change to one of

1	Carrorr Demerrs Stanley Curbertson Woods
1	those things that impacts the Plan as a whole
2	would be a programmatic change. Things lower
3	than that level would be sort of program
4	management and program execution. That's usually
5	left utility discretion. So, I guess we would
6	ask for a bit of trust on that one.
7	CHAIRMAN GOLDNER: Okay. And I'll
8	try to stay in my lane and not address this to
9	Mr. Dexter.
10	But would you say, Attorney Chiavara,
11	and if you want to wait until the DOE is up, then
12	that's fine, but would you say the Department has
13	a good handle on all of the measure changes and
14	programmatic changes, and at every level, they
15	would the Department would have a good handle
16	on all the changes that were made, whether it was
17	a discount rate or a subsidy or a budget, or what
18	have you?
19	The Department would know the answer to
20	all those questions. But what you're proposing
21	for the Commission is just at the very highest
22	level, "yes" or "no"?
23	MS. CHIAVARA: Yes. "Yes" or "no".
24	Certainly, you know, to the extent that the

[WITNESSES: Peters | Lemenager | Chambers | Chen | Downes | Carroll | Demeris | Stanley | Culbertson | Woods ] Commissioners want to understand and kick the 1 tires on what they're saying "yes" or "no" to, 2 3 that is absolutely understandable. 4 But I'd agree, and Attorney Dexter can 5 kick my chair, if he wants. But I think the DOE 6 is definitely aware on every level of what's 7 happening with the programs at the measure level on up, at any given time, through audits and 8 reporting and all of those things. 9 CHAIRMAN GOLDNER: And, Mr. Dexter, 10 11 when it's the DOE's time, please comment on that, 12 if I forget. I'll try not to. 13 BY CHAIRMAN GOLDNER: 14 So, this is probably -- yes, I'll just ask this 0 15 question. So, this question was answered in part 16 earlier, but I want to probe a little further on 17 it. 18 So, you know, we see programs that have 19 exceptionally high B to C ratios. So, for 20 example, the ENERGY STAR Homes Program, I think 21 the B to C is 6.0 or 7.0, or something. What's 22 unclear to me is, why -- why not spend more on 23 ENERGY STAR homes? Is there some sort of -- why 24 wouldn't you put more money in there?

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1		I assume the B to C would come down a
2		little bit if you put more money in there. But
3		it seems like exceptionally effective program.
4	A	(Chambers) So, for that program, in particular,
5		we are limited by the amount of new construction
6		occurring in the state. We can't force more
7		money into homes that aren't being built.
8		So, I think we've captured I think
9		our evaluations have shown that we're capturing

almost all the market now. So, there isn't a lot more room to move on that program, in particular.

12 More broadly, when applied to the 13 portfolio, that same theory is there. You can't 14 just plow all of the program dollars into whatever measure is the most cost-effective, 15 because there are other limitations, there are 16 17 technical limitations, there are economic 18 limitations to the amount of potential you can 19 get from any one measure.

And, in particular, if you were, say, in a given year, really aggressively pursuing one measure, you would then most likely run out of opportunity for that measure, and then the next year you'd have to switch to another measure, it

[WITNESSES: Peters | Lemenager | Chambers | Chen | Downes | Carroll | Demeris | Stanley | Culbertson | Woods ] would cause a lot discontinuity in the market, 1 2 and, overall, we believe would tend to reduce the 3 total amount of savings you can get. 4 The best way to get sustained savings 5 is to have broad offerings that allow a large 6 number of customers to participate with the 7 particular programs that they are undertaking at the best time for them. 8 So, maybe -- maybe you can just give us some 9 Q 10 specific examples. So, it seems to me, if you 11 have a New Homes Program, that's a very good 12 thing, because you're not going to be back in the 13 next year or the year after with more equipment. 14 So, you've solved the problem for another, you know, decade or two. And, so, that would be a 15 16 place that would be optimal. 17 I think what you said earlier was that 18 you're already spending sort of the maximum 19 amount. You're supporting all the new -- you're 20 engaged with all the contractors building new 21 And that you feel like you have a robust homes. 22 program that you're working with them on, and 23 that you've sort of filled up the vessel, as it 24 were, with respect to homes.

[WITNESSES: Peters | Lemenager | Chambers | Chen | Downes | Carroll | Demeris | Stanley | Culbertson | Woods ] 1 I don't want to put words in your 2 mouth, but I'm trying to make sure I understand 3 what you said. 4 Α (Chambers) Yes. Obviously, there's always a 5 little bit more room for growth. We're never at 6 100 percent market penetration. But, for that 7 program, in particular, we're, I believe, in the 90s, in terms of homes that we touch that are 8 That's in an evaluation to confirm. 9 newly built. 10 А (Stanley) And Ms. Peters brought up earlier, 11 we've been recognized now over a decade, year 12 over year, by the EPA, by how well that program 13 has been delivered in the marketplace specific to 14 New Hampshire. So, we have been operating as 15 well as any of our peers in the country in 16 offering a new construction residential offering 17 here in the state. 18 But there are capacity constraints, in 19 terms of how much new construction is happening, 20 and how much we can really influence beyond 21 what's reflected in the Plan. 22 So, we would love to capture more. And 23 there are some opportunities, in some years, 24 where we've decided to reallocate dollars from

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1		some programs to that program. Or, in other
2		circumstances, other programs, because there's
3		more demand that could be captured in one
4		particular year.
5		I will say, for this year, in
6		particular, we've actually had struggled with
7		that offering. We've actually had a little bit
8		of a slow down, at least in Liberty's territory,
9		for that program. So, that program, in
10		particular, can really ebb and flow, depending
11		upon the availability of supplies, contractors.
12		So, that's a difficult program to have consistent
13		activity year over year.
14	Q	And do you have handy an average? And it can be
15		just the Liberty average, or Eversource, or
16		Unitil, or Co-op. But do you have an average
17		that you're spending on the New Homes Programs
18		handy, and what's the average spend for a home?
19		It's somewhere in the 1,500 pages, I
20		know, but I can't find it.
21	A	(Stanley) I'll look to Ms. Peters. Ms. Peters
22		might have it.
23	A	(Peters) I don't think I've got the number at my
24		fingertips.

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1	A	(Chambers) I have I have the benefit-cost
2		model open. And it's showing an average heating
3		incentive for an electrically heated home of
4		about \$2,200.
5	Q	\$2,200. So, that would be washers and dryers,
6		and, you know, all of the various and sundry
7		items that would go into the new home, that would
8		be kind of the totality of it?
9	A	(Stanley) The bulk of the cost is actually just
10		for the certification fees, for the rating of the
11		home itself. So, it's that's where the bulk
12		of the cost is actually coming from, its like the
13		certification process.
14	Q	Hmm.
15	A	(Stanley) So, we pay for, basically, a
16		certification rating. Because there are certain
17		prebuild steps that need to happen to qualify the
18		home, and then postbuild steps that need to
19		occur, in order to validate that the home meets
20		the EPA criteria for that program.
21	Q	So, would it be from a contractor's point of
22		view, they would go through your normal offerings
23		for washers and dryers and what have you, and
24		then that's how they would stock the house with

[WITNESSES:	Peters Lemenager Chambers Chen Downes
Carrol	Demeris Stanlev Culbertson Woods

	-	Carroll Demeris Stanley Culbertson Woods]
1		the equipment, and then this \$2,200 is just the
2		certification, I don't understand that?
3	A	(Stanley) It's not just I'm sorry, I didn't
4		mean to step over you, Chairman.
5		We will pay for small appliances
6		through the program. That's a very small part of
7		the incentive. It's again, the bulk of it is
8		for that rating fee, to qualify that the home can
9		get that kind of "Seal of Approval" stamp that
10		the builder can then market to potential buyers
11		of the home.
12	A	(Downes) I think someone mentioned earlier that,
13		in the New Homes Program, in particular, it's the
14		relationship-building that is really important.
15		So, the HERS raters, the Home Energy raters, are
16		highly skilled, have lots of training and
17		background, and they are on-site, and they
18		provide a tremendous amount of support and advice
19		to the builders themselves. It's somewhat
20		informal. But it helps to helps the builder
21		build a better home, more tighter, you know,
22		better insulation, just dealing with problems
23		that come up, you know, challenges that come up
24		during a construction project.

[WITNESSES:	Peters L	emenager	Chambers C	hen Downes
Carrol	l Demeris	Stanlev	Culbertson	Woods]

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1	And, so, that learning that happens by
2	the builder, by being in a relationship with a
3	HERS rater, carries on to all, you know, it's
4	permanent. That learning, that understanding,
5	makes a better home, makes a better product.
6	And, so, they carry that on even to jobs that
7	aren't going through our program.
8	So, the HERS rating that we're that

9 what the programs are doing in paying for that 10 rating is really paying for that 11 relationship-building, and that learning and 12 training that takes place, literally, at the job 13 site.

So, at the end of that, the building, the home, can get the ENERGY STAR, you know, stamp of approval, and we pay the HERS rater to have performed that service.

18 So, just to make sure I understand the Q mathematics here. The cost is 2,200, the benefit 19 20 is the home, as it relates to a spec home. So, 21 you're doing more insulation, double-pane 22 windows, what have you. And that delta is what 23 you're recording as the benefit? 24 (Downes) Correct. Α

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	Q	Okay. And, so, it's mostly not appliances, I
2		think Mr. Stanley said. It's mostly insulation
3		and windows, and this kind of thing?
4	A	(Downes) Correct.
5	Q	Okay. Okay. All right. Thank you. I do have a
6		few questions relative to the Petition, and the
7		comment on electric baseboard heating. When was
8		the Electric Baseboard Heating Program put in
9		place? I assume there's been a program to put it
10		in, or there was never a utility program to put
11		in electric baseboard heating?
12	A	(Downes) To put it in in the first place?
13	Q	In the first place.
14	A	(Downes) Oh, yes. That wasn't
15	Q	That was never an energy efficiency program?
16	A	(Downes) Well before my time, if that was ever a
17		thing. That was certainly not an energy
18		efficiency effort, I don't believe.
19	Q	Okay. So, it wouldn't have been an energy
20		efficiency program, you can all agree with that?
21	A	[Multiple witnesses indicating in the negative].
22	Q	Okay. That's good, because it's not very
23		efficient.
24		[Laughter.]

1		Carroll Demeris Stanley (Culbertson Woods)
1	BY 1	THE WITNESS:
2	A	(Peters) I want to elaborate, that that mention
3		of "targeted efforts for electric baseboard
4		heating conversions",
5	BY C	CHAIRMAN GOLDNER:
6	Q	Yes.
7	A	(Peters) so that relates to converting
8		electric baseboard heat to heat pumps.
9	Q	To heat pumps, okay.
10	A	(Peters) So, the source of the heat is still
11		electric, but it's a much, much more efficient
12		use of that electricity.
13	Q	Thank you. That's what I was thinking it meant,
14		but I wasn't sure. Okay. So, that answers that
15		question.
16		I did have a question, and this may be,
17		and I apologize, because we have witnesses up and
18		I'm asking attorneys questions, which is
19		nonstandard. But maybe the witnesses know the
20		answer.
21		So, when were heat pumps approved by
22		the Commission? We were looking back through the
23		record, and we, again, this is goes to the
24		baseline, Attorney Chiavara, like we're having a

1		Carrorr Demetrs Stanley Curbertson woods
1		hard time determining what the baseline is.
2		Did the Commission approve heat pumps
3		in some prior time period or plan? We couldn't
4		find it in our in our records, at least I
5		couldn't find it in the records.
6	A	(Peters) So, heat pumps have been a measure in
7		the Products Program for three or four years now.
8		We would have to check.
9	A	(Downes) More than that.
10	A	(Peters) More than that?
11	A	(Downes) More than that.
12	A	(Peters) So, the way that we approach heat pump
13		incentives, is that we are, just like any other
14		efficient appliance, we are looking at the
15		incremental between a baseline heat pump that a
16		customer may install and an efficient heat pump.
17		And we're basing our incentive and our kind of
18		approach on that.
19		So, in a lot of ways, heat pumps, in
20		our programs, have been very similar to any other
21		appliance, in terms of how they're approached and
22		delivered. Now, with this
23	Q	I'm sorry, Ms. Peters, let me just interject.
24		So, I think what you're saying is, because heat

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1		pumps are regarded as a measure, it would never
2		have come before the Commission for approval,
3		it's been something the utilities have been doing
4		for some time, because it fell under the umbrella
5		of the
6	A	(Peters) The Products Program.
7	Q	the Products Program.
8	A	(Peters) Yes. That's correct.
9	Q	Okay. I'm sorry, please proceed. I just wanted
10		to check on that.
11	A	(Peters) Yes. I was going to note that it's kind
12		of called out here in these conversions, where,
13		especially in some income-eligible properties, we
14		are starting to convert the baseboard heat to
15		heat pumps. And, in those cases, we're not just
16		paying an incremental, it's an income-eligible
17		program, we're paying the full cost for those
18		heat pumps as a heating appliance in the
19		building. So, that is a little bit different.
20	Q	Okay. And I think there were some numbers in the
21		OCA's filings, and I promise to wait until the
22		OCA's witness is presented. But let me just move
23		to that quickly on the heat pump question.
24		So, I think, Ms. Peters, what your

	[WII	<pre>INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]</pre>
1		saying is that, for a typical customer, you're
2		paying on the delta between a conventional heat
3		pump and a high-efficiency heat pump.
4	A	(Peters) Uh-huh.
5	Q	And, for a low-income customer, you're paying 100
6		percent for the entire heat pump to go in. And
7		what's a typical heat pump cost these days? Any
8		idea?
9	A	(Peters) It would be several thousand dollars a
10		ton. But it's very dependent on the particular
11		building, and the type of installation that needs
12		to happen, how many lines need to run, how many
13		units you need. But a few thousand dollars a ton
14		I think is a very general estimate.
15	A	(Downes) That's the full cost, just to be clear.
16	A	(Peters) The full cost.
17	A	(Downes) That's not our incentive.
18	Q	And what's the so, a typical 2,000-square-foot
19		house would have how many tons would that
20		need, roughly?
21	A	(Chambers) Well, if you're sizing it for the
22		entire heating season, it would be about four
23		tons.
24	Q	Four tons. So, if we do the math again, it would

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		10K, or something like that, for a heat pump for
2		a 2,000-square-foot house, roughly, I'm just
3		trying to get a handle on it?
4	A	(Chambers) Hmm. When Ms. Peters said "several
5		thousand", she meant more like "four to five
6		thousand per ton".
7	Q	Several, okay, yes.
8	A	(Peters) Thank you.
9	A	(Downes) But, again,
10	Q	Subject to interpretation.
11	A	(Downes) I'm sorry to interrupt. We should
12		distinguish between a heat pump that is
13		supplementing existing fossil fuel heating,
14		versus replacing it or displacing it altogether,
15		right? So, if you want to completely remove your
16		fossil fuel heating system, and replace it with
17		heat pumps, you're talking an order maybe not
18		an order of magnitude, you're talking
19		significantly more money than just what most
20		folks are doing, which is to supplement the
21		existing heating and cooling supplement the
22		existing heating system, and get rid of any
23		existing cooling system.
24	Q	So, this will be another short trip through the

	[WI]	INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		woods. But, if it's four of five thousand
2		dollars per ton, 2,000-square-foot house, so,
3		we're talking let's just round it to \$20,000.
4		My understanding, with most heat pumps,
5		Ms. Downes, and I think you just said this, was
6		that, generally speaking, they're supplemental.
7		So, you keep your existing system, the heat pump
8		is more efficient than your existing heating
9		system. So, for that \$20,000, you get a higher
10		efficiency rating in the house, and you get
11		energy savings by virtue of that process. And,
12		of course, the heat pump works both in summer and
13		winter, to supplement both.
14		So, is that is my understanding of
15		heat pumps sufficient?
16	A	(Downes) Simplified, but, yes. That works.
17	Q	Okay. Okay. And I guess, last question on this
18		is that, if a 2,000-square-foot house needs
19		roughly \$20,000 in equipment, what would roughly
20		the subsidy be?
21		And I'm referring to the OCA's filing.
22		There was I think there's up to 10,000 in
23		incentives, 8,000 for rebates, 2,000 in tax
24		credits. Then, there's something in the filing

	[WII	INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1		about air conditioners only receiving 600. So,
2		we're trying to puzzle through that.
3		But is that would that be for a
4		typical 2,000-square-foot house? So, it would
5		cost 20,000, there would be roughly 10,000 in
6		rebates. So, the homeowner would pay roughly
7		10K, is that roughly how it works?
8	A	(Chambers) For yes. Yes. For the new
9		offering that we are putting forward in this
10		Plan, where, for the first time, we are
11		explicitly offering a retrofit offer for
12		customers on electric baseboard heat. Ms. Downes
13		mentioned "fossil fuels", but we're not targeting
14		those yet.
15		For customers on electric baseboard, we
16		will offer a retrofit offering that is, I
17		believe, \$1,250 per ton, up to 10K, for those
18		customers who can prove that they're displacing
19		their electric baseboard.
20	Q	Okay. Okay. And, then, what I'm trying to
21		picture is the savings, and just to sort of
22		rationalize it in my own head, without worrying
23		about the spreadsheets and so forth. So, if
24		you're spending, you know, 6 or 8 or 10K, and

	[W1]	<pre>INESSES: Peters Lemenager Chambers Chen Downes      Carroll Demeris Stanley Culbertson Woods </pre>
1		you're looking at the savings that you get, I'm
2		thinking a typical air conditioning bill might be
3		a few hundred dollars in the summer, typical
4		heating bill, for a 2,000-square-foot house,
5		maybe two or three hundred dollars, I'm just
6		guessing. Am I wrong?
7		Ms. Downes, it looks like you're
8		spending more at your house.
9	A	(Downes) For electric baseboard heating, I think
10		it would be much more.
11	Q	Oh, much more. I see your point, yes. Yes. So,
12		like, what would you expect, a 2,000-square-foot
13		house, in the winter, the electric baseboard
14		heating would go from what to what?
15		I'm just trying to understand the scope
16		of the \$10,000. So, it would maybe save 100
17		bucks a month or something in the winter? 200
18		bucks a month?
19	A	(Chambers) No. No. No, I think the heat pump
20		would save quite a bit more than that in the
21		winter. So, it's not uncommon to see winter
22		electric bills of \$800
23	Q	Really?

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes|

	[WII	<pre>INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]</pre>
1		actually.
2	Q	On electric baseboard. I didn't know that.
3	A	(Chambers) Heat pump will be, on average, for the
4		whole season, about two and half times more
5		efficient. So, it's going to be a 50 percent
6		drop in those customers' bills.
7	Q	It's going to go from 800 to 400, something like
8		that?
9	A	(Chambers) Could be.
10	Q	So, for a peak season, in winter, which sadly
11		here is quite long, it's going to be maybe three
12		or four months, so you might save 1,200 bucks,
13		something like that. And, so, if you spent 10,
14		you get 1,200 back, you're talking about a seven-
15		or eight-year payback with a subsidy, is that,
16		just
17	A	(Chambers) Potentially. We'd have to run the
18		numbers. I can tell you, in the model, we are
19		seeing we're modeling annual savings of 4,000
20		kilowatt-hours, so you can turn that into
21		dollars.
22	Q	Okay.
23	A	(Downes) You'd also want to you would also
24		want to incorporate the savings from the air

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1		conditioning, assuming that there was air
2		conditioning there to begin with.
3	Q	On the other side, thank you. Okay, that is
4		that makes sense.
5		So, last question on the topic, and
6		then I'm going to move on.
7		So, if it's unsubsidized, and we're
8		just looking at, like, how much does a heat pump
9		actually help, right now, given how much heat
10		pumps cost in the market, it would be, I think
11		the math we just did, was something like a
12		15-year payback or something like that, which
13		would not be very good, in fact, that would be
14		bad. But, with the subsidy, you can cut it in
15		half through the ratepayer-funded program.
16		So, last question on this, but can you
17		help me understand why a heat pump is a good
18		thing, if it has a 15-year payback unsubsidized?
19		Like, why is that helpful? How does that help?
20		And I'm just thinking just think
21		about electric baseboard heating, we won't go to,
22		you know, any other forms of heating. Like, how
23		does that help, if it's such a long payback? It
24		seems like it's not cost-effective.

	[WII	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1	A	(Downes) It's a very it's a very big
2		hypothetical. So, I'm hesitant to comment. But,
3		I think, from the customer's point of view or
4		from the program point of view?
5	Q	I'm thinking just, are heat pumps cost-effective
6		as a measure?
7	A	(Downes) Yes.
8	Q	So, the question becomes, if they truly cost
9		20,000 in the market, and you're saving some
10		hundreds of dollars a month, then why are they
11		cost-effective?
12		If we deeply subsidize them, then you
13		can make it look cost-effective to the customer,
14		but it doesn't look like a cost-effective measure
15		in the first place.
16	A	(Downes) There's no one of the things about
17		heat pumps, in particular, is there is no
18		one-size-fits-all analysis. Like, you really
19		have to look at this on a home-by-home basis.
20	Q	Happily, you gave me one size for the electric
21		one. So, the electric baseboard is where we
22		started. So,
23	A	(Downes) Sure. So, electric baseboard, I think
24		it probably makes sense, and should be done.

	[WII	<pre>INESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]</pre>
1		And, if you had all the money in the world, and
2		didn't need, you know, didn't have a first-cost
3		barrier, then I would recommend that you do it
4		anyway, as long as it's not a summer home.
5	Q	Hmm. Okay. I might respectfully disagree on
6		that. But I appreciate the explanation, and
7		helping me walk through the process. Because I
8		do think that's all over the news, isn't it?
9		Heat pumps are everywhere. So,
10	A	(Stanley) Can I add?
11	Q	Yes.
12	A	(Stanley) That we we actually have customers
13		that, even with electric baseboard heating
14		on-site, and presenting them the incentives that
15		they could take advantage of, where they could
16		cut their energy bill and electric bill
17		significantly, are still not deciding to move
18		forward with installing the unit.
19		So, even though it could appear as a
20		no-brainer to the customer, or that we would
21		think it would appear as a no-brainer, we have
22		customers that still aren't taking advantage of
23		the offering.
24		And sometimes it's due to that split

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		incentive dynamic, where maybe the property owner
2		isn't paying the utility bill. So, you see some
3		customers, where we've offered lucrative
4		incentives for them to take advantage of heat
5		pumps to replace their electric baseboard
6		heating, and they're still deciding not to move
7		forward with it.
8		So, it's not always a slam-dunk, or
9		logic doesn't always apply.
10	Q	And is there a reason why the at least as I
11		understand, the rebates for air conditioners,
12		even high-efficiency air conditioners, is quite
13		different than heat pumps? Looks like one's 600,
14		the other one's like 10,000. Is there a reason
15		that the Joint Utilities have that position? In
16		other words, air conditioning is not really
17		subsidized, but heat pumps are?
18	A	(Chambers) The air conditioning measure is a lost
19		opportunity measure. So, again, we're just
20		comparing, and it's targeted at people who are
21		already purchasing an air conditioner. And it's
22		just meant to cover the difference in cost
23		between a standard efficiency unit and the high
24		efficiency unit.

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1	Q	I see. Okay. That's helpful. Okay. Though, I
2		know, a preview of coming attractions, I think,
3		with the outlawing of the working fluid in the
4		air conditioners, there's going to be a lot of
5		air conditioners being replaced, or heat pumps
6		being put in to supplement those in the future.
7		So, my questions were in the spirit of sort of
8		understanding what the future looks like, looks
9		like there.
10		But I think it's already very hard to
11		get working fluid for existing air conditioners
12		that were put in before maybe 2015.
13		All right. Thank you for that. All
14		right. So, I'm going to move quickly to
15		incentives, and trying to understand what's going
16		on there. And this may be something for the
17		October 31st hearing. This may be, per
18		Commissioner Chattopadhyay's earlier line of
19		questioning, there may be a lot of math involved
20		here. But I'll try to simplify.
21		So, I tried to look at understanding
22		the incentives. Were they less than 50 percent?
23		Were they between 50 and 75 percent? Were they
24		between 75 and 100 percent? And trying to

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1	understand what each of the utilities were doing
2	there. And it looks like Unitil has quite a
3	different model, and I would say a more effective
4	model, in the absence of any other facts, based
5	on based on how that breaks out.
6	In other words, about 60 percent of
7	Unitil's offerings have an incentive of less than
8	50 percent, where, in the case of Eversource,
9	it's more like 25 percent. So, in other words,
10	Unitil is offering lower incentives to achieve
11	the same results. So, from a Commissioner
12	standpoint, I would say that's a good outcome.
13	And, then, I'll also say that about, if
14	you exclude low-income measures, exclude them,
15	there is still about 13 and 20 percent of the
16	offerings that are at 100 percent discounts, in
17	other words, everything is just free.
18	So, I'd like to get your comments on
19	why there are so many measures that are at 100
20	percent, and like, literally, 20 percent of the
21	total offerings, and then the difference well,
22	let's just start with that. Why are there why
23	are there so many measures that are that where
24	there's no customer participation, in terms of

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1		co-funding?
2	A	(Chambers) Are those within the Low-Income
3		Program?
4	Q	No, no. I've excluded them. I've excluded them.
5		There are obviously, the low-income measures
6		are all at 100 percent. So, I took those out.
7	A	(Downes) So, many of the Products Program
8		offerings, the customer incentive is equal to the
9		Total Resource Cost, the increment, the total
10		increment. So, we're not talking about the total
11		cost of a refrigerator. We're talking about the
12		average between a standard efficiency, and there
13		are all kinds of standard efficiencies, and a
14		high efficiency, and, again, there all kind of
15		ways, you know, different costs to those high
16		efficiency models.
17		And, so, an analysis was done, likely
18		in a different state, because we haven't done a
19		lot of first-cost analysis in New Hampshire
20		specifically, to get that average incremental
21		cost between a low efficiency and a
22		high-efficiency unit. And, so, that is a
23		that's, you know, that's an average that we use.
24		And we basically say that, you know, we've

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1		designed the program so that our customer
2		incentives, general speaking, don't go above
3		that, and sometimes we meet it, knowing that
4		those costs are going up over time.
5		Our rebate incentives, we look at them
6		every year, but they don't they tend to stay
7		fairly stable. So, we pay much more attention to
8		the incentives than, frankly, you know, the Total
9		Resource Cost, which is not part of the Granite
10		State Test, that stays fairly static over time.
11	Q	So, let me just clarify that. So, if a
12		high-efficiency refrigerator is \$1,000 and the
13		standard refrigerator is \$900, the incremental is
14		100, and there might be cases that are recorded
15		here where the incentive is 100, because it's all
16		the way down to the standard product, is that
17	A	(Downes) Correct. We're estimating that the
18		total increment or the Total Resource Cost is
19		that \$100 variance, and we're saying "Let's just
20		cover that." Now, for some customers, that's
21		going to cover it, and for some customers it's
22		not.
23	Q	Okay. Thank you. Another interesting factoid in
24		the filing was that lighting still dominates the

1		offerings, realizing it's C&I, and not
2		Residential, but it still dominates the
3		offerings, at least as a percentage of electric
4		benefits, it shows it's about almost half of the
5		electric benefits come from lighting in C&I.
6		Can the utilities walk us through why
7		that is? Why does lighting still dominate after
8		all these years of LED and so forth?
9	A	(Downes) They're still a cost-effective
10		opportunity. And we want to capture that while
11		it's still available to be captured.
12	Q	But they're not using sorry for interrupting.
13		They're not using incandescent bulbs, they're
14		using probably fluorescent bulbs, which are
15		pretty efficient. I mean, what's the
16	A	(Downes) So,
17	A	(Stanley) We see that we still see
18		incandescent and fluorescent bulbs quite
19		regularly.
20	Q	You do?
21	A	(Stanley) Yes.
22	Q	Okay.
23	A	(Stanley) It's not there's not an overall
24		dominance of LEDs in the Commercial/Industrial

	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	sector. I would say, even the office building I
2	work, it still has opportunities for improvement.
3	So, it's a common occurrence.
4	CHAIRMAN GOLDNER: Mr. Sheehan, I think
5	you were just thrown under the bus.
6	MR. SHEEHAN: I'm stopping at Home
7	Depot on the way home.
8	CHAIRMAN GOLDNER: Please.
9	CMSR. SIMPSON: I can think of a few
10	people that might offer an energy audit.
11	[Laughter.]
12	BY CHAIRMAN GOLDNER:
13	Q Sorry, Mr. Stanley. Please proceed.
14	A (Stanley) No, that's it. Thank you.
15	Q And are these I assume these C&I systems, I
16	mean, where is the bulk of the cost? Is it in,
17	you know, a large Anheuser-Busch plant? Is it
18	in like, where do you spend the most of your
19	money on lighting? I'm just trying to picture
20	it. I didn't even know that LED bulbs weren't in
21	just about every application.
22	A (Downes) So, we have to distinguish between
23	screw-in bulbs, which are all
24	[Court reporter interruption.]

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1	WITNESS DOWNES: I am so sorry. I will
2	slow down.
3	CONTINUED BY THE WITNESS:
4	A (Downes) We should distinguish between the
5	screw-in bulbs that we all put in our lamps at
6	home and these types of lights that we have here
7	in this room. And, for the C&I sector, the tubes
8	are the most common form of lamp and fixture.
9	So, I would say, for Unitil, I believe
10	that the majority of our opportunity for C&I
11	lighting is in the Small Business sector. As Mr.
12	Stanley was discussing before, these are
13	customers that are just trying to, you know, get
14	the door open and closed every day, and meet
15	payroll, and scrape by, and they're not thinking
16	too much about the lamps in the ceiling, and they
17	don't have anybody to get up there and deal with
18	it, if they did think about it.
19	So, where the programs come in is to
20	say "We have a vendor, we've got ladders, we've
21	got product, we can do this for you, and we'll
22	help you pay for it." No-brainer, "Okay, we'll
23	do it."
24	And, so, that's the majority of the

	[WIT	NESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1		opportunity in the C&I sector, I believe, and,
2		you know, we can take a look at what we've put in
3		the Plan. But I believe that's the case for
4		Unitil, and I'm seeing nodding heads. So, I'll
5		let others speak to it.
6	BY CI	HAIRMAN GOLDNER:
7	Q	And I think, when you're putting in LED bulbs, I
8		think what you're talking about is arrays and
9		ballasts, and all the electronics that goes
10		behind it. So, we're not talking about, really,
11		bulbs here, we're talking about lighting systems
12		and ballasts, and so forth, correct?
13	А	(Downes) Correct. And controls as well often go
14		in at the same time. It's an opportunity to save
15		even more than the different kilowatt, you know,
16		or, you know, wattage of one fixture versus
17		another, but also to have them turn off when, you
18		know, when it's not occupied, or when the Sun
19		comes up, or whatever.
20		So, that's another opportunity that I
21		think we're investing more in than we have
22		historically is the controls.
23	Q	Okay.
24	А	(Stanley) And the challenge with controls is,

[WITNESSES:	Peters Lemenager Chambers Chen Downes
Carrol	Demeris Stanlev Culbertson Woods

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1		typically, capability. So, that's where we
2		really aggressively push for advance controls to
3		be put in as part of a lighting project. But
4		that's where we run into a challenge with having
5		compatible technology to work with, either with
6		the existing systems that the customer has in
7		place, and just the cost premium the customer
8		would have to incur to install that as part of
9		their lighting package.
10		But that's what there's still a
11		sizable opportunity for that in the commercial
12		market. We've certainly made significant inroads
13		to that over the past several years, but there's
14		still a lot of opportunity there.
15	Q	Would you anticipate, in the next Triennial Plan,
16		there would be much lighting left? Or, I'm
17		picturing that you're ripping through the
18		commercial real estate in New Hampshire pretty
19		quickly. Is that a fair assumption? Or, do you
20		think it will kind of roll off pretty quickly?
21		Or, do you see that there are still a lot of a
22		lot of buildings out there that still need work?
23	A	(Stanley) I think that would be our hope to be in
24		that position. I think, realistically, there

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1	will likely still be some remaining
2	opportunities. There's some customers that are
3	just difficult to convince them to make upgrades.
4	There could, again, you run into that dynamic
5	with who owns the building, versus who's the
6	tenant in the building. And sometimes, with
7	particularly for small businesses, where they're
8	maybe just leasing the facility, they might not
9	want to prioritize some of those enhancements,
10	because they might not know how long they're
11	going to be in the space, the building owner
12	might not be receptive to making upgrades or for
13	paying making an investment to make those
14	enhancements.
15	So, we definitely run into those
16	dynamics regularly.
17	CHAIRMAN GOLDNER: Okay. And my point
18	would be, I don't think that's going to change a
19	lot in three years. So, the people that don't
20	want it aren't going to want it in three years,
21	and you're going to rip through the existing
22	ones, hopefully, pretty quickly. But we'll see
23	then, I suppose.
24	Okay. You know what I'm going to do at

[WITNESSES: Peters | Lemenager | Chambers | Chen | Downes | Carroll | Demeris | Stanley | Culbertson | Woods ] this point, is I'm going to pause here, it's 1 2 2:30. I'll give my fellow Commissioners a chance 3 just to wrap up maybe on their line of 4 questioning, if there's anything else they would 5 like to ask of the utilities. 6 We will ask the utility witnesses to 7 come back on the 31st. But the concept here is to -- is to have all of the witnesses come 8 9 through today. I think we've covered, to Mr. 10 Dexter's concerns, the topics that the Commission 11 would want to cover. 12 Alternatively, we can keep ripping 13 here, and, you know, we've probably got a couple more hours' worth of stuff for the utilities, if 14 15 we keep drilling in on some of the topics we'd 16 like to talk about. 17 MS. CHIAVARA: So, the Joint Utilities 18 would probably prefer if the other -- the other 19 parties had their witnesses sworn in, and you did 20 what you want to do with them, that sounded 21 weird, sorry. 22 [Laughter.] 23 MS. CHIAVARA: And, then, the utility 24 witnesses would come back next Wednesday [sic],

[WITNESSES: Peters | Lemenager | Chambers | Chen | Downes | Carroll | Demeris | Stanley | Culbertson | Woods ] 1 and we would reappear on the 31st and answer 2 further questions then. 3 CHAIRMAN GOLDNER: I think that's the 4 concept. I don't think we'll have anything for 5 the nonutility parties after today. But we will 6 have some follow-up with the utilities. 7 Is that acceptable to the other 8 parties? 9 MR. KREIS: Mr. Chairman, I think we would love that. I'm just looking at Ms. 10 Goldberg on my screen, she seems to be nodding, 11 12 and I'm looking over at Mr. Woolf. From our 13 standpoint, it would be very efficient if we 14 could get them on and off today. 15 CHAIRMAN GOLDNER: Yes. So, the idea I 16 think would be, so that the nonutility witnesses 17 would not have to appear again, and that would be 18 a time and cost savings for everyone, I think. 19 If that's acceptable to everyone? 20 MR. DEXTER: Yes, Mr. Chairman. I just 21 have one scheduling note. Mark Toscano, who's one of our witnesses, had to step away for a 22 23 medical appointment, and is expected to be back 24 by 3:00.

	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]
1	CHAIRMAN GOLDNER: Okay.
2	MR. DEXTER: So, if we didn't have to
3	go first, maybe OCA could go first, and we could
4	go after them, that would be helpful.
5	CHAIRMAN GOLDNER: Okay. Would that be
6	acceptable, Consumer Advocate?
7	MR. KREIS: We would love that.
8	MR. SHEEHAN: And I have one other
9	clarifier that I mentioned earlier today, could
10	we release the utility rate witnesses, not make
11	them have to come back next week?
12	CHAIRMAN GOLDNER: We I'm not sure,
13	Attorney Sheehan. We'll have to confer on that
14	one. I can't say quite yet. But we'll certainly
15	make an effort. And perhaps we could over
16	remote, if there's if that would be helpful on
17	Halloween.
18	MR. SHEEHAN: Thank you.
19	CHAIRMAN GOLDNER: Okay. So, I'll just
20	follow up with my fellow Commissioners to sort of
21	tie up this line of questioning. And, then, I
22	think we can take a quick break, and then return
23	with and return with the OCA's witnesses.
24	Does that will that work for everyone?

	[WITNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanley Culbertson Woods]
1	[Multiple parties indicating in the
2	affirmative.]
3	CHAIRMAN GOLDNER: Okay.
4	[Chairman and Commissioners
5	conferring.]
6	CHAIRMAN GOLDNER: Okay. So,
7	Commissioner Chattopadhyay has one additional
8	question, and after that we'll take a break.
9	So, Commissioner Chattopadhyay.
10	CMSR. CHATTOPADHYAY: Yes.
11	BY CMSR. CHATTOPADHYAY:
12	Q So, for projects that are completed in Quarter 4,
13	are the vendors paid right away or the invoices
14	are dealt with in a staggered way, and they go
15	into the next year?
16	A [Witness Chambers indicating in the affirmative].
17	A (Stanley) If a project takes place in Q4, it
18	really depends on when we get the final
19	paperwork. So, if a contractor or vendor
20	performs a project middle of December, they might
21	submit the invoicing to us by the end of the
22	month, they might submit the invoice to us in
23	January, we will process that payment to the
24	vendor in January, it will be assigned back to

	[WI]	<pre>TNESSES: Peters Lemenager Chambers Chen Downes  Carroll Demeris Stanlev Culbertson Woods]</pre>
1		the program the program year in which the
2		project was completed.
3	Q	Okay.
4	A	(Stanley) So, if the project was completed in a
5		specific calendar year, in, say, 2023, this year,
6		we will assign the cost of that project in the
7		2023 program year.
8	A	(Downes) I'd have to say, for Unitil, it's
9		slightly different. We have a very narrow window
10		in January to process projects from the prior
11		year. So, if we do not have that invoice in hand
12		for the work and the data that is associated with
13		the project by mid-December, it's likely going to
14		hit the books the next year, both the payment and
15		the savings associated with the project.
16	A	(Leménager) And, similar to what Eric I'm
17		sorry, Mr. Stanley noted, for Eversource, we
18		align the project completion with the payment.
19		So, if it were to complete in calendar '23, and
20		everything paperworkwise happens in '24, we would
21		move the costs back to '23 to align with when the
22		program completed.
23		CMSR. CHATTOPADHYAY: Okay. Thank you
24		very much.

Carroll | Demeris | Stanley | Culbertson | Woods ] CHAIRMAN GOLDNER: Okay. I'll just 1 2 take this opportunity to thank the utility 3 witnesses. The witnesses are released, subject 4 to recall. 5 And we'll resume at guarter of with the 6 OCA witnesses. Thank you. 7 (Recess taken at 2:34 p.m., and the hearing resumed at 2:51 p.m.) 8 CHAIRMAN GOLDNER: Okay. We'll pick 9 back up again with the Office of the Consumer 10 11 Advocate witnesses, Attorney Kreis. 12 MR. KREIS: Thank you very much, Mr. 13 Chairman. I think I'd like to take my witnesses 14 15 in alphabetical order, starting with Ms. 16 Goldberg, if that's okay with everybody. 17 Good afternoon, Ms. Goldberg, or it 18 might still be morning where you are. 19 MS. GOLDBERG: Good morning. 20 [Court reporter interruption.] 21 CHAIRMAN GOLDNER: I'm sorry, Mr. 22 Kreis. I forgot to swear in the witnesses. 23 That's on me. 24 MR. KREIS: Sorry about that.

[WITNESSES: Peters|Lemenager|Chambers|Chen|Downes|

1	CHAIRMAN GOLDNER: Yes. Mr. Patnaude.
2	(Whereupon <b>DANIELLE GOLDBERG</b> and
3	<b>TIM WOOLF</b> were duly sworn by the Court
4	Reporter.)
5	[Court reporter interruption.]
6	WITNESS WOOLF: Yes. Oh.
7	WITNESS GOLDBERG: Yes. Can everyone
8	hear me all right?
9	MR. KREIS: Yes. Everybody can hear
10	everybody very well, I think.
11	Okay. Good morning, Ms. Goldberg, out
12	there on the West Coast. Good afternoon
13	otherwise. I'm going to start with you.
14	DANIELLE GOLDBERG, SWORN
15	TIM WOOLF, SWORN
16	DIRECT EXAMINATION
17	BY MR. KREIS:
18	Q Would you please tell us your name, where you
19	work, and why you are here?
20	A (Goldberg) Sure. My name is Danielle Goldberg.
21	I'm a Senior Associate at Synapse Energy
22	Economics. And I am here to help support the
23	OCA's determination that the Plan should be
24	approved.

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1	Q	Thank you. Turning your attention to what has
2		been marked for identification as "Exhibit
3		Number 2", which is a document labeled "Office of
4		the Consumer Advocate Testimony of Tim Woolf and
5		Danielle Goldberg", with attachments, was that
6		did you participate in the drafting of that
7		document?
8	A	(Goldberg) Yes, I did.
9	Q	And do you have any corrections to make to that
10		document, as it was originally filed?
11		Actually, before I ask you that
12		question, let me just say, it is my understanding
13		that you do have some corrections. And I'd like
14		you to start by saying well, telling the
15		Commission what prompted you to determine that
16		some corrections were going to be necessary?
17	А	(Goldberg) Yes. Thanks. So, we made several
18		small changes to the source files, that impacted
19		the numbers in our testimony.
20		First, we updated the files to reflect
21		the revisions made by Unitil on September 11th.
22		Further, upon responding to the Commission's
23		procedural order request, we noticed two small
24		calculation errors. In certain instances, our

1		
1		testimony referenced "nominal" program costs,
2		when the calculation required constant 2024
3		dollars. Second, we double-counted costs for
4		ADR.
5		None of these changes had a material
6		impact on our testimony or modified any of our
7		conclusions within the testimony.
8	Q	So, in other words, you have had an opportunity
9		to consider the September 11th filing made by the
10		utilities, and it hasn't affected any of the
11		ultimate conclusions in the testimony, correct?
12	A	(Goldberg) That is correct.
13	Q	And, when you just mentioned the "Commission's
14		procedural order request", you're talking about
15		the procedural order that actually posed some
16		specific questions to you and to Mr. Woolf,
17		correct?
18	A	(Goldberg) That's correct.
19	Q	Okay. And what specific changes to your
20		testimony do you find it necessary to make, in
21		light of what you just said?
22	A	(Goldberg) I would like to change the net
23		benefits on Bates Page 007, Line 18, and Bates
24		Page 029, Line 15, from "283 million" to "295

1		million".
2		I would like to change two numbers on
3		Bates Page 031, Line 5. The first revises costs,
4		from "194 million" to "204 million". The second
5		revises benefits from "447 million" to "463
6		million".
7		On Line 6 of the same page, I would
8		like to revise net benefits from "253 million" to
9		"265 million".
10	Q	Thank you, Ms. Goldberg. Directing your
11		attention to Bates Page 013 of Exhibit 2, and
12		specifically to Table 3 on that page, which is
13		labeled "EM&V costs as a percent of total", it's
14		my understanding that some of the data, or a lot
15		of that data on that table, needs to be updated.
16		And I wonder if you could describe what is now
17		incorrect about that table?
18	A	(Goldberg) Yes. The Total Program Budgets have
19		shifted slightly, based on the corrections that I
20		mentioned before. The percent of Total Budget
21		values have not changed. I'm not sure if it
22		makes sense for me to go through them, or rather
23		to perhaps the second column in each of those
24		or, sorry, Table 3, the first two columns in that

table has been slightly adjusted from my original 1 2 testimony. 3 CHAIRMAN GOLDNER: I'm sorry, Attorney 4 Kreis, if I could cut in? I'm having difficulty 5 hearing the witness. Maybe, could you ask her to 6 slow down a little bit? 7 I'm not sure if the court reporter can hear as well. Steve, can you hear okay? 8 [Court reporter indicating difficulty 9 10 hearing the witness as well.] 11 CHAIRMAN GOLDNER: It's very tough, 12 yes. Maybe, can you ask her to slow down just a 13 bit please? 14 MR. KREIS: I could. Ms. Goldberg, did 15 you just hear that request from Chairman 16 Goldberg, to slow down? 17 WITNESS GOLDBERG: Yes, I did. 18 MR. KREIS: Okay. Thank you. 19 Let me just say, at this point, that 20 we're prepared to do whatever the Commission's 21 pleasure is. What Ms. Goldberg just said is, 22 essentially, the last column in Table 3 doesn't 23 really change. And the purpose of that table is 24 to communicate Evaluation, Measurement and

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1	Verification costs as a percentage of total
2	costs. But all of the numbers in the first and
3	second columns technically would need to be
4	updated.
5	I'm happy to just ask you to overlook
6	those two columns of those numbers. We could
7	provide an updated edition of that table.
8	Whatever is your pleasure?
9	CHAIRMAN GOLDNER: Commissioners, any
10	preference?
11	CMSR. SIMPSON: I'm comfortable with
12	what Ms. Goldberg has just stated being on the
13	record.
14	CHAIRMAN GOLDNER: Okay. I think
15	that's fine. Mr. Kreis, we'll just ignore the
16	errant columns.
17	MR. KREIS: Thank you. That was going
18	to be my suggestion. But, again, we aim to
19	please.
20	BY MR. KREIS:
21	Q Okay. So, Ms. Goldberg, subject to those
22	corrections, if I were to ask you all of the
23	questions that are set forth in Exhibit 2 today,
24	would the written answers that appear in

1 Exhibit 2 be the answers that you would give	live
2 on the stand?	
3 A (Goldberg) I would just like to clarify that	
4 Table 4 on that same page has the same slight	
5 discrepancy in the numbers, but not the	
6 percentages. I just wanted to include that o	n
7 the record as well.	
8 And, then, to answer your question,	
9 yes, that is correct.	
10 Q And, so, therefore, do you adopt the written	
11 testimony in Exhibit 2 as your sworn testimon	У
12 today in this proceeding?	
13 A (Goldberg) Yes, I do.	
14 Q Okay. Thank you. Now, again, proceeding in	
15 alphabetical order, turning to Mr. Woolf. Go	od
16 morning, Mr or, good afternoon, Mr. Woolf	•
17 If you would, having now been sworn	,
18 would identify yourself by name, where you wo	erk,
19 and then you can tell us what you're doing he	re?
20 A (Woolf) Yes. My name is Tim Woolf. I'm a Se	nior
21 Vice President at Synapse Energy Economics, i	n
22 Cambridge, Massachusetts. And I'm here on be	half
23 of the OCA, sponsoring this testimony to supp	ort
24 approval of the utilities' Plan.	

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1		And I can say that my focus in this
2		testimony was mostly on the sections on the
3		benefits of energy efficiency, the market
4		barriers, and the discount rates.
5	Q	And, just for clarity, the testimony that you're
6		talking about is Exhibit Number 2. And I assume
7		that it is your testimony that you, along with
8		Ms. Goldberg, prepared that document?
9	A	(Woolf) Yes, that is correct.
10	Q	And do you agree with and adopt the corrections
11		that Ms. Goldberg just offered on the record?
12	A	(Woolf) Yes.
13	Q	And, so, subject to those corrections and
14		updates, if I asked you all of the questions that
15		are set forth in Exhibit 2, would the answers
16		that you would give live on the stand be the same
17		as the ones that are written down in Exhibit 2?
18	A	(Woolf) Yes, they would.
19	Q	And, so, therefore, do you adopt the written
20		testimony in Exhibit 2 as your sworn testimony in
21		this proceeding today?
22	А	(Woolf) Yes, I do.
23	Q	Okay. I think I just want to ask one very brief
24		question, that might elicit a fairly elaborate

1		answer, I don't know, beyond what's in your
2		written testimony. And it has to do with the
3		colloquy that occurred earlier today between
4		Commissioner Chattopadhyay and the utility
5		witnesses about the extent to which it's
6		necessary or appropriate to recalculate the
7		discount rate that underlies the assessment of
8		benefit-costs here, in light of timing
9		differences between the prime rate embedded in
10		those calculations and the inflation rate
11		embedded in those calculations.
12		You recall that colloquy, do you not?
13	A	(Woolf) I do, yes.
14	Q	In your opinion, to what extent is it either
15		necessary or appropriate to conduct those
16		
		recalculations as a way of getting to the right
17		recalculations as a way of getting to the right cost-benefit analysis?
17 18	A	
	A	cost-benefit analysis?
18	A	cost-benefit analysis? (Woolf) Well, I would say, I would agree with
18 19	A	cost-benefit analysis? (Woolf) Well, I would say, I would agree with Commissioner Chattopadhyay, that it would be
18 19 20	А	cost-benefit analysis? (Woolf) Well, I would say, I would agree with Commissioner Chattopadhyay, that it would be ideal if the data used to calculate the
18 19 20 21	A	cost-benefit analysis? (Woolf) Well, I would say, I would agree with Commissioner Chattopadhyay, that it would be ideal if the data used to calculate the particular discount rate were from the same
18 19 20 21 22	A	cost-benefit analysis? (Woolf) Well, I would say, I would agree with Commissioner Chattopadhyay, that it would be ideal if the data used to calculate the particular discount rate were from the same period.

make a decision, get an assumption, and use that 1 2 for planning purposes. 3 I, personally, don't think that making 4 those changes, as requested, would really change 5 the results all that much. So, I don't think 6 they're necessary, if it's ideal to keep a 7 consistent assumption for the planning purposes. MR. KREIS: Okay. Thank you. Mr. 8 Chairman, I'm happy to tender these two excellent 9 10 witnesses for cross-examination. 11 CHAIRMAN GOLDNER: All right. We'll begin cross-examination with the Joint Utilities? 12 MS. CHIAVARA: The Joint Utilities have 13 14 no questions. 15 CHAIRMAN GOLDNER: All right. The New 16 Hampshire Department of Energy? 17 MR. DEXTER: No questions, Mr. 18 Chairman. 19 CHAIRMAN GOLDNER: Clean Energy New 20 Hampshire? 21 MR. SKOGLUND: Thank you, Commissioner. 22 Clean Energy New Hampshire has no questions. 23 CHAIRMAN GOLDNER: The Conservation Law 24 Foundation?

1	MR. KRAKOFF: No questions from
2	Conservation Law Foundation.
3	CHAIRMAN GOLDNER: The Nature
4	Conservancy?
5	MS. HATFIELD: No questions. Thank
6	you.
7	CHAIRMAN GOLDNER: LISTEN Community
8	Services?
9	MR. SKOGLUND: They had to step away.
10	CHAIRMAN GOLDNER: Okay. And Southern
11	New Hampshire Services?
12	MR. CLOUTHIER: No questions from
13	Southern New Hampshire Services.
14	CHAIRMAN GOLDNER: Okay. Thank you.
15	We'll move to Commissioner questions, beginning
16	with Commissioner Simpson.
17	CMSR. SIMPSON: Thank you, Mr.
18	Chairman. Thank you for being here.
19	So, I'm happy to entertain responses
20	from either of the witnesses, Ms. Goldberg or Mr.
21	Woolf. So, please feel free to offer your
22	thoughts.
23	BY CMSR. SIMPSON:
24	Q I'm sure that you're familiar that the statute

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1		here requires that cost-effectiveness is based on
2		the newest available Avoided Energy Supply Cost
3		Study for New England, correct?
4	A	(Woolf) Yes.
5	Q	And your firm, Synapse, performs that study,
6		correct?
7	A	(Woolf) It has in the past, and is currently
8		performing one now, yes.
9	Q	And would you be able to address this study, what
10		your team has found, how it's evolved over time,
11		and how we should consider cost-effectiveness
12		within the scope of that study today?
13	A	(Woolf) Well, I can't speak to the study that's
14		ongoing now for the next round.
15	Q	I mean, for this Plan?
16	A	(Woolf) Yes. So, your question is very broad.
17		Maybe you could narrow it down some to what
18		you're looking for regarding the Avoided Energy
19		Supply Cost Study?
20	Q	I think it would be helpful if you might be able
21		to frame that for us.
22	A	(Woolf) Sure.
23	Q	Looking through your résumé, and having read your
24		testimony, it's clear that you've been involved

1		in that for some time. So, my hope was that you
2		might help just set the stage for all of us.
3	A	(Woolf) Okay. I can take you way back, many
4		years ago, before this study was done, as a
5		universal study covering all of New England.
6		I was engaged in energy efficiency
7		discussions back then. And there would be long,
8		extensive arguments about what avoided costs
9		should be, and we would have them different
10		numbers, from different utilities, even within
11		the same state. And, then, you'd have different
12		states using different numbers. And it became
13		pretty clear, around the time of restructuring,
14		that, really, they all come from the same source
15		in New England. Mostly, not entirely, but mostly
16		from the wholesale energy and capacity markets.
17		And, so, there was a move, I've
18		forgotten when the first one was, in the early
19		2000s, to make this consistent, but not only make
20		them consistent, but to do it in a way that is
21		overseen by the commissions, the energy offices,
22		the consumer advocates, and the other agencies,
23		who have a stake and an interest in the
24		efficiency programs.

1		So, that's how this has evolved. And
2		it's done every three years, roughly. Synapse
3		has done most of them, but not all of them. And
4		the idea is to have like a robust modeling
5		environment, where the market prices, and other
6		related, you know, avoided costs, can be
7		captured, reviewed by all the relevant parties,
8		vetted, and then used, as a way of getting very
9		credible inputs to benefit-cost analyses.
10	Q	And, in your review of this Plan, working with
11		the parties throughout this proceeding, can you
12		explain how that study has been applied, and the
13		results that you feel are appropriate for us to
14		consider within the Plan filing, as they overlay
15		with the AESC Study?
16	A	(Woolf) Yes. I believe there's a table in our
17		testimony that points to that. But, basically,
18		the primary avoided costs, like the largest ones
19		are avoided energy, avoided capacity, that all
20		comes from there. Avoided distribution costs I
21		think are done by each utility, or certainly by
22		each state.
23		And, then, for some situations, there's
24		forecasts of REC prices, there's forecasts of

1		RGGI costs. And there may be some others, I can
2		refer to, but that's the gist of it.
3		And my understanding is that everything
4		that should have been taken from the AESC Study
5		was taken from that study.
6	Q	That's helpful. Thank you. In your testimony,
7		you suggest some possibilities for improvement to
8		enhance the value of incentives from the
9		Inflation Reduction Act, along with addressing
10		barriers that may exist for vulnerable or
11		under-served customers.
12		Would you be willing to elaborate on
13		that for us, those two suggestions?
14	A	(Woolf) Sure. I'll start, and
15	A	(Goldberg) I would like to take that question.
16	A	(Woolf) Why don't you go ahead, Ms. Goldberg.
17		Thank you.
18	A	(Goldberg) Yes. Thanks. So, as you stated, we
19		were encouraging utilities to think about some
20		areas where the Inflation Reduction Act can help
21		support some of the existing programs. And two
22		that stuck out, based on some of the existing
23		incentives sorry, I'm going to try to talk
24		closer and slower, just to make sure everyone can

1 hear me -- for heat pumps and weatherization 2 opportunities. 3 There was some discussion earlier today 4 in the hearing about "heat pumps" and "payback 5 period". And I included in my testimony a table 6 that has some of the incentives that are 7 available through the IRA. One of that includes I believe it's up to \$10,000 in incentives for --8 that participants can take advantage of for heat 9 10 pumps, which would dramatically decrease the 11 payback period, and make that a more appealing offer, that could go in tandem with the offerings 12 from the electric utilities. 13 14 And, similarly, with weatherization 15 opportunities, that's something that can benefit 16 all customers, and can be delivered in a 17 fuel-neutral way, particularly when taking 18 advantage of some of these federal credits. 19 And how might you suggest that we frame those Q 20 suggestions, with respect to the Plan that's in 21 front of us today, that we have a statutory 22 requirement to rule on at a date certain, you 23 know, how would you suggest that the parties, the 24 utilities, the Commission frame those suggestions

1		
1		as we move through the three-year period?
2	A	(Goldberg) Sure. My main recommendation was to
3		come up with a short list of areas where those
4		rebates could be applied. Just about when that
5		funding becomes available, it can be taken
6		advantage of quickly, without wasting as much
7		time figuring out where it might be best served.
8		So, it's simply from a, I would say,
9		prioritization perspective, and some future
10		planning with the expectation that those
11		incentives will be made available to customers.
12	Q	Great. Thank you for that. I'll just say that,
13		speaking on my own behalf, I certainly support
14		your suggestion for seeking more federal funding,
15		and how that funding can enhance these programs.
16		I think that that's something that we may be able
17		to discuss more at the next hearing with the
18		utilities. Would be interesting to get further
19		perspective from them on that topic. But
20		appreciate those suggestions.
21	A	(Goldberg) Thank you.
22	Q	You also suggest that fuel switching could be
23		enhanced and additional weatherization. Would
24		you be able to discuss a bit more? And we heard

1		a little bit about the measures the measure
2		evolution, with a specific target of baseboard
3		electric resistive heating, and transforming that
4		source of heat to air source heat pumps. What
5		other that's not fuel-switching to me, but
6		what other types of fuel-switching might you
7		consider as opportunities for improvement?
8	A	(Goldberg) Yes. So, I was referring to switching
9		off of non-electric fuels. So, this would be
10		customers who heat with oil or propane, or even
11		natural gas. My understanding is that the
12		incentives offered by the utilities right now are
13		unlikely to either motivate or likely give a
14		customer kind of apples-to-apples decision about
15		what heating system they might want in the
16		future. They would likely go with the one that
17		is the lowest cost option, very similar. So,
18		being able to take advantage of some of those IRA
19		rebates could allow a customer, who is interested
20		in fuel-switching, take advantage of that and
21		supplement the existing incentives that the
22		utilities offer to all customers.
23	Q	And I understand you might not have a response
24		for this question. But, in your opinion, do you

1		think that would be a change or an evolution that
2		the Joint Utilities could make within this Plan,
3		or do you think that that would require some sort
4		of an update to us? What's the significance of
5		that suggestion?
6	A	(Goldberg) I'm not sure I'm prepared to answer
7		that, given that the framework of how those
8		incentives would be delivered has not yet been
9		determined, and whether or not they would need to
10		fit within some of the existing requirements,
11		such as the 65 percent savings rule.
12		So, I think that one would be an
13		ongoing discussion.
14	Q	Okay. Thank you. No problem. And, then, my
15		last question, you have a suggestion for
16		enhancing participation by income-eligible and
17		some of the most vulnerable communities. Might
18		you elaborate on that suggestion for us as well?
19	A	(Goldberg) Sure. My suggestion there was to
20		identify some communities that may have been
21		historically under-served in the Plan. My
22		understanding is that there is a study currently
23		going on, and it's possible it will address some
24		of those questions. For things like renters, or

1		possibly rural customers, or other categories
2		other than just income, that may have led certain
3		groups to not be able to participate fully.
4		I think understanding some of those
5		barriers, and possibly being able to track
6		historical participation among those groups,
7		could be advantageous for making sure that the
8		Plan is accessible by everybody.
9	Q	Are you aware of such initiatives in other
10		jurisdictions that have been successful to better
11		serve those populations?
12	A	(Goldberg) I do know that, in Massachusetts,
13		there is renter versus homeownership tracking.
14		There's also identification of vulnerable
15		communities, and reallocating some resources to
16		those. I don't, off the top of my head, have
17		examples from other states.
18	Q	Okay. Thank you, Ms. Goldberg. Thank you oh,
19		Mr. Woolf?
20	A	(Woolf) May I elaborate?
21	Q	Please.
22	A	(Woolf) So, there was a lot of talk this morning
23		with the utility representatives about "getting
24		more participation" from among customers. There

was also a lot of talk about "performance 1 2 incentives" for the utilities. You can put those 3 two concepts together. And the performance 4 incentives could, and I'm talking longer term, 5 not for these plans, --6 Ο Uh-huh. Sure. 7 (Woolf) -- could be modified so that А 8 participation rates are a part of what the 9 utilities earn an incentive on, for good 10 performance, for reaching out. And it could be 11 mostly income-eligible customers, or it could be 12 all customers, because I wholeheartedly endorse 13 the goals of getting more customer participation. 14 CMSR. SIMPSON: Thank you. Thank you, 15 both. I don't have any further questions for 16 these witnesses. 17 CHAIRMAN GOLDNER: Thank you. Moving 18 to Commissioner Chattopadhyay. 19 CMSR. CHATTOPADHYAY: Good afternoon. 20 WITNESS WOOLF: Good afternoon. 21 BY CMSR. CHATTOPADHYAY: 2.2 Q So, I was glad to hear that you agree with me, 23 that using inflation rate and the prime rate from 24 the same period is helpful. But you also said

1		"it's not necessary."
2		So, are you suggesting that you already
3		looked at how you plug in those numbers, and the
4		benefit-cost ratios will remain afloat, so to
5		speak, that's what you meant?
6	A	(Woolf) What I meant
7	Q	Or was it something else that you were trying
8		to
9	A	(Woolf) Well, two things.
10	Q	Yes.
11	A	(Woolf) What I meant in that response was that
12		the difference between, whatever it is, 2.8
13		versus 2.6 percent discount rate, isn't going to
14		change the ultimate results of the study. And,
15		you know, there is a need to have an assumption
16		and work with it.
17		But what I didn't say, which I'll add,
18		if that's okay, is that I think you're putting a
19		little too much weight on the index that's used
20		to determine the discount rate.
21		As I've said in my testimony, that
22		there's a lot of considerations to be made in
23		choosing a discount rate. And there's a range of
24		what's available to use. Whether you consider it

1	
1	a low-cost discount rate, whether you consider it
2	a societal discount rate, or even something more
3	like a utility weighted average cost of capital,
4	there's a range to work within.
5	And I think it's convenient, and kind
6	of transparent, to have the discount rate in New
7	Hampshire, and the same thing is done in many
8	other states, tied to an index, like we have,
9	with prime rate, minus inflation. But it doesn't
10	have to be. And it could be simply, as I've said
11	in my testimony, the whole point of the discount
12	rate is to balance short-term versus long-term
13	impacts. And, ultimately, that's the goal here.
14	And the Commission could, with
15	sufficient input from stakeholders, utilities,
16	and others, choose a discount rate that they
17	think is appropriate for that purpose. It could
18	be, you know, in the case of a low-risk discount
19	rate, it could be a one percent or two percent
20	real, just leave it at that, and use that going
21	forward, because you don't necessarily want your
22	analysis to swing with short-term swings in
23	either the prime rate or inflation.
24	Q So, because I'm not sitting there, I the

1	reasons why I was talking about trying to be
2	aligned, and then I will ask a few other
3	questions, I actually agree with your analysis,
4	that it's better to perhaps have a range of
5	rates, and look at what happens to the
6	benefit-to-cost ratios. And this approach, the
7	reason I was going to check in whether how the
8	numbers would be if we were in 2022, there's too
9	much fluctuation in the discount rate, the real
10	discount rate, if you're using these input
11	variables.
12	And, so, in some ways, we are talking
13	about the same things. Okay? I didn't mention
14	it, because I was asking questions.
15	The other point I would make is, you
16	started off by saying it's you know, it's a
17	little bit of change, doesn't matter. But the
18	rate being used in the model is 2.78 percent for
19	the real discount rate. If you use the updated
20	numbers, based on a response from the utilities,
21	the number would be, and it's rough, I can't
22	speak for it, because they would have to run it,
23	the social discount rate would be perhaps four
24	and a half percent, okay. So, that's quite a

1		change.
2	A	(Woolf) Yes. That is quite a change.
3	Q	So, it is going to be helpful to us to take a
4		look at what happens. And you may still be
5		correct that it doesn't change the that's why
6		I said, the BC ratios will still remain afloat.
7		So, that's why I was asking that question.
8	A	(Woolf) But
9	Q	Go ahead.
10	A	(Woolf) I would just say that, as you do that,
11		keep in mind, like, the purpose of the discount
12		rate, and whether you really need it to change
13		that much with and I would describe the recent
14		changes in the prime rate as somewhat of a, not
15		"anomaly", but they have been atypical, during
16		the you know, especially last year, and this
17		year.
18		So, as you do that, just keep in mind,
19		do you want to tie your discount rate to
20		something that is that volatile.
21	Q	So, would you agree that it would be better to
22		take a snapshot of a long-term view of what's
23		going on, so that you have more stability for
24		those two numbers?

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1	A	(Woolf) That's one way to put it, yes.
2	Q	Okay.
3	A	(Woolf) Yes.
4	Q	Thank you. Can we go to Page your Exhibit 2,
5		Bates Page 041. Let me know when you're there?
6	A	(Woolf) I am there.
7	Q	So, starting from, actually, Bates Page 40, the
8		last sentence there is "When this inflation
9		effect is removed from the nominal discount rate,
10		the real discount rate equals 2.78 percent."
11		And, then, you say "The utilities then
12		apply the real discount rate to the costs and
13		benefits in real dollars, to determine the
14		present value of costs and benefits."
15		Given the discussion that I had
16		previously, do you agree that is a correct
17		statement?
18	A	(Woolf) Good point, it is not. However, as the
19		utility witnesses mentioned, it is effectively
20		the same thing, because they apply a nominal rate
21		to the nominal dollars.
22		So, these words aren't exactly correct.
23		But, I think, as I heard them this morning, their
24		application was correct.

1	Q	Okay. I'll leave it there. Can you you are
2		involved in the NSPM work, right, are you?
3	A	(Woolf) Yes. I was the lead technical author of
4		both of the NSPM.
5	Q	Is there one in the process right now that is
6		going to be done later?
7	A	(Woolf) When I say "two", there was one for
8		energy efficiency, and then a follow-up for
9		distributed energy resources.
10	Q	Uh-huh.
11	A	(Woolf) That's what I was referring to. But I
12		will add, that there's a third one that we're
13		working on now, and it's all about equity, and
14		how to account for equity in benefit-cost
15		analyses.
16	Q	And do you have a sense when it will be
17	A	(Woolf) It's being it's going through peer
18		review right now with an extensive advisory
19		committee of peers. We're going to finish it up
20		this week or so, and then goes to DOE, who is the
21		funder of it. It could take months for the DOE,
22		it might take weeks. So, it should be this year,
23		if not early next year.
24	Q	Are you still the lead author of that?

1	A	(Woolf) Yes, Synapse is the lead author. And Ms.
2		Goldberg has helped me out on that one as well.
3		CMSR. CHATTOPADHYAY: Thank you.
4		That's all I have.
5		CHAIRMAN GOLDNER: I just have a few
6		questions.
7	BY C	CHAIRMAN GOLDNER:
8	Q	On the AESC Report, it's predicting, right here,
9		it's predicting the future of what's going to
10		happen. And, so, that's very necessary. Is
11		there any kind of feedback loop? Do you look at
12		what you did in the past, and said "Oh, we made
13		these errors", and go back and correct them?
14	A	(Woolf) That question comes up a lot, and I've
15		never seen it done. And the main reason being
16		that, at that point, it's irrelevant, because
17		it's too late. Unless, you know,
18	Q	Maybe for the next one.
19	A	(Woolf) you might be able to learn some
20		lessons from that, but I don't think it's been
21		done.
22	Q	Because, probably, what often happens with the
23		modeling, as far as you have you end up with a
24		bias, on either the high side or low side, if you

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1		look back through the last three or four, and
2		knowing that, it might be instructive, in terms
3		of the next process. And I know you're working
4		on the next report right now, right?
5	A	[Witness Woolf indicating in the affirmative].
6	Q	So, I'm asking in the context of, you know, or
7		maybe the input that would be, that would be
8		helpful to look back at prior reports, to see if
9		you have a bias on one side or the other. And
10		any lessons learned that you could garner to
11		improve the accuracy of the report, because it is
12		critical for what we're doing here, you know?
13	A	(Woolf) Yes.
14	Q	And there's no New Hampshire or even
15		state-specific data, right? It's a regional cut
16		of data?
17	A	(Woolf) Well, no. It looks at all of New
18		England, but it and it looks at the market
19		operation in all of New England, but it does
20		break it out by locational marginal prices, you
21		know, by zones. And I know there's several zones
22		in Massachusetts. I don't know how many there
23		are in New Hampshire. But it does get lower than
24		just the entire wholesale market.

1	Q	Okay.
2	A	(Goldberg) I believe there is one statewide
3		average for New Hampshire.
4	Q	Okay. Thank you. And the next AESC Report will
5		be in 2024. Do you have an idea of will it be in
6		the spring? Or, do you have any idea when that
7		will be filed?
8	A	(Woolf) I don't. I think, early 2024. But I
9		can't tell you anything more specific than that.
10	Q	Okay. But it's usually early in the year?
11	A	(Woolf) It does vary.
12	Q	It varies?
13	A	(Woolf) Each time it's a little different.
14	Q	Okay. Depending on the approval process, it
15		sounds like. Okay.
16	A	(Woolf) I could check on that back in my shop and
17		get back to you, if it's important.
18	Q	I was just trying to understand, because it will
19		be instructive, if the utilities choose to file
20		next July 1st, they will use that report. So, if
21		that report doesn't come timely, then they won't
22		have it for the next filing.
23	А	(Woolf) I think it's safe to say, it will be
24		ready well before July 1st

1	Q	Okay.
2	A	(Woolf) for that report.
3		CHAIRMAN GOLDNER: That sounds good.
4		And, then, a question for Attorney
5		Kreis. My understanding is, if the Commission is
6		to approve the AESC Report, what, in your
7		opinion, is the Commission's role in approving
8		the AESC Report?
9		MR. KREIS: I just want to grab my copy
10		of the statute,
11		CHAIRMAN GOLDNER: Oh, of course. Yes.
12		MR. KREIS: before I answer that
13		question for you, because I don't want to answer
14		it off the top of my head.
15		So, the statute that we're talking
16		about today, in Section (d)(4), refers to the
17		"Avoided Energy Supply Cost Study for New
18		England". And it says that your review, "the
19		commission's review of cost-effectiveness shall
20		be based upon the latest completed and available
21		Avoided Energy Supply Cost Study for New
22		England."
23		Others in the room, the other lawyers
24		in the room in particular, are welcome to correct

1	me if I'm mistaken, but, as far as I know, that
2	document, the AESC, either the current one, or
3	the ones that the folks at Synapse are currently
4	working on, they don't come before the Commission
5	for approval. It's really a document that's
6	created, funded by the utilities and created, I
7	guess, for their edification, in their capacities
8	as program administrators.
9	And it's referenced in the statute, I
10	assume, because it's considered a bit of a "gold"
11	standard, with respect to avoided costs. And,
12	so, there it is.
13	Obviously, when you're required to rely
14	on it in making a determination, that, I think,
15	or would assume, gives you some opportunity to
16	look under the hood of that document, and talk
17	about whether you think it's correct or
18	incorrect, or adequate or inadequate, that sort
19	of thing.
20	But I don't believe that it ever comes
21	before any regulator for approval.
22	CHAIRMAN GOLDNER: Okay. Thank you.
23	And maybe you can share, and I'll ask the DOE,
24	too, in a bit, but what is the OCA's role in

1 review of that document? 2 I say that, because, you know, the 3 utilities are sponsoring the effort. And, so, 4 that, you know, perhaps -- that perhaps puts some 5 imbalance in the equation, in terms of who's 6 paying for the report. 7 MR. KREIS: I'm not sure I understand your question, Mr. Chairman. 8 9 CHAIRMAN GOLDNER: Yes, no problem. 10 So, the AESC Report is done, I think, largely by 11 Synapse, and it's paid for by the New England utilities, right? 12 13 So, whenever there's a group paying for 14 a certain report, there might be a -- there might be a bias towards a certain outcome. And I'm 15 16 certainly not accusing Synapse of anything 17 nefarious. I'm just saying that, when somebody 18 pays for a report, there can be a one-way bias. 19 And I'm just wondering what the OCA's 20 thoughts on that are? And what, if any, is the 21 OCA's thought in terms of reviewing that 22 document, to make sure that you're comfortable 23 with it when it's used for energy efficiency? 24 MR. KREIS: Thank you. I understand

now.

2	At the risk of testifying, rather than
3	just arguing, let me say that my sense is that
4	the process of developing the AESC is a pretty
5	open one. The utilities aren't have not
6	created a process that's closed to input from
7	people like me. And I guess you might ask this
8	question of the Department, because I think their
9	answer might be a little different than mine.
10	The OCA doesn't have the bandwidth to really
11	engage with the folks who are working on the AESC
12	as it's developing.
13	It's true that Mr. Woolf and Ms.
14	Goldberg are, I guess, the lead authors, but
15	they're not doing that under contract to us. And
16	I haven't had any conversations with either of
17	them about that, to tell you the truth. I would
18	love to. I wish I had the time and the
19	analytical bandwidth to be up to my neck in
20	developing the AESC, because, and I think this is
21	what's driving your question, it is a very
22	important and impactful document.
23	And I can't disagree with you that they
24	who pay for the document tend to have an

1	influence on the output of the document, if only
2	sort of subtly and implicitly.
3	I hope that's helpful.
4	CHAIRMAN GOLDNER: It is helpful.
5	WITNESS WOOLF: May I elaborate?
6	WITNESS GOLDBERG: Just to clarify,
7	actually neither Mr. Woolf nor myself are lead
8	authors on AESC specifically. At least speaking
9	for myself, I'm not involved in that project
10	within Synapse.
11	WITNESS WOOLF: Neither am I. And I
12	would add that I do talk occasionally,
13	frequently, with my colleagues who work on that.
14	And they can confirm that they get a lot of input
15	from stakeholders. Sometimes they're in food
16	fights over what's going to be done here, what's
17	going to be done there, and it takes a lot of
18	back-and-forth, a lot of discussion. And the
19	stakeholders are not just the utilities. It's
20	all the people you see in this room, and other
21	states, where there's a differing of views across
22	those parties as to, you know, what they want to
23	do. So, that minimizes the risk of any kind of a
24	bias in any direction.

1 CHAIRMAN GOLDNER: Okay. 2 MR. KREIS: Yes. Thank you to my two 3 witnesses for clarifying that. I'd forgotten that they're actually not the people at Synapse 4 5 who are driving this. 6 Again, at the risk of testifying, I'm 7 actually on the email list that gets all the communications that pass among those who are 8 actually involved in that project. I just -- I 9 10 don't have time to keep up with them, I wish I 11 I've read some of them, and I have, at did. 12 least in one instance, I made an inquiry about that to one of my colleagues at the Department of 13 14 Energy. But it would be -- it would not be 15 accurate to say that we have been playing any role at all in the development of the AESC. 16 If one of the Commission's suggestions 17 18 is that we should involve ourselves in that, I 19 would take that pretty seriously. 20 CHAIRMAN GOLDNER: I think that would 21 be helpful. Is that enough encouragement? 22 MR. KREIS: It would be helpful if you 23 opened your checkbook. 24 [Laughter.]

1		CHAIRMAN GOLDNER: I'm afraid our
2		process in the state is the same for opening a
3		checkbook, and it's called "G&C" for anything
4		over 10,000.
5		Okay. Thank you, Attorney Kreis, and
6		both witnesses. Just a couple more questions.
7	BY CH	AIRMAN GOLDNER:
8	Q	Ms. Goldberg, you mentioned there was a table in
9		your testimony relative to "heat pumps". And I
10		scanned the document twice, did a word search,
11		and still can't find it.
12		Can you direct me to the Bates page of
13		the table relative to "heat pumps" in your
14		testimony?
15	А	(Goldberg) Yes. I'm scrolling through now.
16		Okay, I found it. It is on Bates Page 023. This
17		is a table taken from the IRA HEEHRA, the
18		High-Efficiency Electric Home Rebate Act. "Heat
19		pumps", it looks like it's probably not word
20		searchable, which is why it didn't come up.
21		"Heat pumps" are the first line under
22		"Equipment".
23	Q	Okay. Thank you. And what what would be your
24		takeaway or what should I take away from this

1		table?
2	A	(Goldberg) Sure. For heat pumps specifically,
3		households that have less than 150 percent of the
4		Area Median Income are eligible for \$8,000 in
5		rebates for heat pumps. And participants, or,
6		rather, those who pay taxes are also eligible
7		for, I believe, another \$2,000, as long as
8		they're high-efficiency equipment.
9	Q	Okay.
10	A	(Goldberg) So, in summary, that would be another
11		\$10,000 that can help buy down the cost for a
12		participant, and ultimately shorten their payback
13		period.
14	Q	Thank you. And is this similar, say, for
15		Massachusetts? Is this the same program or
16		something different?
17	A	(Goldberg) My understanding is that this is
18		federal,
19	Q	So, federal, okay.
20	A	(Goldberg) and so it is applies equally to all
21		states.
22	Q	Okay. Thank you.
23	A	(Goldberg) You're welcome.
24		CHAIRMAN GOLDNER: All right. And,

1	Mr. Kreis, my compliments for the best witness
2	panel ever, two mechanical engineers. So, my
3	hardy congratulations, sir. In addition to other
4	degrees.
5	MR. KREIS: I hope they will add that
6	to their CVs, "Best Witness Panel Ever".
7	CHAIRMAN GOLDNER: It is. I think I
8	think it might not fit on Mr. Woolf's, but we can
9	try.
10	MR. KREIS: And, of course, a finding
11	to that effect would be more than welcomed.
12	CHAIRMAN GOLDNER: I'll see if I can
13	get another vote on that, sir.
14	Okay, just a couple more. So, a
15	question directed at Mr. Woolf.
16	BY CHAIRMAN GOLDNER:
17	Q I have to say my overall, I was I'm
18	surprised at the process in New Hampshire,
19	codified, but still surprised, that the discount
20	rate process is not some sort of long-term
21	average, as Commissioner Chattopadhyay was
22	talking about, and, instead, it's two
23	instantaneous data points, or at best you could
24	say one of them is a short-term average over a

1		few months.
2		But I don't understand that. Like, how
3		did we get to this place where we've got these
4		instantaneous data points, which is going to give
5		you funny answers, right? As it was negative, if
6		we would have captured it last year. Probably,
7		in 1982, it would have been, you know, I don't
8		know, like 15 percent or something.
9		Like, how did we get here? And what,
10		if anything, can be done to fix it?
11	A	(Woolf) Yes. It's a great question. First thing
12		is, I'd much prefer to have all of the analyses
13		done entirely in real dollars, and that way
14		inflation is just not relevant, because it's hard
15		to forecast.
16	Q	Yes.
17	A	(Woolf) And, then, that leaves us with "Okay,
18		what's the right index to use for the real
19		discount rate?"
20		I think a lot of states, and I've seen
21		this done, and I was part of it in Massachusetts
22		and Rhode Island, are looking for an indicator of
23		low-risk cost of capital. Just to have something
24		to kind of put, you know, hang their hat on, or

1		to give some basis for what a good discount rate
2		would be, to reflect the low-risk sort of cost of
3		capital and the low-risk nature of the efficiency
4		programs.
5		And at the time, I saw this done again
6		around the 2000s, early 2000s. Back then the
7		inflation rate oh, I'm sorry, the prime rate
8		was fairly stable. And, so, it didn't seem like
9		it was going to be this kind of thing, where
10		month to month you have to check for it, and
11		update for it.
12		So, that's my understanding. I don't
13		know if that was went through anybody's heads
14		at the time, but I think that was part of it. I
15		don't think anybody anticipated where it would
16		go. And I don't think anybody anticipated where
17		you can get this crossover where some of the
18		times the real one is negative. It doesn't sit
19		very well with a lot of people.
20	Q	No. No. And a long-term average would, of
21		course, helped with that, and real dollars would
22		have helped probably even more.
23	A	(Woolf) Yes.
24	Q	So, I'd agree with that. And perhaps my

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encouragement would be, in future -- in future processes, that would be something I think that would only improve the program, which is the spirit of the comment.

5 One other thing I'll opine on quickly 6 is that, prior to HB 549, there was -- the 7 Commission approved the budget. So, it was sort 8 of, in those days, all cost-effective energy 9 efficiency. So, my interpretation of that was 10 that, if the BC was over one, then that's the 11 amount of spending that you do. And, when the 12 Legislature capped it, now you can see the 13 utilities making trade-offs. They're trying to 14 figure out how to balance everything. So, I 15 think it changed the paradigm a little bit.

16 And, for me, what I'll share is that, 17 that means that having the appropriate discount 18 rate, I won't use "right", because "right" is in 19 the eye of the beholder. But the appropriate 20 discount rate is so important, because it enables 21 you to prioritize within those buckets 22 appropriately. And I think Commissioner 23 Chattopadhyay's questions, and some questions 24 I'll ask on the 31st, are related to that topic.

Like, how do we get to a discount rate that has 1 2 the appropriate prioritization of projects within 3 the B to C paradigm. 4 So, I know there's lots of different 5 ideas on what "right" or "correct" is. But the 6 paradigm shifted here in New Hampshire, I'm sure 7 you're aware of that. But that's -- that's made 8 this discount rate I think even more important, 9 so that we prioritize the right projects, meaning 10 the projects have different timelines, different 11 timeframes, right, it's going to shift which ones 12 are -- go to the top of the list? 13 (Woolf) Yes. Although, I would clarify a little А 14 bit. I think, if the standard is to implement 15 all cost-effective efficiency, the discount rate 16 is important there, too. Well, not so much that 17 it's changed or it become less important, I don't 18 think. 19 I would say it's much more important than it was Q 20 before. Because, now that you have a budget, you 21 have to -- they're in the position of having to 22 prioritize projects. And, so, they have to make 23 good decisions, not bad decisions. And, if we're 24 using a discount rate that's I'll call it

[WITNESSES: Goldberg|Woolf]

1		"wrong", for shorthand, but wrong, then they're
2		going to get the wrong answer.
3	A	(Woolf) I understand your point. But it's my
4		understanding that the utilities are constantly
5		prioritizing. That is, they don't just, as
6		you've heard this morning, take the programs with
7		the lowest BCA and just I'm sorry,
8		benefit-cost ratio and just do all those. They
9		have to design the programs to serve a variety of
10		customers and address a variety of venues. And
11		that right there is a prioritization.
12	Q	Oh, yes. It's multifaceted.
13	A	(Woolf) Yes.
14	Q	It's a multi-dimensional problem, totally agree.
15		But, on that one dimension, I think an
16		improvement there would, I think, be worth
17		looking into.
18	A	(Woolf) And, if I might add, I overheard a
19		conversation this morning about maybe applying a
20		different discount rate for low-income customers
21		or income-eligible customers. And that makes me
22		nervous for that very reason. If you have a
23		different discount rate across different
24		programs, it's hard to prioritize based upon that

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1		metric. So, and I've never seen it done
2		anywhere else. I've seen lots of different
3		variations of proposals for discount rates, but
4		not that one.
5	Q	I think the New Hampshire statutory framework is
6		probably different. I don't know that it is.
7		You might have better visibility. But, because
8		20 percent of the spending goes to low-income,
9		and that's required, that also sort of changes
10		the mathematics of at least how things work here
11		in New Hampshire.
12	A	(Woolf) I've seen similar provisions in other
13		states, such as Massachusetts, Rhode Island, and
14		probably many others.
15	Q	What's the I'm just curious, what's the
16		Massachusetts requirement, do you remember?
17	А	(Woolf) I think it's the same thing. But folks
18		from who work in Massachusetts from the
19		utilities, I think it's a 20 percent sort of
20		portion of the total budget has to go to
21	Q	So, it's the same thing
22	A	(Woolf) Yes.
23	Q	as in New Hampshire.
24	A	(Woolf) And, while we're

1	A	(Goldberg) It's 10 percent for electric, and 20
2		percent for gas, I believe.
3	A	(Woolf) Oh, thank you.
4	Q	Ten and twenty, respectively. Okay. Thank you,
5		Ms. Goldberg.
6	A	(Goldberg) It's
7	A	(Woolf) If I may?
8	Q	Go ahead.
9	A	(Woolf) You first, Ms. Goldberg. Did you have
10		more to add?
11	A	(Goldberg) I'm sorry, did you not hear my
12		response?
13	Q	Yes. I thought you said "10 percent for
14		electric, 20 for gas", I think?
15	A	(Goldberg) Yes. I believe that's correct.
16	Q	Okay. Thank you. Thank you.
17	A	(Woolf) So, I look at this issue in many states,
18		and sometimes nationally. And every state that
19		I'm aware of has some way to account for
20		income-eligible programs differently than the
21		other programs, for obvious reasons. And there's
22		a variety of ways to do it. Sometimes they have,
23		like, a lower threshold. It doesn't have to meet
24		1.0.

1		Sometimes they don't even require
2		cost-effectiveness testing at all. They just
3		realize the benefits are going to be there, so
4		they just do it without sweating the numbers.
5		So, there's a lot of ways to do it.
6		And they're all trying to get at the same thing,
7		which is how to account for the benefits of those
8		programs that aren't easy to monetize. And there
9		are ways to do it, just by being a little more
10		flexible in how you apply the framework.
11	Q	Yes. I'm not sure that discounting to NPV would
12		make sense for the low-income programs in our
13		paradigm, but I would have to think more about
14		it. But I don't think it does, in my opinion, at
15		the moment.
16		Okay. The last question, just to see
17		if I can throw you off the track a little bit,
18		just mildly.
19		But have you considered, has the OCA
20		considered, in this paradigm, like community
21		aggregators, you know, having their own program,
22		or some sort of carve-off, or anything like that?
23		Has that come up? Or, is this is there has
24		there been any discussion on changes in the way

1		the program is managed moving forward?
2	A	(Woolf) Well, I will let my client elaborate.
3		But I will say that both Ms. Goldberg and I are
4		very much engaged in that kind of a program in
5		Massachusetts for the
6		[Court reporter interruption.]
7	CONT	INUED BY THE WITNESS:
8	A	(Woolf) for the Cape Light Compact. And I
9		think that has been a very successful program.
10		However, to your question, we have not
11		really discussed that with my client, in this
12		context.
13		CHAIRMAN GOLDNER: I know you're not
14		providing testimony, Attorney Kreis, but would
15		you care to comment?
16		MR. KREIS: Sure. Mr. Woolf's client
17		would say that, and this is kind of off the top
18		of my head, I think that would require
19		legislation at this point. You know, and that's
20		sort of my reaction to a lot of what has been
21		talked about between you and Mr. Woolf in the
22		last few minutes. You know, all of the things
23		that both of you were tossing back and forth,
24		from my perspective, are important issues to be

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1	hashed out.
2	But, for good or ill, the Legislature
3	adopted a very long and very specific statute
4	that drives this particular proceeding, in
5	particular.
6	And I think, to a significant degree,
7	these are conversations that are going to have to
8	happen over at the State House. There is a
9	legislative service request that I've seen on the
10	list that concerns cost-effectiveness in the EAP
11	ratepayer-funded energy efficiency context. And,
12	so, I am pretty confident that we will be having
13	this very conversation in the hearing room of the
14	House Committee on Science, Technology & Energy.
15	And, frankly, I would look forward to it.
16	CHAIRMAN GOLDNER: And I think I'll
17	just add briefly that, what you're hearing from
18	the Commission, I think, is a passion for program
19	improvements. When we look at the program, and
20	we try to look at things objectively, when we see
21	something that we think "Hey, that could be
22	improved", then we're talking about that today.
23	And I think that, for me, is a healthy
24	governmental process. And how it's implemented

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1 or where it's implemented, and these kinds of 2 things, are a topic from another forum and 3 another day. 4 But I hope everyone sees that what the 5 Commission is trying to do here is take its knowledge and its experience and share where we 6 7 see things that maybe could be improved. I don't have anything else for the OCA 8 9 witnesses. Do you, Commissioner Chattopadhyay? 10 CMSR. CHATTOPADHYAY: So, just to 11 follow up. 12 BY CMSR. CHATTOPADHYAY: 13 In looking through the -- excuse me -- NSPM, you Q 14 do look at what the other states use as their 15 discount rates, right? 16 (Woolf) To some extent. I can add that the А 17 organization that sponsors the NSPMs, it's called 18 the "National Energy Screening Project", they 19 have a website that has a database of assumptions 20 and methods that utilities use for energy 21 efficiency programs. In fact, Ms. Goldberg was 22 one of the people who helped create the database. 23 And, in there, there's a lot of information about 24 discount rates and so forth.

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1		Not so much in an NSPM, just to
2		complete the question or, the answer, there's
3		an appendix, I think it's Appendix G, that I
4		referred to a lot, where we looked a little bit
5		at what's being done around the country.
6	Q	And you've been working on benefit-to-cost ratios
7		matters with energy efficiency for quite a while,
8		right?
9	A	(Woolf) Most of my career.
10	Q	And all the time, have you did you have, like,
11		different positions on discount rates? And, you
12		know, is it dependent on where you are and what
13		the situation is?
14	A	(Woolf) Well, I will say there was a bit of a
15		mindset shift for me, when we came with the whole
16		concept of the regulatory perspective. Because
17		it clarifies let me back up a little bit.
18		Before the NSPM, we had the California Standard
19		Practice Manual. And that was focused on, for
20		our purposes, three perspectives: The Utility
21		Cost Test; the Total Resource Cost Test; and the
22		Societal Cost Test. And, then, many people just
23		assumed that the discount rate should follow the
24		perspective of the test.

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1	And, when we came along with the
2	regulatory perspective, it kind of busted open
3	that framework, in a very positive way, so that
4	now we can talk about what does each state want
5	to do, based upon their policy goals and their
6	statutes and so forth.
7	And, so, at that point, yes, I was
8	always, I think, in talking about the same
9	principles and concepts about discount rates.
10	But, at that point, it just became clear to me,
11	"Oh, yes. This is something that can be decided
12	based upon the policy goals in the state, based
13	upon the input from the stakeholders and the
14	utilities."
15	And, so, that kind of clarified my way
16	of framing this tricky issue.
17	CMSR. CHATTOPADHYAY: Okay. Thank you.
18	That's all.
19	CHAIRMAN GOLDNER: Okay. Thank you.
20	Just a moment please.
21	Okay. I think, at this point, what we
22	can do is I'll release the witnesses from the
23	OCA.
24	MR. KREIS: Actually, just a couple of

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1 questions on redirect please. 2 CHAIRMAN GOLDNER: Oh, on direct. I'm 3 sorry, sir. 4 MR. KREIS: I think this will just take 5 a minute. 6 REDIRECT EXAMINATION 7 BY MR. KREIS: 8 I just want to pick right up on what you, 0 9 Mr. Woolf, were just talking about with 10 Commissioner Chattopadhyay, and you were 11 describing the "regulatory perspective", as it 12 relates to benefit-cost testing. 13 And, just to be clear, the "regulatory 14 perspective" that you just alluded to is 15 essentially the perspective that takes the public 16 policy of a given jurisdiction into account in 17 how to assess costs and benefits, correct? 18 (Woolf) That is correct, a good clarification. А 19 And I will add that we use the term "regulatory" 20 broadly. And it can include legislators, it can 21 include energy offices, it can include 22 commissioners. Also, boards who oversee, co-op's 23 or munies, you know, whoever is sort of making the big decisions. That's one key point. 24

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1		And the other key point about that is,
2		that the policy goals in each state on each issue
3		should be informed by input from the stakeholders
4		who, you know, are interested. And, in fact,
5		that was the whole concept of the working group
6		meetings that I was hired to work on to come up
7		with the Granite State Test. We met for like
8		seven different meetings, and some of the people
9		in this room were there. And we got all their
10		input, and used that to determine "Okay, what are
11		the goals of this group as a whole, and how do we
12		make that sort of what's in the public interest
13		perspective viable and concrete in this test?"
14	Q	So, you anticipated my last question on the
15		subject, which is, would you say that the Granite
16		State Test, as it was developed, right here in
17		this room back in 2019, is a reflection of that
18		"regulatory perspective" you were just talking
19		about?
20	A	(Woolf) Yes.
21	Q	And, finally, because there was a fair amount of
22		testimony about the suggestions that you and Ms.
23		Goldberg both made for improvements here in New

Hampshire going forward, I just want to make sure

	-	
1		it's absolutely clear, so I'll ask each of you to
2		confirm, it is your unequivocal recommendation
3		that the Commission approve the Triennial Plan,
4		as it has been presented by the utilities in this
5		proceeding, is it not?
6	A	(Woolf) Yes, it is.
7	Q	Ms. Goldberg?
8	A	(Goldberg) Yes, it is.
9		MR. KREIS: Okay. Thank you. Those
10		are all the questions I have.
11		And thank you to the I forget the
12		expression you used, "the world's greatest
13		witness panel ever to be sworn in in any
14		jurisdiction on the planet."
15		CHAIRMAN GOLDNER: We'll be sure to at
16		least footnote it, if not feature it.
17		Thank you. Thank you very much. The
18		witnesses
19		WITNESS WOOLF: Thank you.
20		CHAIRMAN GOLDNER: Thank you very much.
21		The witnesses are released.
22		Next, we'll take a quick break. And
23		we'll start, I'll push the envelope here, we'll
24		start at five till, to try and complete the last

1 two witness panels today. So, we'll come back 2 with the DOE, and then we'll move to Mr. Skoglund 3 after that. So, five till please. 4 (Recess taken at 3:49 p.m., and the 5 hearing resumed at 3:58 p.m.) 6 CHAIRMAN GOLDNER: All right. Attorney 7 Dexter, did you want to have your witnesses in the traditional place, or we can be flexible, if 8 that's not -- if that's not --9 10 MR. DEXTER: Well, no. I would, when 11 the time comes, I would ask the witnesses to take 12 the witness booth. 13 But we had a request from Clean Energy 14 New Hampshire if Mr. Skoglund could go next? CHAIRMAN GOLDNER: Oh, of course. 15 16 MR. DEXTER: And we don't have any 17 objection to that. Obviously, it's up to you. 18 CHAIRMAN GOLDNER: No, of course. Mr. 19 Skoglund. MR. SKOGLUND: If you have a lot of 20 21 questions, I can come up? 2.2 MR. KRAKOFF: And I'll be introducing 23 Mr. Skoglund today. CHAIRMAN GOLDNER: Okay. Thank you. 24

1		MR. SKOGLUND: I don't get a name tag.
2		Hope you remember who I am.
3		(Whereupon CHRIS SKOGLUND was duly
4		sworn by the Court Reporter.)
5		CHRIS SKOGLUND, SWORN
6		DIRECT EXAMINATION
7	BY M	IR. KRAKOFF:
8	Q	Good afternoon. Could you please state your full
9		name and who you work for?
10	A	My name is Chris Skoglund. And I work for Clean
11		Energy New Hampshire.
12	Q	And what's your position there?
13	A	I am the Director of Energy Transition.
14	Q	And have you testified before the Commission
15		before?
16	A	I have.
17	Q	I'll start with what has been identified as
18		"Exhibit 3". Is this your prefiled testimony?
19	А	It is.
20	Q	And do you have any changes or corrections you
21		would like to make to your testimony today?
22	A	I do not.
23	Q	And is your testimony true and accurate to the
24		best of your knowledge?

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1	A	Yes, it is.
2	Q	And do you adopt the testimony, which has been
3		identified as "Exhibit 3, as your sworn testimony
4		here today?
5	A	I do.
6	Q	Just briefly, do you support the 2024 to 2026
7		Triennial Plan as submitted?
8	A	I do.
9	Q	And are you recommending that the Commission
10		approve the Plan?
11	A	Yes.
12	Q	And just one final question. Did Clean Energy
13		New Hampshire join the stipulation to certain
14		facts regarding the proposed 2024 to 2026
15		Triennial Energy Efficiency Plan that was filed
16		in this docket?
17	A	We did indeed.
18		MR. KRAKOFF: Okay. I have no further
19		questions.
20		CHAIRMAN GOLDNER: Thank you. We'll
21		begin with the Joint Utilities, and Eversource?
22		MS. CHIAVARA: And, again, we have no
23		questions.
24		CHAIRMAN GOLDNER: All right. The New

1 Hampshire Department of Energy? 2 MR. DEXTER: The Department has no 3 questions. CHAIRMAN GOLDNER: Very good. 4 The 5 Conservation Law Foundation? 6 MR. KRAKOFF: I have no questions. 7 CHAIRMAN GOLDNER: All right. The 8 Nature Conservancy? 9 MS. HATFIELD: No questions. Thank 10 you. 11 CHAIRMAN GOLDNER: Thank you. LISTEN 12 Community Services? 13 [No indication given.] CHAIRMAN GOLDNER: Absent. And, then, 14 15 Southern New Hampshire Services? 16 MR. CLOUTHIER: No questions. Thank 17 you. 18 CHAIRMAN GOLDNER: Thank you. We'll 19 move to -- oh, I'm sorry. The Office of the 20 Consumer Advocate? 21 MR. KREIS: Why thank you, I was hoping 22 you would get to me. 23 Much as I would love to spend an hour 24 on withering cross-examination of Mr. Skoglund,

1 in the interest of time, I will forgo that 2 opportunity. 3 CHAIRMAN GOLDNER: Thank you. All right. We'll move to Commissioner questions, 4 5 beginning with Commissioner Simpson. 6 CMSR. SIMPSON: Thank you, Mr. 7 Chairman. Thank you, Mr. Skoglund. 8 BY CMSR. SIMPSON: 9 So, in your testimony, you had an interesting Q 10 section where you suggest that "energy efficiency 11 acts as a financial hedge." I thought maybe you might be able to elaborate on that for us? 12 13 А Yes. So, one thing that we have been watching 14 at --15 WITNESS SKOGLUND: And, Brandy, I don't 16 know what the problem is, it works fine. 17 [Witness Skoglund referring to the 18 microphone.] CONTINUED BY THE WITNESS: 19 20 -- that we've been watching at Clean Energy New А 21 Hampshire is the forecasts from ISO-New England, 22 and specifically the forecasts for heat pumps and 23 electric vehicles going forward, out to 2030, 24 2032, and how those forecasts have continued to

grow.

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2	There's a common there's a
3	phenomenon that is referred to as the "porcupine
5	
4	chart", where they conservatively forecast one
5	year, then next year they update that forecast,
6	and the forecasts come in above what they had
7	been the year prior. And it turns out that the
8	forecasts from the year prior were, in fact,
9	undercounting where they were headed across many
10	different sectors.
11	And, so, energy efficiency ends up
12	playing a crucial role, where we reduce the
13	amount of energy that we need, and also like
14	build up a store of energy efficiency, that
15	allows us to grow, in terms of the total demand
16	and the total consumption that we will see from
17	electric vehicles, which, across all of New
18	England, I think are projected to grow about
19	44 4,400 percent over current-day levels, and
20	not quite as much in heat pumps, but that will
21	add a considerable amount of peak demand, during
22	the summer and the winter.
23	And, so, energy efficiency allows us to
24	kind of buy down, in advance of that increase in

1		consumption and demand.
2	Q	And, in other parts of your testimony, you
3		describe "indirect benefits", are you familiar
4		with that?
5	A	I should be, as it's my testimony. Is there a
6		specific section that you're looking at?
7	Q	Well, I was curious, with this section about
8		"energy efficiency acting as a financial hedge",
9		of whether you would consider that to be an
10		"indirect benefit", that the that what you
11		just described, if that's an indirect benefit?
12	A	I would describe it as an "indirect benefit", in
13		the sense that it allows us to perhaps better
14		utilize the existing infrastructure that's
15		already in place, with the
16		transmission/distribution infrastructure, that
17		can be very long-lived, the poles, wires,
18		transformers, those sort of things. They can
19		remain in service at their existing level for
20		longer, before we need to upgrade them to meet
21		the new demand, the new consumption that we can
22		see.
23		And perhaps we do it, if it buys us
24		enough lead time, where we can then bring on

1 storage and other DERs that allow us to more, as 2 well as the time-of-use rates that all of you 3 have been kind of like talking about, we have 4 more time to put those time-of-use rates in 5 place, perhaps we can get to that dynamic energy 6 system where we can now use the existing 7 infrastructure more efficiently. So, not just --8 maybe we're not just dropping energy consumption, but we're spreading it out over the course of the 9 10 day, so we don't need to build guite as much. 11 We've had some discussion forward-looking, and we Q understand the Plan that's in front of us today, 12 13 but we've had some discussion about future plans. 14 I would expect that, at the continued hearing on 15 the 31st, there might be some discussion about 16 other measure types. And I wanted to give you an 17 opportunity. 18 Are there suggestions that you or CENH 19 might offer to us, and the utilities, for 20 consideration of a future measure or program 21 offerings? 22 And I'm thinking about, you mentioned 23 "electric vehicles", you mentioned "distributed 24 energy resources". Are there other things that

1		you might suggest be considered for inclusion
2		within these programs in the future?
3	A	I think, at this moment, I'm hesitant to just
4		throw any out, without making sure I'm answering
5		precisely.
6	Q	Uh-huh.
7	A	But I do think that we are at an exciting time,
	11	
8		where the line between demand response and grid
9		modernization and energy efficiency is about to
10		be blurred pretty strongly. As we have more IT
11		coming in, we have more data that can help us do
12		planning, and then we also have more technology,
13		which can be dispatched differently. So, it's
14		not necessarily reducing the energy, but it's
15		just changing it around.
16		So, like my electric vehicle, it
17		automatically charges between midnight and 8:00
18		a.m. If I manage to get a heat pump through
19		these federal programs, that are hopefully
20		coming, that bring that first cost down, that can
21		be dispatched by the utility, so that my house,
22		as far as I know it, is as cool or as warm as my
23		family desires, but it's being done in way that
24		spreads that energy consumption out.

1 But it doesn't change the consumption, 2 it just uses the infrastructure more efficiently. 3 So, it's a different way of talking about 4 efficiency. 5 I think, in future planning, where we 6 have a full 3-year termed plan before the 7 2027-2029 Plan, we'll have an opportunity to dig into those, because the technology will be more 8 mature. But, also, we'll have more time to think 9 10 "How do we do that?" And are there, to the point 11 that Attorney Kreis made, we might need legislative changes that allow you then to affirm 12 13 that in future plan approvals. 14 CMSR. SIMPSON: Thank you, Mr. 15 Skoglund. I appreciate that. 16 That's all the questions I had for this 17 witness. Thank you. CHAIRMAN GOLDNER: Thank you. 18 19 Commissioner Chattopadhyay? 20 CMSR. CHATTOPADHYAY: I don't have any 21 questions after those excellent questions. 22 CHAIRMAN GOLDNER: And, Mr. Sköglund, 23 I'll just -- "Skoglund", sorry, I'll just thank 24 you for your -- I spent too much time in Norway.

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1 So, I see your name "Sköglund", which is the 2 wrong pronunciation in America. 3 WITNESS SKOGLUND: Yes. 4 CHAIRMAN GOLDNER: So, I'll thank you 5 for your testimony, and coming here today. And 6 you're excused. Thank you. 7 WITNESS SKOGLUND: All right. Thank 8 you so much. CHAIRMAN GOLDNER: I'm sorry, Mr. 9 10 Krakoff, I forgot about redirect again. It's I 11 haven't had enough coffee today. 12 MR. KRAKOFF: Yes. I have no questions 13 for redirect. CHAIRMAN GOLDNER: Thank you. And 14 15 sorry about that. My apologies. 16 [Short pause.] 17 CHAIRMAN GOLDNER: Mr. Patnaude, please 18 swear the witnesses, when they're ready. 19 (Whereupon ELIZABETH R. NIXON, MARK P. TOSCANO, and JAY E. DUDLEY were 20 21 duly sworn by the Court Reporter.) 22 CHAIRMAN GOLDNER: Thank you. Attorney 23 Dexter. 24 MR. DEXTER: Thank you, Mr. Chairman.

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1		I have a series of questions for the
2		witnesses. And I'm going to ask the question
3		once, and ask the witnesses to answer them in
4		order of appearance.
5		ELIZABETH R. NIXON, SWORN
6		MARK P. TOSCANO, SWORN
7		JAY E. DUDLEY, SWORN
8		DIRECT EXAMINATION
9	BY M	R. DEXTER:
10	Q	So, would you please identify yourself by stating
11		your name and your position with the Department
12		of Energy?
13	A	(Nixon) My name is Elizabeth Nixon. And I am the
14		Electric Director at the Department of Energy.
15	A	(Toscano) My name is Mark Toscano. I'm a Utility
16		Analyst with DOE.
17	A	(Dudley) My name is Jay Dudley. I'm a Utility
18		Analyst for the DOE Electric Division.
19	Q	And have you testified previously before this
20		Commission?
21	A	(Nixon) Yes.
22	A	(Toscano) Yes.
23	A	(Dudley) Yes.
24	Q	I'd like to direct your attention to the document

1		that's been marked as "Exhibit 4" in this
2		proceeding. That's your prefiled written
3		testimony, is that correct?
4	A	(Nixon) Yes.
5	Q	Were you prepared in the were you involved in
6		the preparation of that testimony?
7	А	(Nixon) Yes.
8	А	(Toscano) Yes.
9	A	(Dudley) Yes.
10	Q	On Page 24 of that testimony, it talks about a
11		filing that the utilities made on September 11th,
12		2023, and that your written testimony does not
13		take into account that September 11th filing. Do
14		you recall that, that discussion in your
15		testimony?
16	А	(Nixon) Yes.
17	Q	Have you since had an opportunity to review the
18		September 11th filing by the utilities?
19	A	(Nixon) Yes.
20	Q	And, having reviewed that filing, would that have
21		changed any of the conclusions that you drew in
22		this document that's marked as "Exhibit 4"?
23	A	(Nixon) No.
24	Q	I'd like to go to Page 11 of your testimony for a

1		minute. And Page 11, at Line 14, references a
2		"total program portfolio benefit cost ratio of
3		2.27 percent." Do you see that?
4	A	(Nixon) Yes.
5	Q	Is it your understanding that, with the changes
6		that the utilities put in, that Unitil put in on
7		September 14th [11th?], and the subsequent
8		changes that Unitil talked about today, that that
9		benefit-cost ratio number would probably be
10		different if the utilities had run an updated
11		portfolio benefit-cost ratio?
12	А	(Nixon) It possibly could, since some of the
13		numbers did change. But my guess is, I have not
14		run the numbers, but my guess is it would have
15		been very minimal impact.
16	Q	Okay. And, so, noting those two items that I
17		mentioned, due to the passage of time, if I were
18		to ask you the questions contained in the written
19		testimony that you submitted, would your answers
20		be the same today?
21	A	(Nixon) Yes.
22	A	(Toscano) Yes.
23	Q	And do you adopt the testimony as your sworn
24		testimony in this proceeding?

1	A	(Nixon) Yes.
2	A	(Dudley) Yes.
3	A	(Toscano) Yes.
4		MR. DEXTER: I think that's all I have
5		at this time. Thank you.
6		CHAIRMAN GOLDNER: Thank you, Attorney
7		Dexter. We'll turn to the Joint Utilities, any
8		questions?
9		MS. CHIAVARA: Not a one.
10		CHAIRMAN GOLDNER: All right. Now,
11		let's move to the OCA?
12		MR. KREIS: I just have one quick thing
13		to ask the Department witnesses, and it just
14		follows up on the colloquy that we had earlier
15		about the AESC.
16		I think this might be a question for
17		Ms. Nixon.
18		CROSS-EXAMINATION
19	BY MI	R. KREIS:
20	Q	Could you describe the extent to which the
21		Department of Energy is involved in the
22		development of the AESC?
23	A	(Nixon) I'll start, but then I'll turn to my
24		colleague.

1		So, we've been involved in the AESC
2		Study this time, and over the years we've been
3		involved as well. And there is a working
4		group or, I guess a group that gets together,
5		and we do provide input and comments. And our
6		comments have been listened to and have impacted
7		the study.
8		But I'll see if Mr. Toscano has
9		anything to add?
10	A	(Toscano) Yes. I am currently on the committee,
11		and we meet every couple weeks. And we go over
12		the latest assumptions and what's going to be
13		considered for inputs, and et cetera. And our
14		feedback was taken, and we're pleased with that,
15		and we will continue to do so.
16		MR. KREIS: That's all for me, Mr.
17		Chairman.
18		CHAIRMAN GOLDNER: Well, thank you.
19		And apologize for going out of order last time.
20		Clean Energy New Hampshire?
21		MR. SKOGLUND: Thank you, Mr. Chairman.
22		No questions.
23		CHAIRMAN GOLDNER: Conservation Law
24		Foundation?

1		MR. KRAKOFF: Thank you. No questions.
2		CHAIRMAN GOLDNER: The Nature
3		Conservancy?
4		MS. HATFIELD: I believe I just have
5		one question. Thank you, Mr. Chairman.
6	BY M	S. HATFIELD:
7	Q	I'm not sure which witness this would go to, but,
8		with respect to earlier discussion of "seeking
9		federal funding", I think there was a reference
10		made by a utility witness that discussions have
11		been had. And I wondered if any of the witnesses
12		are familiar with any of the planning that's
13		happening in that respect, or if there's anything
14		you could share about how federal funding could
15		be added to the program over the three-year Plan?
16	A	(Nixon) So, I'll address that the best I can.
17		The three of us are not involved, but we did get
18		some feedback from our colleagues.
19		It's my understanding that the
20		Department of Energy is applying for two
21		programs. One is the Homes Rebate Program, and
22		the other is the Energy Efficiency Revolving Loan
23		Fund. We have put in an application for some
24		early administrative funds for the Homes Rebate

1		Program, and that gives us the funds to hire a
2		person on staff here to help manage that program.
3		And, then, let's see, the applications
4		for the actual program will be due around January
5		25th, but we expect that we'll apply before that.
6		And New Hampshire is set to receive almost \$35
7		million on that, to be spent by September 30th,
8		2031.
9		And, then, on the Energy Efficiency
10		Revolving Loan Fund, New Hampshire is set to
11		receive a little over 800,000. And we have filed
12		an application in May of 2023 on that, but we
13		have not received any word on that.
14	Q	Thank you very much. I did not hear you mention
15		"HEEHRA", the "High-Efficiency Electric Home
16		Rebate Act". So, I wondered, do you have any
17		knowledge of whether the Department will be
18		seeking those funds, which I think are also in
19		the range of 35 million for the state, and could
20		possibly play a role with the efficiency
21		programs?
22	A	(Nixon) Unfortunately, I cannot provide any
23		feedback on that. But I'm happy to get more, if
24		you'd like.

1	MS. HATFIELD: Thank you. I have no
2	further questions.
3	CHAIRMAN GOLDNER: Southern New
4	Hampshire Services?
5	MR. CLOUTHIER: No questions. Thank
6	you.
7	CHAIRMAN GOLDNER: Thank you. We'll
8	move to Commissioner questions, beginning with
9	Commissioner Simpson?
10	CMSR. SIMPSON: Thank you. Thank you
11	for being here.
12	At the risk of avoiding nonattorneys to
13	answer a legal question, I would ask whether, in
14	the Department's view, whether the Plan, through
15	the testimony submitted, whether you agree,
16	Attorney Dexter, that the Department's conclusion
17	is that the Plan ensures that the statutory
18	requirements of HB 549 and the revisions to the
19	restructuring statute had been met?
20	MR. DEXTER: Well, yes, I can answer
21	that. And, in fact, I was going to address that
22	in our closing statement.
23	But, basically, the Department's
24	approach in this case, given the passage of HB

1	549, since the last Plan was approved by the
2	Commission, was to make sure that the Plan that
3	was filed by the utilities was compliant with the
4	requirements of HB 549. And we structured our
5	testimony that way.
6	CMSR. SIMPSON: Uh-huh.
7	MR. DEXTER: You'll notice that most of
8	the questions went to that.
9	And, so, yes. It is the position of
10	the Department that the Plan should be approved
11	as compliant with the requirements of HB 549.
12	Now, the witnesses have said that in
13	their testimony, and I was going to ask them that
14	on redirect. But I would ask them to, at this
15	time, either agree or disagree with what I just
16	said?
17	WITNESS NIXON: I agree.
18	WITNESS TOSCANO: Agree.
19	WITNESS DUDLEY: Agree.
20	CMSR. SIMPSON: Thank you. And I note
21	that the Department didn't sign the Joint
22	Stipulation, but I just want to confirm that the
23	Department does not object to the Joint
24	Stipulation, correct?

1	MR. DEXTER: That is correct.
2	CMSR. SIMPSON: Okay. And my
3	understanding is correct there as well, that you
4	are not a signatory to it, correct?
5	MR. DEXTER: No, we did not sign the
6	Joint Stipulation, and nor do we contest the
7	Joint Stipulation.
8	CMSR. SIMPSON: Thank you.
9	BY CMSR. SIMPSON:
10	Q In your testimony, on Bates Page 011, you note
11	that "the Plan doesn't contain "geotargeted"
12	measures". I was hoping that you might elaborate
13	on that, what that means to you? And is this a
14	suggestion for future plan filings?
15	A (Nixon) I'll start, and others can weigh in.
16	So, as the utilities have indicated in
17	their data response, they do not say that there
18	is any geotargeted programs. We would say,
19	though, that the Active Demand Response Programs
20	can get to that somewhat. While it does get down
21	to the distribution level, and can help the
22	distribution system, there were not specific
23	areas targeted within those programs. But those
24	programs do help out with the distribution

1 system, as well as -- I mean, even though they're 2 targeted for transmission, reducing the 3 transmission costs. 4 I don't know if you have anything to 5 add? 6 А (Toscano) I'm new to this, in this Plan in this 7 But I'm not aware of anything specifically area. 8 geotargeting that's been going on. 9 The only thing I will comment on is 10 that there has been some discussion of using some 11 different temperature data for the heat pumps, as that starts to get rolled out over time. 12 But 13 that's not in the current Plan, that's just --14 but I do expect that it may come up down the 15 road. 16 So, just for clarification, when you say Q 17 "geotargeted", you mean looking at the network, 18 whether it's electric or gas, and the system 19 operational conditions, and then specifically 20 targeting customers in those locations to address 21 a need or an issue, correct? Am I interpreting 22 that correctly? 23 Α (Nixon) That's what I meant. 24 А (Toscano) That's my understanding of it.

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1	Q	Okay. Thank you. And, then, on Bates Page 022,
2		you mentioned the "Planning process for the next
3		three-year Plan". Is there any specific
4		suggestion or suggestions that you'd like to
5		raise now that you think would be relevant?
6	A	(Nixon) We mentioned that in our testimony,
7		because, not in this three-year Plan, but in the
8		previous ones, we hired a consultant to help
9		facilitate that. And they were also subject
10		matter experts, so they could actually provide
11		additional input and suggestions.
12		We made the suggestion here, but I know
13		the utilities did not propose it. And we're okay
14		with how they proposed it. But just, maybe in
15		the future, that that's something to think about
16		and consider.
17	Q	I guess I would offer that, if there would be
18		direction from the Commission that would be
19		helpful to the Department, you know, you can let
20		us know today, or you can let us know on the
21		31st, if there's something that would be helpful
22		in an order, for the subsequent planning process
23		and how you'll be involved, that would be
24		helpful.

	r	
1	A	(Nixon) I think that, to the extent we would need
2		approval, I'm not sure if we do, that it would be
3		helpful to have a consultant to help facilitate
4		that process, in our opinion.
5	Q	Thank you. And, then, my understanding is that
6		the Department, via consultants, works with the
7		third party evaluators in facilitating the
8		program, is that correct?
9	A	(Nixon) Yes. So, we have a consultant that sits
10		on the EM&V Working Group, and they are
11		intimately involved.
12	A	(Toscano) Yes. I've participated in every chance
13		I can in all the meetings and the various studies
14		that have been going on, and the consultants are
15		deeply involved, and do offer suggestions. And
16		there's a lot of back-and-forth amongst the
17		participants.
18	Q	And is that at the we heard some discussion
19		about, when there are measure changes, they are
20		not presented to the Commission, but the EM&V
21		Working Group vets measure changes. Is that the
22		type of activity that your consultant would
23		engage on with the Working Group?
24	А	(Nixon) Yes. So, they're intimately involved in

1		all the studies, and that includes the Technical
2		Reference Manual. And that's when the measures
3		are brought out, and the savings and the study
4		results are incorporated. But they're involved
5		in all of the studies.
6		CMSR. SIMPSON: Okay. Great. Thank
7		you so much.
8		I don't have any further questions for
9		the Department witnesses. Thank you.
10		CHAIRMAN GOLDNER: Okay. Thank you.
11		We'll move to Commissioner Chattopadhyay?
12		CMSR. CHATTOPADHYAY: I do not have any
13		questions.
14		CHAIRMAN GOLDNER: All right. I just
15		have a couple of quick ones.
16	BY CI	HAIRMAN GOLDNER:
17	Q	Mr. Toscano, if you could elaborate, you
18		mentioned that you have a call on AESC every
19		couple weeks. Could you elaborate a little bit
20		on if you feel like New Hampshire is listened to,
21		is well represented, and then that feedback is
22		you're getting favorable feedback?
23	A	(Toscano) Certainly. The bottom line is "yes."
24		They do listen, they listen to all areas. And,

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1		as you know, each area has their own specific
2		interest. And we speak amongst ourselves, and we
3		make comments. And, as I mentioned, they have
4		already taken some of those into account,
5		including the one on reliability, and some of the
6		other counterfactuals that they are using.
7		So, they are very much interested in
8		what New Hampshire and they recognize New
9		Hampshire as being somewhat unique, compared to
10		some of our neighbors.
11	Q	Okay. Thank you very much. Excellent. And I
12		think I just have one other question, and it's
13		relative to the admin., marketing, and EM&V
14		costs. So, when looking at the utility filing,
15		it looks like those costs, admin., marketing,
16		EM&V, are increasing pretty steeply over time.
17		It looks like it about doubles for each of the
18		utilities from 2021 to 2026, except for NHEC,
19		where it only increases by about 25 percent.
20		Can you talk a little about the
21		drivers, what's contributing to the trend? And
22		what the Department would recommend, in terms of
23		making sure that those costs are, you know, sort
24		of under control over time?

1	A	(Nixon) Well, so, I'll talk first to the EM&V. I
2		think that's a very critical element. I mean,
3		that's basically verifying that the savings that
4		are being forecast and used are actually what's
5		happening in the real world. So, those studies
6		are verifying that those savings are happening.
7	Q	If I could please just in, excuse me. But I'm
8		wondering is, why have the costs doubled? So,
9		it's not it's not that it's not important, of
10		course, it's important. So, is administrative
11		costs, it's a necessity.
12		The question is really around the
13		doubling of the costs. Why did the costs double?
14		And does the Department have any thoughts on how
15		to keep the costs under control over time?
16	A	(Nixon) Just off the top of my head, my first
17		thought was that we're engaged in many more
18		studies than we have been in the past, and doing
19		a lot more because than we ever have as long
20		as I've been involved.
21		So, on the EM&V side, on the admin. and
22		marketing, I think that, as the utilities have
23		said, that, you know, lighting was a big measure
24		in the past, and now there's that that's going

1		away, they perhaps need to market more.
2		But I don't off the top of me head,
3		I don't have any suggestions on how to control
4		that, other than to monitor it.
5		I don't know if others have anything to
6		add, but
7	Q	Maybe it would help to understand, too. What's
8		the Department's role in sort of reviewing those
9		admin., marketing, EM&V costs? Is that something
10		that the Department is deeply engaged in, or is
11		that something that really comes to you as an
12		output from the utilities?
13	A	(Nixon) So, again, on the admin. and marketing, I
14		would say that comes to us as part of the Plans
15		in the quarterly reports.
16		On the EM&V, we are intimately involved
17		in when those studies are issued. So, we do see
18		those costs more on a more detailed basis, I
19		would say.
20		CHAIRMAN GOLDNER: Okay. Thank you.
21		That's helpful.
22		All right. I might have one more, just
23		a moment.
24		I think I'm okay. Okay. Any other

1		questions from my fellow Commissioners?
2		[Cmsr. Chattopadhyay and Cmsr. Simpson
3		indicating in the negative.]
4		CHAIRMAN GOLDNER: All right. This
5		time I'm going to do redirect. Attorney Dexter,
6		you're the lucky winner.
7		MR. DEXTER: Thanks. I just have one
8		question.
9		REDIRECT EXAMINATION
10	BY M	R. DEXTER:
11	Q	When we were talking about the funds that might
12		come from the federal government for use in
13		energy efficiency, is it your understanding that
14		those funds would be in addition to what's put
15		forth here in the NHSaves Plan, not as a
16		replacement for the Plan?
17	А	(Nixon) Yes. That's true. And, in fact, one
18		of at least one of the programs, the Homes
19		Rebate Program, it specifically says they have to
20		supplement, not replace, existing EE program
21		funds.
22	Q	And the Homes Rebate Plan was the one you
23		mentioned with the \$35 million price tag,
24	A	(Nixon) Correct.

1 -- not the \$800,000 price tag? Q 2 А (Nixon) Correct. 3 MR. DEXTER: Thank you. That's all I 4 have. 5 CHAIRMAN GOLDNER: Thank you, Attorney 6 Dexter. 7 So, at this point, I'm ready to recess the hearing for the 31st. But, first, I want to 8 check to see if there's anything else we need to 9 10 cover today, before we recess? 11 [No verbal response.] 12 CHAIRMAN GOLDNER: Okay. So, I think -- I think the witnesses for the utilities 13 we'll need back. I know that Attorney Sheehan 14 had requested that the rates witnesses be 15 16 excused. 17 Do my fellow Commissioners have any 18 comments on the rates witnesses? 19 CMSR. SIMPSON: I don't anticipate 20 having any questions for them. 21 CHAIRMAN GOLDNER: Commissioner 22 Chattopadhyay? 23 CMSR. CHATTOPADHYAY: I don't either. 24 CHAIRMAN GOLDNER: All right. So,

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1
         we'll excuse the rates witnesses.
 2
                    And just to make sure we apply a name
 3
         to a topic, who should we expect not to be here?
 4
                    MS. CHIAVARA: So, that would be Yi-An
 5
         Chen, for Eversource.
 6
                    CHAIRMAN GOLDNER: Okay.
 7
                    MS. CHIAVARA: Elena Demeris, for
         Unitil.
 8
 9
                    CHAIRMAN GOLDNER: Okay.
10
                    MS. CHIAVARA: Is it -- Tyler
11
         Culbertson, for Liberty.
12
                    CHAIRMAN GOLDNER:
                                      Okay.
                    MS. CHIAVARA: And Carol Woods will
13
14
         still be here, because she is a
          jack-of-all-trades for the Co-op.
15
16
                    CHAIRMAN GOLDNER: All right.
17
         Excellent. Okay. That's how we'll move forward
18
         then.
19
                    Anything else to cover today, before we
20
         move to recess?
21
                    [No verbal response.]
2.2
                    CHAIRMAN GOLDNER: And let me first
23
         release the witnesses.
24
                    And I think we have everything covered.
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1	So, we're out of time, and I'll recess the
2	hearing. We'll return at the next scheduled
3	hearing session on October 31st, at 9:00 a.m.
4	Thank you.
5	(Whereupon the hearing was adjourned
6	at 4:27 p.m., and the hearing to
7	resume on October 31st, commencing at
8	9:00 a.m.)
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