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STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

January 25, 2022 - 9:16 a.m.
21 South Fruit Street
Suite 10
Concord, NH

DAY 1
MORNING SESSION
ONLY

[Hearing also conducted via Webex]

RE: ELECTRIC DISTRIBUTION UTILITIES:
Electric Vehicle Time-of-Use Rates.

PRESENT: Chairman Daniel C. Goldner, Presiding
Commissioner Pradip K. Chattopadhyay
Special Commissioner F. Anne Ross

Doreen Borden, Clerk
Corrine Lemay, PUC Hybrid Hearing Host

APPEARANCES: **Reptg. Eversource Energy:**
Jessica Chiavara, Esq.

Reptg. Unitil Energy Systems, Inc.:
Patrick H. Taylor, Esq.

**Reptg. Liberty Utilities (Granite
State Electric) Corp. d/b/a
Liberty Utilities:**
Michael J. Sheehan, Esq.

Court Reporter: Steven E. Patnaude, LCR No. 52

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APPEARANCES: (C o n t i n u e d)

Reptg. Conservation Law Foundation:
Nicholas A. Krakoff, Esq.

Reptg. ChargePoint, Inc.:
Nikhil Vijaykar, Esq. (*Keyes & Fox*)

Reptg. Clean Energy New Hampshire:
Chris Skoglund, Dir./Energy Transition

Reptg. the City of Lebanon, NH:
Clifton C. Below, Asst. Mayor

Reptg. Dept. of Environmental Services:
Rebecca Ohler

Reptg. Residential Ratepayers:
Julianne Desmet, Esq.
Maureen Reno, Dir./Rates & Markets
Office of Consumer Advocate

Reptg. New Hampshire Dept. of Energy:
Brian D. Buckley, Esq.
(*Regulatory Support Division*)

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* * *

**WITNESS PANEL: HEATHER M. TEBBETTS
 CINDY L. CAROL
 CAROL VALIANTI
 JOHN D. TAYLOR
 SANEM I. SERGICI**

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2	Testimony and Attachments of Cindy L. Carroll, Carleton B. Simpson, and Carol Valianti (06-15-21)	<i>premarked</i>
3	Testimony and Attachments of Edward A. Davis (06-15-21)	<i>premarked</i>
4	Testimony and Attachments of Dennis E. Moore, Brian J. Rice, and Michael R. Goldman (06-15-21)	<i>premarked</i>
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10	Rebuttal Testimony and Attachments of Heather M. Tebbetts and Melissa J. Samenfeld (12-10-21)	<i>premarked</i>
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16	Unitil Response to CLF & CENH 1-23 (08-04-21)	<i>premarked</i>
17	Unitil Response to Staff 2-6 (08-05-21)	<i>premarked</i>
18	Unitil Response to Staff 2-6, Attachment 1 (08-05-21)	<i>premarked</i>
19	Unitil Response to Staff 2-6, Attachment 2 (08-05-21)	<i>premarked</i>
20	Liberty Response to Staff 1-3 (07-13-21)	<i>premarked</i>
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EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
22	Liberty Response to DOE 2-5 (08-04-21)	<i>premarked</i>
23	Eversource Response to CLF-CENH 2-001-2-003 (08-13-21)	<i>premarked</i>
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P R O C E E D I N G

1
2 CHAIRMAN GOLDNER: Good morning,
3 everyone. I'm Chairman Goldner. I'm joined by
4 Commissioner Ross and Commissioner Chattopadhyay.

5 We're here this morning in Docket DE
6 20-170 for a hearing regarding Electric Vehicle
7 Time-of-Use Rates, which include a Liberty/Unitil
8 Settlement Agreement and an Eversource proposal.
9 We would propose starting with the schedule from
10 the DOE dated 01-24-22, and written closings.
11 After appearances, we'll take comments on the
12 proposed outline.

13 All right. So, with appearances, let's
14 start with Liberty.

15 MR. SHEEHAN: Good morning,
16 Commissioners. Mike Sheehan, for Liberty
17 Utilities (Granite State Electric) Corp.

18 CHAIRMAN GOLDNER: Thank you.
19 Eversource?

20 MS. CHIAVARA: Yes. Good morning,
21 Commission. This is Jessica Chiavara, here for
22 Public Service Company of New Hampshire, doing
23 business as Eversource Energy.

24 CHAIRMAN GOLDNER: Thank you. Unitil?

1 MR. P. TAYLOR: Good morning,
2 Commissioners. Patrick Taylor, on behalf of
3 Unitil Energy Systems, Inc.

4 CHAIRMAN GOLDNER: Thank you. Clean
5 Energy New Hampshire?

6 MR. SKOGLUND: Good morning,
7 Commissioners. Chris Skoglund, with Clean Energy
8 New Hampshire.

9 CHAIRMAN GOLDNER: ChargePoint?

10 MR. VIJAYKAR: Good morning,
11 Commissioners. Nikhil Vijaykar, of Keyes & Fox,
12 LLP, on behalf of ChargePoint.

13 CHAIRMAN GOLDNER: Okay. Thank you.
14 Conservation Law Foundation?

15 MR. KRAKOFF: Good morning,
16 Commissioners. Nick Krakoff, on behalf of
17 Conservation Law Foundation.

18 CHAIRMAN GOLDNER: Thank you. City of
19 Lebanon?

20 MR. BELOW: Good morning,
21 Commissioners. Clifton Below, on behalf of the
22 City of Lebanon.

23 CHAIRMAN GOLDNER: Thank you. New
24 Hampshire Department of Environmental Services?

1 *[No verbal response.]*

2 CHAIRMAN GOLDNER: Okay. I had an
3 appearance from a Ms. Ohler. I'll strike that
4 from the list.

5 The New England Convenience Store &
6 Energy Marketers Association?

7 *[No verbal response.]*

8 CHAIRMAN GOLDNER: I had a Mr. Moran.
9 No?

10 *[No verbal response.]*

11 CHAIRMAN GOLDNER: Okay. Office of
12 Consumer Advocate?

13 MS. DESMET: Good morning,
14 Commissioners. Julianne Desmet, with the OCA.
15 And also in attendance is one of our directors,
16 Ms. Reno, also.

17 CHAIRMAN GOLDNER: All right. Thank
18 you. And New Hampshire Department of Energy?

19 MR. BUCKLEY: Good morning, Chairman
20 Goldner, Commissioner Chattopadhyay, and Special
21 Commissioner Ross. My name is Brian Buckley.
22 And I'm appearing on behalf of the Department of
23 Energy.

24 CHAIRMAN GOLDNER: Thank you. So, for

1 preliminary matters, I'll open the hearing to
2 comments on the order of presentation and written
3 closings? Maybe start with Liberty.

4 MR. SHEEHAN: Thank you. We are
5 supportive of the DOE's letter from yesterday to
6 proceed according to that. And, more
7 specifically, for Liberty, my intention is to
8 qualify Ms. Tebbetts, have her adopt her
9 testimony, then, frankly, turn her over to Mr.
10 Buckley to ask questions as part of the
11 Settlement panel.

12 CHAIRMAN GOLDNER: Okay. Thank you.
13 Eversource, any comments?

14 MS. CHIAVARA: Eversource assents to
15 the Department of Energy's proposed schedule.

16 CHAIRMAN GOLDNER: Okay. Unitil?

17 MR. P. TAYLOR: Unitil also assents to
18 the Department of Energy's proposed schedule.
19 And picking up the thread that Mr. Sheehan left
20 off there, today, on the stand, I will be
21 qualifying Cindy Carroll, Carol Valianti, and
22 John Taylor as witnesses on behalf of the
23 Company.

24 CHAIRMAN GOLDNER: Okay. Thank you.

1 Clean Energy New Hampshire?

2 MR. SKOGLUND: Clean Energy New
3 Hampshire assents to the proposed schedule.

4 CHAIRMAN GOLDNER: Thank you.
5 ChargePoint?

6 MR. VIJAYKAR: Thank you, Commissioner.
7 ChargePoint assents to the schedule proposed.
8 And, similar, as some of the other parties have
9 already spoken, we plan on having our witness
10 qualified and adopting and swearing in his
11 testimony, and then turning over our witness for
12 cross-examination and Commissioner questions.

13 Thank you.

14 CHAIRMAN GOLDNER: Thank you.

15 Conservation Law Foundation?

16 MR. KRAKOFF: Thank you, Chairman. CLF
17 assents to the proposed procedural schedule. As
18 noted on the procedural schedule, our witness
19 will be available tomorrow [sic] to answer
20 questions.

21 Just a point of clarification. I
22 think, earlier, did you say that closing
23 statements would be in written form?

24 CHAIRMAN GOLDNER: Yes.

1 MR. KRAKOFF: Okay. Thank you.

2 CHAIRMAN GOLDNER: Thank you. City of
3 Lebanon?

4 MR. BELOW: The City concurs. I just
5 want to mention that, as a volunteer, because of
6 other demands on my time, I wasn't able to
7 provide any comment as the Commission requested
8 on Friday. But I am available Friday afternoon,
9 and in the time slot, to adopt my testimony and
10 respond to any questions, if so desired. But I
11 won't be able to participate in the entire
12 hearing because of other commitments.

13 Thank you.

14 CHAIRMAN GOLDNER: Thank you. Office
15 of Consumer Advocate?

16 MS. DESMET: Yes. Thank you. There is
17 no objection to the proposed schedule. And the
18 Office of Consumer Advocate does not have any
19 additional witnesses to put forward.

20 CHAIRMAN GOLDNER: Thank you. And New
21 Hampshire Department of Energy?

22 MR. BUCKLEY: The New Hampshire
23 Department of Energy supports the proposed
24 schedule.

1 CHAIRMAN GOLDNER: Thank you.

2 Okay. Exhibits 1 through 24 have been
3 prefiled and premarked for identification. Is
4 there any confidential information in any of the
5 exhibits? I didn't see any.

6 MR. BUCKLEY: I don't believe so.

7 CHAIRMAN GOLDNER: Okay. Thank you.
8 Is there anything else we need to cover regarding
9 exhibits?

10 MR. BUCKLEY: I do not believe so.

11 CHAIRMAN GOLDNER: Thank you. Okay.
12 Any other preliminary matters, before we have the
13 witnesses sworn in?

14 MS. CHIAVARA: Chair Goldner, I believe
15 Eversource will not be participating today. So,
16 if they want to demote us to attendees, so that
17 you can focus on the witnesses, then, that's
18 fine.

19 CHAIRMAN GOLDNER: Okay. Thank you.
20 Does anyone object --

21 MR. P. TAYLOR: Chairman Goldner?

22 CHAIRMAN GOLDNER: Yes. Go ahead.

23 MR. P. TAYLOR: Oh, excuse me. No, I
24 didn't mean to interrupt you. Why don't you

1 finish what you're asking about the objection,
2 and then I'll make my point.

3 CHAIRMAN GOLDNER: Okay. Thank you. I
4 was just asking if anyone objected to the
5 witnesses that we're about to swear in?

6 *[No verbal response.]*

7 CHAIRMAN GOLDNER: Go ahead, Mr.
8 Taylor.

9 MR. P. TAYLOR: I'm just going to note
10 this as a preliminary matter, although we're also
11 going to deal with it on the stand. Hearing
12 Exhibit 2 is testimony sponsored by Carleton
13 Simpson, Cindy Carroll, and Carol Valianti. And,
14 as I said, we'll walk through this on the stand
15 with our witnesses. But the Company has -- is
16 withdrawing Mr. Simpson as a witness on that
17 testimony, because he's no longer employed by the
18 Company. And the testimony will be adopted in
19 its entirety by our witnesses on the stand today.

20 CHAIRMAN GOLDNER: Okay. Thank you,
21 Mr. Taylor.

22 Anything else for preliminary matters?

23 MS. OHLER: Yes. Excuse me, Mr.
24 Chairman. This is Rebecca Ohler, with the

1 Department of Environmental Services. I had
2 troubled joining. So, I just wanted to let you
3 know that I am here on behalf of the Department.

4 CHAIRMAN GOLDNER: Okay. Thank you
5 very much.

6 MR. BUCKLEY: Excuse me, Mr. Chairman?

7 CHAIRMAN GOLDNER: Uh-huh.

8 MR. BUCKLEY: One other preliminary
9 matter regarding exhibits. I do think that there
10 is one late-filed exhibit that might be coming
11 your way from the City of Lebanon, I believe,
12 Exhibit 25, which is a data response from the
13 Department of Energy to Liberty. Am I correct in
14 stating that?

15 MR. BELOW: No. As I said, when I
16 filed just the cover page for that discovery
17 response, the actual document is an Excel file,
18 that I couldn't submit in conformance with the
19 PUC rules. It would have taken over 2,200 pages
20 to print it as a *pdf*. And, as a live file, it's
21 a *.xlsx*, and the Commission on its website says
22 it only accepts *.xls* files.

23 So, if the Commission would like me to
24 file it as a live spreadsheet in its current

1 format, I can do that. But that's why I didn't
2 previously file it.

3 MR. BUCKLEY: I stand corrected.

4 *(Chairman Goldner conferring with*
5 *Special Cmsr. Ross.)*

6 CHAIRMAN GOLDNER: Yes. Mr. Below, if
7 you could file the live spreadsheet, we can mark
8 that "Exhibit 25".

9 MR. BELOW: Okay. Thank you. I will
10 do that in a few minutes.

11 CHAIRMAN GOLDNER: Thank you.

12 **(Exhibit 25 reserved.)**

13 CHAIRMAN GOLDNER: Anything else?

14 *[No verbal response.]*

15 CHAIRMAN GOLDNER: Okay. Let's proceed
16 with the witnesses. Mr. Patnaude, would you
17 please swear in the Settlement Agreement Panel of
18 witnesses.

19 *(Whereupon **Heather M. Tebbetts,***
20 ***Cindy L. Carroll, Carol Valianti,***
21 ***John D. Taylor, and Sanem I. Sergici***
22 *were duly sworn by the Court Reporter.)*

23 CHAIRMAN GOLDNER: Okay. Let's move to
24 direct examination. We'll begin with -- I'll

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 recognize Mr. Sheehan, at Liberty Utilities.

2 MR. SHEEHAN: Thank you.

3 **HEATHER M. TEBBETTS, SWORN**

4 **CINDY L. CARROLL, SWORN**

5 **CAROL VALIANTI, SWORN**

6 **JOHN D. TAYLOR, SWORN**

7 **SANEM I. SERGICI, SWORN**

8 **DIRECT EXAMINATION**

9 BY MR. SHEEHAN:

10 Q Ms. Tebbetts, could you please introduce yourself
11 and describe your position with Liberty?

12 A (Tebbetts) Yes. My name is Heather Tebbetts.
13 And I am the Manager of Rates and Regulatory
14 Affairs. And I'm employed by Liberty Utilities
15 Service Company. And I'm responsible for
16 rate-regulated dockets for Granite State
17 Electric.

18 Q And what's been marked as "Exhibits 1" and "10"
19 are two pieces of testimony that bear your names.
20 Exhibit 1 is the Testimony of Heather Tebbetts
21 and Melissa Samenfeld, dated June 15th of '21.
22 And Exhibit 10 is the Rebuttal Testimony of you
23 and Ms. Samenfeld, dated December 10, 2021. Is
24 that correct?

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 A (Tebbetts) Yes.

2 Q And did you participate in the drafting of that
3 testimony?

4 A (Tebbetts) Yes.

5 Q Along with Ms. Samenfeld, who is seated behind
6 me?

7 A (Tebbetts) Yes.

8 Q And do you have any changes you'd like to make to
9 either of those testimonies here this morning?

10 A (Tebbetts) I do not.

11 Q And do you adopt those testimonies as your sworn
12 testimony here this morning?

13 A (Tebbetts) Yes.

14 MR. SHEEHAN: And, Mr. Chair, Ms.
15 Tebbetts has adopted the testimony, and Ms.
16 Samenfeld is behind me, I can tell you she would
17 make the same statements. So, we had elected not
18 to put her on the stand. And, if sufficient, we
19 can just move forward with Ms. Tebbetts' sworn
20 testimony.

21 CHAIRMAN GOLDNER: Thank you. Thank
22 you. And I think you said, Mr. Sheehan, you
23 wanted to move to Mr. Buckley next?

24 MR. SHEEHAN: When Mr. -- Mr. Buckley

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 will be asking questions of the Settlement Panel.
2 And I have just basically deferred to him to
3 include whatever questions he would have of Ms.
4 Tebbetts as part of that, rather than me asking
5 questions and him asking his witness questions.

6 CHAIRMAN GOLDNER: Okay. Very good.
7 Would you like to proceed, Mr. Buckley?

8 MR. BUCKLEY: It might be easier,
9 processwise, to move to Unitil, and then to the
10 DOE.

11 CHAIRMAN GOLDNER: Okay. Very good.
12 Mr. Taylor.

13 MR. P. TAYLOR: My first questions will
14 be to Cindy Carroll.

15 BY MR. P. TAYLOR:

16 Q Ms. Carroll, please state your name, employer and
17 position, and your responsibilities for the
18 record?

19 A (Carroll) My name is Cindy Carroll. I am
20 employed by Unitil Service Corporation. And I'm
21 the Vice President of Customer Energy Solutions.
22 My primary responsibilities are the development,
23 implementation, and advancement of Unitil's
24 distribution utilities' business expansion and

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 economic development programs, energy efficiency
2 programs, and critical customer management.

3 Q Have you previously testified before the
4 Commission?

5 A (Carroll) Yes, I have.

6 Q Please refer to Hearing Exhibit 2, which is the
7 Testimony and Attachments of Cindy Carroll,
8 Carleton Simpson, and Carol Valianti. Can you
9 please briefly describe Hearing Exhibit 2?

10 A (Carroll) Yes. Hearing Exhibit 2 is testimony
11 that Unitil Energy Systems, Incorporated,
12 submitted as part of its rate case in DE 21-030.
13 In that case, the Company requested, among other
14 things, approval of a suite of Electric Vehicle
15 Time-of-Use rates, an EV infrastructure proposal,
16 including a residential charger program, and a
17 make-ready program for DC Fast and Level 2
18 chargers, and an EV Time-of-Use marketing,
19 communication, and education plan.

20 Q Thank you. And why did the Company submit
21 testimony from the concurrently pending rate case
22 in this case?

23 A (Carroll) The Company submitted its comprehensive
24 EV Time-of-Use, infrastructure, and education

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 proposal several months prior to the time that
2 proposals were due to be submitted in this
3 matter. And, so, because the Company's EV
4 Time-of-Use proposal was designed in accordance
5 with the guidelines set forth in Commission Order
6 Number 26,394, the Company believed it was
7 appropriate to provide the same testimony to the
8 Commission in this case.

9 Q Was this testimony prepared by you or under your
10 direction?

11 A (Carroll) Yes. It was.

12 Q And were the schedules and attachments that
13 accompany the testimony prepared by you or under
14 your direction?

15 A (Carroll) Yes, they were.

16 Q Do you have any changes or corrections to your
17 testimony or schedules that you'd like to note on
18 the record today?

19 A (Carroll) No, I do not.

20 Q Carleton Simpson is named as a witness on this
21 testimony. He is no longer a witness sponsoring
22 the testimony, correct?

23 A (Carroll) That is correct. Mr. Simpson is no
24 longer employed by Unitil. And the Company has

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 withdrawn him as a witness.

2 Q And, to the extent that Mr. Simpson was a sponsor
3 of this testimony, will you act as a substitute?

4 A (Carroll) Yes. I will.

5 Q And other than those portions of the testimony
6 for which Ms. Valianti is the primary witness, do
7 you adopt the testimony in its entirety as your
8 own?

9 A (Carroll) Yes, I do.

10 Q Please refer to Hearing Exhibit 24, which is the
11 Settlement Agreement and attachments. Did you
12 participate in the negotiation and drafting of
13 the Settlement Agreement that's before the
14 Commission today?

15 A (Carroll) Yes, I did.

16 Q And are you familiar with the terms of the
17 Settlement Agreement?

18 A (Carroll) Yes, I am.

19 Q Can you please provide a brief overview of the
20 Settlement Agreement, as it pertains to Unitil's
21 EV Time-of-Use rate proposals?

22 A (Carroll) Yes. The Settlement Agreement contains
23 a Residential EV Time-of-Use rate for Unitil
24 customers. The customer charge on this rate is

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 \$5.26 per month. This is a separately-metered
2 residential EV charging rate, and it will have
3 three time-of-use periods: Off-peak, mid-peak,
4 and peak. The peak period is no more than five
5 hours in duration. And the ratio between the
6 total dollars per kWh paid by a customer during
7 the peak period to the dollars paid per kWh by a
8 customer during the off-peak periods will be no
9 less than three-to-one on average annually.

10 Unitil's proposed methodology for
11 developing the transmission and generation rate
12 time-of-use ratios is largely adopted in the
13 Settlement, but subject to certain clarifications
14 described in the Settlement. And the DOE's
15 proposed methodology for developing the
16 distribution rate time-of-use ratios, as
17 described in the Settlement is also adopted.

18 The Agreement also provides for a
19 Commercial Customer EV Time-of-Use rates for
20 Unitil customers. To qualify for this rate, the
21 customer's projected individually metered load
22 must be at least 90 percent EV charging.

23 Customers can opt-out to the
24 appropriate -- oh, pardon me. Customers can

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 opt-in to the appropriate EV Time-of-Use rate for
2 their demand, on their demand, and can opt-out at
3 any time, but must, thereafter, after they
4 opt-out that is, wait at least 12 months before
5 returning to the rate.

6 The customer charge for these rates
7 will be the same as that of the analogous or
8 corresponding commercial customer rate class.

9 These are separately-metered commercial
10 EV charging rates that will have three
11 time-of-use periods: Off-peak, mid-peak, and
12 peak. These commercial charging rates will have
13 time-varying transmission, distribution, and
14 generation components, with the exception that
15 there will be no time-based generation component
16 for the G1 class in this rate. The time-varying
17 generation component will be imputed from the
18 default service load. However, if doing so will
19 result in an unreasonable cost shift, the utility
20 can choose not to offer an imputed time-varying
21 generation rate.

22 Transmission, generation, and
23 distribution rate time-of-use ratios will be
24 developed in the manner similar to the method

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 used for the residential rate, except maintaining
2 a demand charge representing 50 percent of the
3 demand charge for the analogous or corresponding
4 commercial customer rate class.

5 Also in the Settlement, rates will take
6 effect June 1st, 2022, or 90 days from an order,
7 whichever is later. Unitil will pursue targeted
8 marketing opportunities. And there are certain
9 reporting and update requirements in the
10 Settlement.

11 Q Thank you very much. That's very helpful. Do
12 you believe that the Settlement Agreement, if
13 approved, is consistent with the guidelines
14 established by the Commission in DE 20-004, Order
15 26,394?

16 A (Carroll) Yes, I do.

17 Q And do you believe that the Settlement, if
18 approved, is in the public interest and will
19 result in just and reasonable rates?

20 A (Carroll) Yes, I do.

21 Q Thank you. I'll move next to Ms. Valianti. Ms.
22 Valianti, can you please state your name,
23 employer and position, and your responsibilities
24 for the record?

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 A (Valianti) My name is the Carol Valianti. I work
2 for Unitil Service Corporation. I am the Vice
3 President of Communications and Public Affairs.
4 And I'm responsible for external communications
5 with all Unitil stakeholders.

6 Q Have you previously testified before the
7 Commission?

8 A (Valianti) No, I have not.

9 Q Please refer to Hearing Exhibit 2, which I had
10 also presented to Ms. Carroll, is the Testimony
11 and Attachments of Cindy Carroll, Carleton
12 Simpson, and Carol Valianti. Was this testimony
13 prepared by you or under your direction?

14 A (Valianti) Yes, to the extent not already adopted
15 by Ms. Carroll.

16 Q And were the schedules and attachments that
17 accompany the testimony prepared by you or under
18 your direction?

19 A (Valianti) Yes, they were.

20 Q Do you have any changes or corrections that you'd
21 like to note on the record today?

22 A (Valianti) No, I do not.

23 Q And, again, I'll refer you to Hearing Exhibit 24,
24 which is the Settlement Agreement and its

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 attachments. Did you participate in the
2 negotiation and drafting of the Settlement
3 Agreement that is before the Commission today?

4 A (Valianti) Yes, I did.

5 Q And are you familiar with the terms of the
6 Agreement?

7 A (Valianti) Yes, I am.

8 Q Do you believe that the Agreement, if approved,
9 is consistent with the guidelines established by
10 the Commission?

11 A (Valianti) Yes, I do.

12 Q And do you believe that the Settlement Agreement,
13 if approved, is in the public interest and will
14 result in just and reasonable rates?

15 A (Valianti) Yes.

16 Q Thank you. All right. I'll move to Mr. Taylor.
17 Mr. Taylor, please state your name, your employer
18 and your position, and your responsibilities for
19 the record?

20 A (J. Taylor) Yes. It's John Taylor. I'm a
21 Managing Partner with Atrium Economics, and was
22 retained by Unitil to support the development of
23 a time-of-use proposal initially in Docket
24 21-030.

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 Q Have you previously testified before this
2 Commission or any other commission?

3 A (J. Taylor) Yes. I provided direct testimony in
4 Unitil's 21-030 docket, as well as the Northern
5 natural gas case, which I don't have the docket
6 number, I believe DG 21-104.

7 Q Please refer to Hearing Exhibit 12, which is the
8 Rebuttal Testimony and Attachments of John D.
9 Taylor. Was this rebuttal testimony prepared by
10 you or under your direction?

11 A (J. Taylor) Yes.

12 Q And were the schedules and attachments that
13 accompany the rebuttal testimony prepared by you
14 or under your direction?

15 A (J. Taylor) Yes, they were.

16 Q Do you have any changes or corrections to the
17 testimony or schedules that you'd like to note on
18 the record today?

19 A (J. Taylor) Yes. We have a few updates to the
20 last table of that testimony, which is Table 7,
21 on Page 26.

22 Q Okay. And is that Bates Page 029 of Hearing
23 Exhibit 12?

24 A (J. Taylor) I believe so. Yes.

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 Q Okay. Go ahead.

2 A (J. Taylor) Yes, it is. So, these tables are
3 presenting some illustrative bill impacts related
4 to some time-of-use proposals that we discussed
5 and talked about during this proceeding.

6 Table 7, the first column, "Current Rate",
7 inadvertently had actually been based off of a
8 load factor of 15 percent, but the intent was for
9 it to be off of a 10 percent load factor. So, as
10 a result of that, the row that stated the
11 "Monthly Energy (kWh)", instead of the "102,600",
12 it should be 70,794. So, that's the correct
13 amount of kWh related to a 10 percent load
14 factor.

15 As a result of that update, nothing
16 changes in the second two columns. But the
17 "Current Rate" column, there's an update to the
18 "Energy Charge", as well as to the "Total Monthly
19 Charge". The Energy Charge, which, as filed, was
20 "3,726.70", would be updated to "2,571.42". And,
21 as a result, the calculation that derives the
22 Total Monthly Charge would be updated to
23 "4,937.91".

24 Those are the updates to the "Current"

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1 column. And there's two more updates that result
2 from the change of the kWh. It's the last row,
3 which is the "Difference from Current Rates".
4 The difference -- the first difference, which is
5 comparing the Unitil's proposal to the current
6 rate, would be "907.48". And then, the
7 difference between the current rate and the DOE
8 method would be "2,731.63".

9 So, again, it's just an error in that
10 first column in the calculation of the load
11 factor that was used to derive the current rates'
12 illustrative bill impact.

13 Q Thank you. And does this correction in any way
14 impact the conclusions or recommendations
15 discussed in your rebuttal testimony?

16 A (J. Taylor) No.

17 Q So, I'll ask you the same questions that I asked
18 Ms. Carroll and Ms. Valianti, and I apologize to
19 everyone else for being repetitive.

20 Refer to Hearing Exhibit 24, which is
21 the Settlement Agreement and attachments.

22 A (J. Taylor) Yes.

23 Q Did you participate in the negotiation and
24 drafting of the Settlement Agreement that's

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 before the Commission today?

2 A (J. Taylor) I did.

3 Q Are you familiar with the terms of the Agreement?

4 A (J. Taylor) I am.

5 Q Do you believe that the Settlement Agreement, if
6 approved, is consistent with the guidelines
7 established by the Commission?

8 A (J. Taylor) Yes.

9 Q And do you believe that the Settlement Agreement,
10 if approved, is in the public interest and will
11 result in just and reasonable rates?

12 A (J. Taylor) Yes, I do.

13 MR. P. TAYLOR: I have no further
14 direct questions for the Unitil witnesses.

15 CHAIRMAN GOLDNER: Thank you. Attorney
16 Taylor, can Unitil file a corrected exhibit that
17 Mr. Taylor just went through?

18 MR. P. TAYLOR: Indeed, yes. It would
19 be a corrected page of his testimony, but we can
20 certainly get that filed.

21 CHAIRMAN GOLDNER: Thank you. Okay.
22 Very good. So, let's now move to the New
23 Hampshire Department of Energy.

24 MR. BUCKLEY: Thank you, Mr. Chairman.

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 BY MR. BUCKLEY:

2 Q Dr. Sergici, can you please state your name and
3 employer for the record?

4 A (Sergici) My name is Dr. Sanem Sergici. And I am
5 employed by the Brattle Group.

6 Q And can you please describe the nature of your
7 participation in this proceeding?

8 A (Sergici) Yes. I participated in this proceeding
9 on behalf of the New Hampshire Department of
10 Energy. I reviewed proposals, served discovery,
11 reviewed discovery response, I filed testimony, I
12 answered discovery requests, and participated in
13 technical sessions, and I took part in the
14 settlement negotiations that ultimately led to
15 the Settlement filed on Friday, January 14, 2022.

16 Q And is that Settlement Agreement the one that has
17 been premarked as "Exhibit 24"?

18 A (Sergici) Yes. That is correct.

19 Q And do you believe that approval of the
20 Settlement is in the public interest, and would
21 result in just and reasonable rates?

22 A (Sergici) Yes. I do believe that rates developed
23 consistent with that Settlement Agreement would
24 be just and reasonable, and approval of that

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 Agreement by the Commission would be in the
2 public interest.

3 Q Thank you. And, now, did you file testimony in
4 this proceeding marked as "Exhibit 8"?

5 A (Sergici) Yes, I did.

6 Q And do you have any corrections to make to this
7 testimony?

8 A (Sergici) I do have an important clarification to
9 make relating to the illustrative rates presented
10 in my testimony for the commercial customer
11 rates.

12 To develop those rates, one must make
13 several assumptions due to the very limited
14 number of separately-metered commercial class
15 charging stations currently deployed in New
16 Hampshire, and the lack of information relating
17 to the usage patterns for those charging
18 stations. And one of these important assumptions
19 is the utilization rate. My assumed utilization
20 rate to develop these rates that would lead to
21 the same amount of revenue collection as the
22 analogous Non-EV commercial class was reasonable,
23 given the information I had possessed at the
24 time. However, later I came to understand that

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1 utilization rate would be much lower than I used
2 in my testimony.

3 Q And, so, you mentioned the "utilization rate".
4 Can you just briefly explain what a "utilization
5 rate" is?

6 A (Sergici) Yes. A charging station's utilization
7 rate is a description of the level of charging,
8 measured in kilowatt-hours, that happens over a
9 given period, usually a month or a year, as a
10 percent of the overall level of charging that
11 could have occurred in that charging station,
12 based on the installed capacity of a charger or
13 chargers on a single meter.

14 So, I can give an example here. If one
15 100 kilowatt EV charger is used every day at full
16 capacity of 100 kilowatts for out of 12 out of
17 the 24 hours in a day, then that utilization rate
18 for the charger would be 50 percent.

19 Again, when determining utilization
20 rate, it's important to remember that the
21 numerator is the actual usage, actual consumption
22 of kilowatt-hours, and the denominator is the
23 maximum possible usage based on the installed
24 capacity. This contrasts with how one calculates

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1 the load factor, which is based on actual usage,
2 as the numerator, divided by the maximum possible
3 usage based on the billed peak demand, rather
4 than the installed capacity.

5 Q Okay. So, just to make sure I have this clear,
6 am I correct to say that load factor is based on
7 actual billed peak demand, while utilization rate
8 is based on installed capacity --

9 A (Sergici) Yes, it is.

10 Q -- or potential demand?

11 A (Sergici) Yes. That is correct.

12 Q And, so, you mention that the utilization rate
13 that you replied upon to develop your revenue
14 neutral illustrative rates was too high, is that
15 correct?

16 A (Sergici) This is correct. And I think it might
17 be helpful to show you what I mean exactly. So,
18 if you could please turn to Exhibit 13, Bates
19 Page 022 and 023. And, in that request, we asked
20 Eversource to identify the high demand EV
21 charging stations in its service territory. And,
22 at the time of the response, there were nine
23 known high demand draw charging customer
24 locations, representing about 47 charging ports

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1 in the Eversource service territory. And we
2 asked for the utilization rates for those
3 stations, which Eversource provided in early
4 August. And that data is also available within
5 Exhibit 13, at Bates Page 7-10.

6 And, in that data set, the Company's
7 utilization rate appears all the way to the
8 right in the column labeled "Utilization
9 percentage (%)". I want to take a moment to make
10 sure everyone is caught up with the exhibits.

11 And, then, if you look at that
12 "Utilization %" column, it appears that the
13 utilization rates reported in that column are
14 somewhere in between 5 and 20 percent, with the
15 average being about 15 percent.

16 However, after further inquiry during a
17 subsequent technical session, it came to the
18 attention of the parties that the utilization
19 percentage reported in this column was actually
20 based on the billed demand, again, instead of
21 installed capacity of the chargers at the
22 station, and therefore would be more accurately
23 represented as a load factor, instead of the
24 utilization rate. And that distinction was later

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1 identified and corrected in a follow-up data
2 request, which is available at Exhibit 13, Bates
3 Page 034, and then with supporting information
4 detailed at Bates 36-39.

5 And then, I'm just going to pause a
6 moment here to make sure everybody has access to
7 those exhibits.

8 And, on those sheets, again, Bates
9 36-39, it contains two percentage columns showing
10 the billed demand utilization and installed
11 capacity utilization, and that it is clear that
12 the separately-metered electric vehicle charging
13 customers generally had an installed capacity
14 utilization between 1 to 5 percent range. So,
15 essentially much lower than my original
16 assumption of 15 percent, which I originally
17 interpreted to be the installed capacity
18 utilization rate, but then later discovered to be
19 a load factor.

20 Q And, so, what impact does the use of the 15
21 percent utilization rate assumption instead of
22 the arguably more accurate 1 to 5 percent
23 utilization rate assumption have on the
24 illustrative rates described in your testimony?

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1 A (Sergici) Sure. So, you said "illustrative", but
2 I want to highlight one more time and iterate one
3 more time that all the rates that I developed in
4 my testimony are illustrative only. I am not the
5 utility analyst overseeing the revenue
6 requirements and the rate design for a given
7 utility, nor I am the responsible party or person
8 for the tariff filing that will follow a
9 Commission order on this Settlement.

10 Having said that, throughout my
11 engagements, I have spent a fair amount of time
12 researching the transmission, distribution, and
13 supply revenues applicable to each utility rate
14 class based on various data responses and
15 utilities' own testimonies.

16 Then, I allocated those revenues across
17 time periods through methods that would send
18 economically efficient price signals, while
19 limiting the cost shifts and subsidies to the new
20 customer group at the expense of non-EV customer
21 classes. But that implied that the illustrative
22 rates in my testimony were only recovering
23 similar revenues to those that would be recovered
24 under the analogous rate class, under this

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1 original 15 percent utilization rate assumption.
2 Given the reality that most charging stations in
3 New Hampshire are nowhere near that utilization
4 rate, and they are much lower, in the 1 to 5
5 percent rate, that these illustrative rates in my
6 original -- in my testimony would under-recover
7 costs for these lower utilization stations.

8 However, with the exception of this
9 utilization rate assumption, all the
10 recommendations and rate development methods
11 proposed in my testimony remain economically
12 sound.

13 Q And, so, how might one remedy this change in the
14 assumption when designing EV TOU rates?

15 A (Sergici) Sure. As I just mentioned, due to the
16 15 percent utilization rate assumption, the
17 illustrative volumetric rates would not be
18 recovering sufficient revenues for these lower
19 utilization stations. As it happens, however,
20 that this situation can be remedied by leaving
21 all other assumptions in rates in my modeling the
22 same, and also leaving the resulting volumetric
23 time-varying rates the same, but also maintaining
24 a demand charge at half of the demand charge rate

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1 of the comparable commercial customer class. And
2 this is, in fact, the rate design adopted for
3 commercial customers within the Settlement
4 Agreement.

5 Q And, given that clarification and acknowledgment,
6 do you adopt that testimony as representative of
7 your position on the matters addressed therein at
8 the time of filing?

9 A (Sergici) Yes.

10 Q Thank you. Now, moving to the Settlement itself.
11 And I'm going to start with some table setting
12 and framing of the Settlement before the
13 Commission.

14 The Settlement before the Commission
15 today, labeled as "Exhibit 26" [24?], adopts
16 time-of-use rates for several classes of
17 separately-metered vehicle charging customers --
18 electric vehicle charging customers in the Unitil
19 and Liberty territories. They're not the
20 Eversource territory, is that correct?

21 A (Sergici) Yes.

22 Q And the Settling Parties include the two
23 aforementioned utilities, the Department of
24 Energy, the Consumer Advocate, Department of

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1 Environmental Services, but not Clean Energy New
2 Hampshire, Conservation Law Foundation, and City
3 of Lebanon, is that correct?

4 A (Sergici) Yes. That is correct.

5 Q Now, turning to time-of-use rates generally. Can
6 you tell me just briefly what is the value of
7 electric utility time-of-use rate offerings,
8 generally?

9 A (Sergici) Sure. Time-of-use rates allow
10 customers to receive a price signal based on the
11 actual cost of providing service during a given
12 time period. And these price signals give
13 customers the opportunity to respond to these
14 signals by shifting their load to times when it
15 causes lower costs for the system, and, as a
16 result, benefits all customers.

17 Historically, most electric utility
18 rates include some combination of a customer
19 charge, a flat volumetric kilowatt-hour charge,
20 and, for commercial classes, in addition to these
21 two, a kilowatt-based demand charge. However, I
22 should note that this trend has been changing
23 rapidly recently, as several jurisdictions have
24 started to make time-of-use rates their default

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1 rates for the residential customers, such as
2 California utilities and Consumers Energy in
3 Michigan, and there's some movement towards
4 implementing time-of-use rates, both as an opt-in
5 and as well as an opt-out rate offering.

6 Q And, so, this question is for Dr. Sergici, but
7 it's possible that Ms. Tebbetts might want to
8 weigh in, too. But do the New Hampshire electric
9 distribution utilities currently offer
10 time-of-use rates?

11 A (Sergici) Yes. My understanding is that
12 Eversource and Liberty Utilities currently offer
13 time-of-use rates.

14 Eversource offers R-OTOD, which has a
15 13-hour long peak period and a customer charge
16 twice that of their regular residential customer
17 rate. And there's about 50 customers on this
18 rate out of Eversource's 400,000 residential
19 customers.

20 Eversource also offers a G-OTOD rate to
21 commercial customers, again, using the same
22 13-hour long peak period, and that it assesses
23 demand charges only during that period. And
24 approximately 150 of Eversource's 80,000

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1 commercial sector customers are on this voluntary
2 rate.

3 And, as I understand it, all of this
4 information was summarized in the Staff
5 Recommendation that opened the Docket Number
6 20-004, an investigation that preceded this
7 proceeding.

8 Q And, so, you mentioned that Liberty Utilities
9 currently offers time-of-use rates. I'm
10 wondering if Ms. Tebbetts may care to supplement
11 that response a bit?

12 A (Tebbetts) Sure. So, for right now, our
13 customers at Liberty, electric customers, have
14 the opportunity to take -- we have an EV
15 residential charging rate. And that rate is a
16 five-part rate, meaning that, on the weekends,
17 they have an on-peak and off-peak period, and,
18 during the week, they have three periods:
19 Critical peak, mid-peak, and off-peak. This
20 offering is available to our residential
21 customers only. And it is a separately-metered
22 offering.

23 We do have customers in the process of
24 getting on that rate. But, as I think I've

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1 mentioned in other hearings, we've had difficulty
2 getting the meters. And, so, our customers are
3 waiting. But they are -- we do have customers
4 enrolled and waiting to get on that rate.

5 The other time-of-use rate we offer is
6 only to a subset of customers who are
7 participating in our Battery Storage Pilot. And
8 those customers have that exact same rate. And
9 the only difference is that the customer charge
10 for the Battery Storage Pilot is the same as our
11 Rate D rate. And the customers who are taking
12 the EV charging rate have a lower customer
13 charge.

14 And the other rate we do offer is Rate
15 D-10, which is also a time-of-use rate. And it
16 only is time-of-use for the distribution
17 component. And it only is for a subset of hours
18 during the day, during the week, I believe it was
19 9:00 a.m. to 9:00 p.m. So, it's a 12-hour
20 distribution rate only.

21 Q And, Ms. Tebbetts, is it fair to say that the
22 Residential Time-of-Use -- Electric Vehicle
23 Time-of-Use rate described in the Settlement for
24 Unutil, that rate has a very similar structure to

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 the Liberty Utilities' Residential Electric
2 Vehicle Time-of-Use rate?

3 A (Tebbetts) Yes.

4 Q Thank you. Now, this is for the panel more
5 broadly, but I think that maybe Dr. Sergici might
6 answer. Why would the Commission offer a
7 time-varying rate for separately-metered electric
8 vehicles within an existing residential dwelling?

9 A (Sergici) So, in its order closing the
10 investigation that preceded this proceeding, the
11 Commission found that separately-metered EV TOU
12 rates would be appropriate. And I agree with
13 that assessment. And it is simply because EV TOU
14 rates will lead to a more efficient charging
15 behavior and a more efficient utilization of the
16 grid. So that, essentially, these rates would
17 provide the right price signal to these
18 customers, so that they could take this very
19 flexible load, and then charge it during the
20 times that it doesn't cost too much for the grid
21 to support this charging behavior.

22 And, as I mentioned, electric vehicles
23 are uniquely flexible. And, as the way our grid
24 evolves, we will need to harness all the flexible

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1 load potential that is available to us. And
2 these separately-metered EV rates -- TOU rates
3 would be a really effective way of harnessing
4 that flexibility potential.

5 I also want to highlight that there is
6 a direct analogy to be drawn to controllable
7 water heating previously offered by most electric
8 distribution utilities. Again, that's another
9 uniquely flexible load, that was also separately-
10 metered and offered as a separate rate, apart
11 from the residential rate within which the
12 dwelling existed.

13 Q And, so, we've heard some discussion of both the
14 Unitil residential rate and the Liberty
15 residential rate for separately-metered electric
16 vehicles. I'm wondering if you can just observe
17 for the record the similarities between those two
18 rates?

19 A (Sergici) Sure. So, those two rates are similar,
20 in that they follow the guidelines set forth by
21 the Commission Order Number 26,394. And those
22 guidelines directed that the rates would be based
23 on cost causation; that they would incorporate
24 time-varying energy supply, transmission, and

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1 distribution components; that those rates would
2 have three periods, namely off-peak, mid-peak,
3 and peak; that those rates would be seasonably
4 differentiated; and that they would have an
5 average price differential between off-peak and
6 peak of periods of no less than a three-to-one
7 ratio; and that the peak window in these rates
8 would be no longer than five periods [hours?] in
9 duration.

10 And both Liberty and Unitil's
11 separately-metered EV TOU rates are consistent
12 with that directive from the Commission.

13 Q And, so, you mentioned the ratios that are used
14 for peak to off-peak. I'm wondering if you, or
15 maybe Mr. Taylor, can speak a bit to how those
16 ratios are developed for transmission rates,
17 generation rates, and distribution rates under
18 the proposed Settlement?

19 A (Sergici) I can give my overview, and then maybe
20 Mr. Taylor wants to supplement later.

21 A (J. Taylor) Yes, that's fine. Go ahead.

22 A (Sergici) Sure. So, essentially, we followed, in
23 order to develop the illustrative rates in my
24 testimony, we followed a different approach to

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1 allocate the costs to time periods for each of
2 the generation, transmission, and distribution
3 elements of the rate.

4 Essentially, for generation components,
5 we take the annual energy supply revenue
6 requirements, found out the capacity market
7 FCM-related portion of that revenue requirement
8 and allocated it to the summer peak periods,
9 because it's entirely a summer peak driven
10 expense.

11 And then, for the rest, non-FCM related
12 generation supply revenue requirements, we
13 allocated to the relevant time periods determined
14 in our rate design, based on the average weighted
15 marginal cost of generation, and created price
16 signals by doing that allocation, and then trued
17 it up to the actual embedded cost revenue
18 requirement for the supply. So, that's the
19 generation piece.

20 For the transmission piece, the
21 transmission expenses or transmission revenue
22 requirement is driven by the coincident --
23 monthly coincident peak imposed by the utilities.
24 So, we essentially allocated the transmission

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1 revenue requirement to summer and winter seasons
2 initially. And then, we calculated the
3 probability of the monthly peak occurring in each
4 of the peak and off-peak windows by looking at
5 the ISO New England monthly peak occurrence
6 between 2010 and 2020, and allocated those
7 expenses, again, based on the likelihood of a
8 peak falling into a summer peak, summer off-peak,
9 summer mid-peak, and then similarly a winter
10 peak, winter off-peak, and winter mid-peak. So,
11 that's how the transmission costs were allocated
12 and then later trued up.

13 And, then, last, but not least, for the
14 distribution revenue requirement, we started with
15 the hourly system load profile, and we wanted to
16 allocate the distribution revenue requirement
17 more heavily towards those hours that had a much
18 higher load requirement, on the basis that the
19 higher demand is essentially responsible for
20 driving the distribution system cost
21 requirements. And using our system load profile,
22 taking the square of the load in each hour and
23 creating a percentage allocation factor based on
24 each hour's allocation, we distributed the

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1 distribution revenue requirement to each of the
2 hours, and then grouped them based on our
3 predefined seasonal and time period definitions.

4 So, it's at a very high level we went
5 about doing this allocation. But I want to
6 highlight that the premise of this method, in its
7 entirety, was to adhere to the cost causation
8 principal. So, we determined, again, what was
9 the main driver of the cost causation, and
10 crafted our allocation approach based on that
11 cost causation, and adhering to the marginal cost
12 principles, because we understand that this
13 Commission is really focused on reflecting
14 marginal cost price signals in the rates. So,
15 that's how we approached DOE's illustrative rate
16 designs.

17 Q And, so, for my non-analyst brain here, the
18 overarching goal appears to be that these rates
19 are based on cost causation, with assignment of
20 costs to those hours when usage is highest?

21 A (Sergici) That is correct. And this is essential
22 to ensure that the recovery of costs are better
23 linked to the time periods during which those
24 system assets are utilized.

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 Q Mr. Taylor, anything to add?

2 A (J. Taylor) Yes. I would just add that, you
3 know, just for clarification, for purposes of the
4 Settlement, the distribution, you know, we're
5 just doing the process for half of the revenues
6 not recovered through the customer charge. So,
7 it's not the full distribution revenues that are
8 recovered through a time-varying rate. It's just
9 half of the commercial customers that have a
10 demand charge.

11 So, I don't know if you're going there,
12 Brian. But that would be my only clarification.

13 Q Very helpful, Mr. Taylor.

14 A (Tebbetts) I just would like to add something as
15 well.

16 So, when we talk about the recovery of
17 costs that are linked to time periods, for
18 Liberty, there is a nuance. And I just want to
19 make sure we're clear on that. Our rate is going
20 to start at 3:00 p.m., for critical peak hours,
21 and go until 8:00 p.m. That doesn't align with
22 our system peak at Liberty. Our system peak is
23 usually between 2:00 p.m. and 3:00 p.m.

24 But, when looking at data, and looking

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1 at when customers may charge, especially in the
2 summer, we don't want to have a six-hour period,
3 we want to have a five-hour period. And, so,
4 what we've done is shifted that period from,
5 instead of 2:00 p.m. to 7:00 p.m., of 3:00 p.m.
6 to 8:00 p.m. And we're going to look at that
7 data and see how that added hour in the evening
8 is affected, and are customers charging?

9 Because we think it's important that we
10 meet the New England -- ISO New England peak, but
11 we don't want off-peak rates to start at 7:00
12 p.m. That's just -- we believe it's too early,
13 especially in the summertime, when folks are
14 out-and-about, and they may be charging on their
15 way home from things that they're doing in the
16 evening.

17 So, I just want to make it clear that,
18 yes, we are looking at this to assign costs to
19 those hours when usage is highest, but we also
20 believe that customers will not be charging
21 necessarily from 2:00 to 3:00 p.m. So, we don't
22 think that there will be that impact on the
23 system. But, as this rate, assuming it's
24 approved, develops, and we get more data from

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1 customers who are charging, we can further make
2 that data available to review, and determine if
3 that -- those 3:00 p.m. to 8:00 p.m. hours are
4 appropriate.

5 I just want to make sure we got that on
6 the record.

7 Q Thank you. That's very helpful, Ms. Tebbetts.

8 So, now, I want to move to the section
9 of the Settlement Agreement that is labeled
10 "Section 10. Rate Development Method, Demand
11 Charge, and Revenue Neutrality". And that can be
12 found at Bates -- Exhibit 24, Bates Page 007.

13 And I can just briefly observe, there
14 is a numbering issue in the Settlement Agreement.
15 The Section B, on Page 6, the numbering does not
16 restart at "1" below "B". So, it starts at "5".
17 Just wanted to note that for folks who might be
18 still searching through the Settlement for the
19 section we're discussing now.

20 So, on that page, and in that section,
21 can you just briefly talk to me, Dr. Sergici,
22 about what is labeled as "Section 10. Rate
23 Development Method, Demand Charge, and Revenue
24 Neutrality"?

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1 A (Sergici) Sure. So, maybe I can start with
2 briefly summarizing the merits of demand charges
3 and, again, their role in the customer rate
4 structure. So, as we previously mentioned, the
5 demand charge is a rate component that is very
6 common in the commercial sector distribution
7 rates. And this is because of a direct line of
8 cost causation between customer's peak loading
9 and the need for capacity-related improvements
10 and investments on the distribution system.

11 So, even though this is a typical
12 rate -- demand charges are a typical rate design
13 element for commercial customers, the Commission
14 simply expressed its expectation that utilities
15 may consider demand charge alternatives for high
16 demand draw charging stations.

17 Q And can you tell me what portion of the overall
18 commercial customer revenues, that is
19 transmission, distribution, generation, demand
20 charges would represent in the proposed
21 Settlement rates?

22 A (Sergici) Sure. So, demand charges generally
23 represent a significant portion of the overall
24 distribution revenues that the utilities collect

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1 from a distribution customer, but a relatively
2 small portion of the customer's overall bill,
3 again, when including generation and transmission
4 expenses. And, in particular, though, a rather
5 small portion of the bill that would result from
6 the rates proposed in the Settlement Agreement.
7 So, it would, obviously, vary by utility, but,
8 under the Settlement, the demand charge is
9 roughly, you know, 20 percent, to maybe 30
10 percent in some cases, of the overall revenue
11 requirement the utility would need to collect
12 from an EV charging customer.

13 Q And, just for some context here, what percent of
14 distribution revenue is collected from the demand
15 charge for Unitil's G1 class, for example?

16 A (Sergici) My recollection is that Unitil's demand
17 charge represents more than 90 percent of its
18 distribution revenues from the G1 class. And
19 that Liberty's demand charge represents 85
20 percent of distribution revenues.

21 Q And, so, the method for rate development outlined
22 in this Settlement provides for a 50 percent
23 demand charge, and that is, in fact, designed to
24 limit cost shifts associated with the rate

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1 methodology, is that correct?

2 A (Sergici) That is correct.

3 Q And maybe at this time it would be helpful to
4 pull up Exhibit 24, and turn to Bates Page 020
5 through 021. I'm wondering if you could just
6 briefly highlight what that revenue neutrality
7 analysis provides for?

8 A (Sergici) Sure. So, as we indicated previously,
9 so, our objective was here to design a rate that
10 maintains the price signals embedded in the class
11 load and cost allocation. Because, essentially,
12 we didn't have data on the separately-metered
13 commercial charging stations in a cost of service
14 construct. So, we had to rely on this commercial
15 class cost information, cost of service
16 information to design these rates.

17 So, what this means is that, when we
18 are creating this alternative rate, we still
19 needed to pay attention to, like you said, one,
20 maintaining price signals, limiting the extent of
21 the cost shifts that might happen between this
22 new rate and customers who are taking this rate,
23 as well as the other customers.

24 So, as you can see on Bates 020-021,

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1 our analysis of what a customer bill would be
2 under the original time-of-use and 50 percent
3 demand charge, versus the standard commercial
4 customer offering.

5 And then, again, based on those pages,
6 at 5 percent utilization rate, labeled as
7 "Facility 1", the rates collect the same amount
8 of revenues as the original class rate. And I
9 have to note that this analysis does not assume
10 any load shifting. That's essentially how one
11 ensures the revenue neutrality before any load
12 shifting happens. The goal is to make sure that
13 the same amount of revenues are collected.

14 And, then, I think that was for Unitil.
15 This analysis was also conducted for one of the
16 Liberty rates at Bates 023.

17 But the idea is that the original TOU
18 and half demand charge is recovering the same
19 amount of revenues as the standard commercial
20 customer offering, roughly.

21 Q Thank you. And, now, I think I'm going to turn
22 to the section of the Settlement entitled "Other
23 Matters". And that would be at Bates Page 008.
24 And just I want to briefly touch on the

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1 "Marketing" section. And this question is for
2 whoever on the panel might feel most comfortable
3 answering, and maybe it's actually directed to
4 Ms. Tebbetts.

5 Ms. Tebbetts, you had mentioned that
6 there's -- thus far there's been somewhat limited
7 participation in the Residential EV TOU rate
8 offering that Liberty has or provides, and that
9 was because of meter issues, is that correct?

10 A (Tebbetts) Yes. Yes. So, the difficulty of
11 getting these meters. We have done some
12 marketing, social media marketing. And, while
13 we're excited that customers are asking about it,
14 we aren't able to get a meter to serve them. So,
15 to market something that we can't offer them
16 today isn't really fair to the customer. Though,
17 we're excited that customers are excited that
18 we're offering the rate.

19 Q And you mention there has been some degree of
20 customer interest thus far?

21 A (Tebbetts) Yes. We have, last I knew, three or
22 five customers who are waiting to take the rate.
23 They -- a couple of them need a few upgrades to
24 serve their car that they're going to be plugging

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1 in, such as an upgraded transformer. But, then,
2 the others are just waiting for a meter.

3 Q And you mentioned a moment ago that thus far the
4 marketing that Liberty has done has been social
5 media based largely?

6 A (Tebbetts) Social media based, it's on our
7 website. And, on social media, we do direct them
8 to our website, which explains the time-of-use
9 rates, and also the benefits of plugging in a
10 car.

11 Q And, so, there's this commitment in the
12 Settlement Agreement, Section C.2, around
13 "targeted marketing opportunities". Do you think
14 it's possible that those -- pursuing those
15 targeted marketing opportunities might draw even
16 more customer interest than the social media
17 marketing opportunities thus far?

18 A (Tebbetts) I do. I do. Again, we are hoping
19 that we can order a bulk of meters, in the event
20 that customers really do want to take this rate.
21 And, hopefully, we'll be able to get all those
22 meters and get them out to deploy to customers.
23 And it's just merely a supply chain issue right
24 now with Itron.

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1 But, yes. We do believe that there is
2 great opportunity to do more targeted mailings,
3 and either be, you know, through the mail or more
4 social media. We are definitely looking forward
5 to more marketing.

6 Q Thank you, Ms. Tebbetts. And, now, I want to
7 move ahead to the section entitled "Update Rate
8 and Class Revenue Requirement to Reflect Actual
9 Cost of Service". That is on Bates Page 009 of
10 the Settlement Agreement, Exhibit 24. And I
11 think this question is for Dr. Sergici.

12 Can you tell me just a little bit more
13 about this section? It's fairly brief, but I
14 think maybe it could use just a bit of
15 explanation.

16 A (Sergici) Yes. Yes, this section is actually
17 extremely important, and really is the
18 underpinning of offering in this
19 separately-metered rate. So, as I previously
20 mentioned, we use the best available information
21 and data to design these rates. But, again,
22 given that the specific data for these customer
23 charging stations as a separate class did not
24 exist at this time, the choices were to just wait

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1 until the data becomes available or rely on the
2 available cost of service data from the class as
3 a whole and use those price signals to design
4 this rate, with the expectation that these rates
5 would be modified as more data becomes available.

6 And, more specifically, that these
7 rates should be treated as a separate customer
8 class for the purpose of cost of service studies
9 developed in each utility's next rate case.
10 Again, this wasn't -- this wasn't possible at
11 this time. But we approached this with the
12 expectation that next time there's a rate case
13 that the utilities will take a hard look. And,
14 to the extent that there are sufficient number of
15 customers, charging customers, that they would be
16 represented as a separate class for the cost of
17 service purposes.

18 And this is important, and because
19 distribution revenue responsibility is allocated
20 to each customer class within the cost of service
21 studies, based on a number of factors. And one
22 of the important factors is that class's
23 contribution to system peak, or the peak
24 coincidence. So, there are, you know, many

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1 reasons for why this separately-metered high
2 demand draw customer class could have a different
3 peak, impact peak coincidence, compared to the
4 current commercial class that they are embedded
5 in. And that, through these rates, our objective
6 is to send the right price signals. And, then,
7 if you are sending the right price signals, these
8 customers hopefully will respond to these price
9 signals. And, then, over time, their load shape
10 will have a low contribution to peak, because,
11 again, they're responding to signals by shifting
12 their load from peak to off-peak periods,
13 reducing their contribution to peak. And, then,
14 this would mean less system costs to be incurred,
15 and then the cost of service studies would and
16 should reflect this reality when sufficient data
17 was compiled, and that these customer classes
18 would be assigned a more accurate amount of costs
19 under these developments.

20 Q That's very helpful, Dr. Sergici. Now, I want to
21 move to the next section of the Settlement
22 Agreement entitled "Alternative Metering
23 Feasibility Assessment". Can you tell me just a
24 little bit more about this commitment, and maybe

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1 provide some background on it?

2 A (Sergici) Sure. As part of the Commission's
3 order preceding this proceeding, it directed
4 Staff and the parties to further develop the
5 concept of alternative metering feasibility
6 assessment. So, this is the idea that metering
7 embedded in electric vehicle chargers, or the
8 vehicle telemetry itself, could be relied upon,
9 instead of the additional Company-owned meter to
10 separately meter the EVs.

11 And there are examples of this being
12 done in various places throughout the country,
13 including Baltimore Gas & Electric, and I believe
14 Xcel, in Minnesota. And consistent with the
15 Commission order, and agreed upon procedural
16 schedules in this proceeding, each of the
17 utilities developed outlines of what an
18 assessment would look like.

19 For example, Eversource's outline is
20 provided in Exhibit 12, Bates Page 020-021. And,
21 although no utility actually filed a full
22 feasibility assessment at this time, Unitil has,
23 in fact, proposed, as part of its rate case, a
24 pilot to test the feasibility of using embedded

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1 metering. And, as part of the Settlement, the
2 Parties have agreed that Unitil will report on
3 the results of their pilot, and that the Parties
4 will consider expansion of the pilot, including
5 potentially to Liberty Utilities.

6 Q And does this Settlement preclude other electric
7 vehicle rate offerings, for example, if the
8 Commission were to direct that the utilities
9 differentiate between public charging rates,
10 fleet charging rates, or some other type of
11 electric vehicle rate?

12 A (Sergici) No, it does not.

13 Q And these separately-metered electric vehicle
14 rates are, in fact, optional for a customer, is
15 that correct?

16 A (Sergici) That is correct. Those are voluntary
17 rates. The customers may very well choose to
18 stay on their existing rate, or, if they think
19 that they could benefit from these rates by
20 shifting their usage from peak to off-peak rates,
21 they might opt-in to these rates.

22 What's happening here is that utilities
23 are giving customers additional options, in case
24 they choose to be on these rates.

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1 Q And, now, I just want to preemptively discuss
2 some -- a few critiques that might be offered
3 about the rates and approaches defined in the
4 Settlement.

5 The first one is, what's your response
6 to an argument that "the Settlement does not go
7 far enough to facilitate deployment of electric
8 vehicle charging stations", specifically with
9 respect to the treatment of demand charges?

10 A (Sergici) So, my recollection is that no one in
11 this proceeding has proved that the current
12 deployments of commercial sector charging is
13 inadequate, insufficient at this time. In fact,
14 as we have seen earlier, the utilization rate for
15 high demand draw charging stations in New
16 Hampshire remains quite low, at around 1 to 5
17 percent. A higher utilization rate would tend to
18 indicate the need for further deployment. But,
19 again, the utilization rates remain quite low in
20 New Hampshire.

21 And my take on this is that, if New
22 Hampshire really is interested in accelerating
23 transportation electrification, there are other
24 ways and approaches that don't rely on electric

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1 utility rates that favor one customer class to
2 the detriment of other customer classes or other
3 customers.

4 So, the rates are a great tool in order
5 to achieve multiple objectives. But their utmost
6 responsibility is to recover costs in an
7 equitable and efficient manner. So, once we
8 start to assign multiple missions on the rates,
9 such as advancing the adoption of one technology
10 versus the other, all of a sudden rates start to
11 not deliver on their primary objective, creating
12 all kinds of issues around cost shifts, inequity,
13 and whatnot.

14 So, as I mentioned, again, if New
15 Hampshire decides that acceleration of
16 transportation electrification is one of the
17 state goals, there are other ways to do that,
18 such as participation in the zero-emission
19 vehicle compact, or, you know, if utilities
20 expanding their make-ready and EV car and rebates
21 program, so that the demand in the market will be
22 accelerated, and then the demand, in turn, can
23 manifest itself in the form of higher utilization
24 on these charging stations.

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1 So, I guess the bottom line is that my
2 preference is not to use rates to choose one
3 technology over the other, but rely on other
4 methods to facilitate the deployment of charging
5 stations, if New Hampshire chooses that to be one
6 of its state goals.

7 MR. BUCKLEY: Thank you, Dr. Sergici.
8 Actually, the Department of Energy has no further
9 questions for the panel.

10 CHAIRMAN GOLDNER: Okay. Thank you,
11 Mr. Buckley. Would you be able to have your
12 witness provide amended testimony? During the
13 first part, there were some corrections.

14 MR. BUCKLEY: That is maybe a question
15 that I would turn to my witness. To the extent
16 that a revised utilization rate could be inputted
17 into the -- input into the testimony, would there
18 be expansive reverberations requiring,
19 essentially, a rewrite of the testimony. Could
20 you tell me how that would impact the testimony?

21 WITNESS SERGICI: No, I don't think so.
22 As I, essentially, I -- I indicated earlier this
23 modification doesn't really change the original
24 rates that we designed. It just adds an

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1 additional rate component. So, this could very
2 well be done as an addendum, in a couple of
3 pages, explaining the basis, and perhaps
4 providing some details about the additional
5 revenue collection that becomes possible by
6 introducing this 50 percent demand charge.

7 So, no. No, Brian. I don't think it
8 would be a big effort.

9 MR. BUCKLEY: Okay. So, we can provide
10 that.

11 CHAIRMAN GOLDNER: Thank you.

12 MR. BUCKLEY: And that would be
13 "Exhibit 26", by my count now, is that correct?

14 CHAIRMAN GOLDNER: You can -- I think
15 you can amend your current exhibit. I don't know
16 that you need to add one. Would that be
17 acceptable?

18 MR. BUCKLEY: Yes. That's acceptable.
19 Or, we could take it as a record request as well,
20 if that's possible?

21 CHAIRMAN GOLDNER: Okay. Okay, we'll
22 take that offline and sort through that at the
23 break. Okay. Very good. But I appreciate your
24 willingness to update the exhibit.

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1 What I'd like to do before a break, if
2 acceptable to everyone, is to finish the
3 examination of the witnesses by the signing
4 parties, and then move to cross-examination after
5 a short break. Is that okay with everyone?

6 Which would mean that the Office of
7 Consumer Advocate and the New Hampshire
8 Department of Environmental Services would have
9 the opportunity to examine the witnesses before
10 the break.

11 So, perhaps we move to the Office of
12 Consumer Advocate?

13 MS. DESMET: I have nothing additional
14 to add.

15 CHAIRMAN GOLDNER: Well, we might get
16 to a break more quickly then.

17 Does the New Hampshire Department of
18 Environmental Services have anything? I see Ms.
19 Ohler on the line, but don't see her picture.

20 MS. OHLER: Sorry. No. The Department
21 of Environmental Services does not have
22 anything --

23 *[Court reporter interruption.]*

24 CHAIRMAN GOLDNER: Can you repeat that

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1 please, Ms. Ohler? Ms. Ohler, we couldn't hear
2 you.

3 MS. OHLER: I'm sorry. Let me take my
4 mask off.

5 CHAIRMAN GOLDNER: Okay.

6 MS. OHLER: This is Rebecca Ohler, with
7 the Department of Environmental Services, and we
8 have nothing to add.

9 CHAIRMAN GOLDNER: Thank you. Okay.
10 Let's take a ten-minute recess, coming back at
11 10:45, to begin the cross-examination of the
12 witnesses.

13 Thank you. Off the record.

14 *(Recess taken at 10:36 a.m., and the*
15 *hearing resumed at 10:50 a.m.)*

16 CHAIRMAN GOLDNER: Okay. We'll go to
17 cross-examination of the Settlement witnesses.
18 And we'll begin with Clean Energy New Hampshire?

19 MR. SKOGLUND: Clean Energy New
20 Hampshire has no comments -- or, questions at
21 this time.

22 CHAIRMAN GOLDNER: Thank you. We'll
23 move to ChargePoint?

24 MR. VIJAYKAR: Thank you, Commissioner.

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1 ChargePoint has no questions of the Settlement
2 panel.

3 CHAIRMAN GOLDNER: Okay. Thank you.
4 The Conservation Law Foundation?

5 MR. KRAKOFF: Thank you, Chairman.
6 Conservation Law Foundation does have questions
7 for cross-examination.

8 And I would like to start with Mr. John
9 Taylor, for Unitil.

10 **CROSS-EXAMINATION**

11 BY MR. KRAKOFF:

12 Q Now, Mr. Taylor, isn't it -- you would
13 acknowledge that fast charge stations, public
14 charge stations, can result in a high peak demand
15 due to elevated power levels from quick charging,
16 correct?

17 A (J. Taylor) Yes. Their peak demand requirements
18 can be high, but so can other -- I don't know
19 that that -- what relevant to what, when you say
20 the word "high"?

21 Q Well, you know, I think you stated that in one of
22 your testimonies. So, as Exhibit 18, which was
23 your response -- was an attachment to Unitil's
24 2-6, and if you look at Bates 006. And, for

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1 context, this is your testimony that you filed in
2 a Massachusetts rate case that's considering
3 demand charge alternatives, correct?

4 A (J. Taylor) Okay. I don't have that in front of
5 me. But, yes. In general, you know, DCFC, or
6 high demand draw fast charging stations, can have
7 higher demands than, you know, like a Level 2 or
8 smaller ports.

9 Q I mean, and, you know, just very briefly, can you
10 just provide an example of, you know, say you
11 have a DCFC charger with two cars charging
12 simultaneously, two EVs charging simultaneously?
13 How much power, you know, on average, would that
14 use? Or, could you just provide an estimate?

15 A (J. Taylor) Assuming that each port is 100 kW,
16 and you had two ports that were charging
17 simultaneously, then the demand draw would be
18 200 kW.

19 Q Okay. Now, if a charging station has a low
20 utilization rate, which I think you defined in
21 one of your testimonies as the time during the
22 month when EV station owners are charging at a
23 station, the demand charge portion of a bill can
24 be substantially higher than the actual energy

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1 costs. Would you agree with that?

2 A (J. Taylor) Yes. I think, as we discussed
3 earlier, it depends on the particular rates that
4 are in place, and if we're talking about
5 distribution only, versus distribution,
6 transmission, and generation. But, you know,
7 depending on the particular circumstances, the
8 rates and the jurisdiction, there can be, you
9 know, a high portion of the distribution bill
10 that's related to the demand charge.

11 Q And, you know, it obviously depends, but the
12 demand charge portion of a bill, in your words,
13 can be substantially higher than the actual
14 energy costs. And, if you want, I can point that
15 out in your testimony, but I don't think that's a
16 controversial statement. But let me know if you
17 would you like me to point that out from your
18 prefiled testimony.

19 A (J. Taylor) Right. For distribution cost
20 recovery in the State of New Hampshire, demand
21 charges can be a substantial portion of the bill.
22 I think Dr. Sergici mentioned that it's close to
23 90 percent for Unitil's class, which, you know, I
24 agree with, for G2, and G1, I think it's closer

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1 to about 78 percent.

2 So, for an average customer, that would
3 be the percentage that would be, you know, within
4 their bill.

5 Q Okay. And I'm going to ask you about something
6 you stated in Exhibit 18. Are you able to find
7 that exhibit at this point in time or, you know,
8 would you like me to just read what's stated
9 there?

10 A (J. Taylor) Yes. What is Exhibit 18?

11 Q So, yes, Exhibit 18 is what I just asked you
12 about, it was filed by Unitil as an attachment to
13 your response to DOE 2-6, which I --

14 A (J. Taylor) 2-6.

15 Q -- which I have attached here as -- or, that I
16 provide as "Exhibit 17". So, Exhibit 17 is
17 Unitil's response to Staff -- I think it was
18 "Staff" at the time, Staff 2-6. And, then, you
19 provided an attachment in response to that.

20 A (J. Taylor) Oh. That's the mentioned
21 Massachusetts testimony that was filed. Yes.

22 Q That's correct. Yes.

23 A (J. Taylor) Yes.

24 Q So, turning to Exhibit 18, Bates 006, Lines 11

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1 through 14, is it true that you stated that "For
2 EV chargers, demand charges can be initially
3 challenging because EV equipment is likely to be
4 used sporadically to start but still see high
5 power demands, resulting in a final bill heavily
6 tilted towards the demand charges." You stated
7 that, correct?

8 A (J. Taylor) Correct.

9 Q So, you know, in other words, you would agree
10 that, for low utilization rate charging stations,
11 demand charges can represent a significant
12 portion of the monthly bill?

13 A (J. Taylor) Yes. I mean, the way I would word
14 that is that, for stations with low utilization,
15 resulting in low load factors, the distribution
16 portion of their bill that's recovering
17 distribution revenue requirement, the demand
18 charges can be a large portion of that bill.

19 Q Okay. And, also, you stated, this is also that
20 same exhibit, same page, Bates 006, Lines 14
21 through 16. This is the next sentence in your
22 testimony there. You stated that "Such a rate
23 structure", with the demand charge, "may make the
24 economics of EV charging stations challenging,

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1 particularly during the early days of charger
2 installation where EV market penetration is still
3 relatively low." You stated that, correct?

4 A (J. Taylor) Correct.

5 Q So, would it be fair to say that you would agree
6 that, for early stage -- early stage public
7 charging stations, the demand charge component of
8 bills can be a large portion of the total bill,
9 and could even be cost-prohibitive in the
10 development of public charging stations?

11 A (J. Taylor) I think it all depends. Yes, the
12 demand charges can be a high portion of the bill
13 for those. You know, for the conclusion that
14 they're "cost-prohibitive", I'm not sure I'd go
15 that far. You know, it does impact the
16 economics. But, you know, there is a lot of
17 other make-ready infrastructure programs.
18 There's a new federal infrastructure bill that
19 has allocated seven and a half billion dollars to
20 the development of EV infrastructure charging
21 facilities.

22 So, yes. The demand can be a high
23 portion. But the economics of a new facility,
24 from the standpoint of the facility owner, is

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1 dependent on a plethora of items, the utility
2 bill just being one of those items.

3 Q So, I mean, I think you stated that you don't
4 think they're cost-prohibitive. But, if you look
5 at Exhibit 12, that is your rebuttal testimony in
6 this docket, on Bates 030, did you not, in fact,
7 say that "While the demand component of EV
8 stations bills can be a large portion of total
9 costs and prohibitive in the development of these
10 stations, so too can time-varying costs" --
11 "time-varying energy costs".

12 So, there didn't you state that demand
13 charges can be prohibitive?

14 A (J. Taylor) On which lines?

15 Q Yes. Bates 030, sorry, Lines 1 through 2.

16 A (J. Taylor) And that was Page what in my
17 rebuttal?

18 Q That's Bates 030, or "Page 27 of 27", that's the
19 original number.

20 A (J. Taylor) I'm sorry. Let me get to that. Yes,
21 I stated that.

22 Q Okay. Now, I mean, I think this is a
23 non-controversial statement, but you've noted
24 that "hurdles caused by demand charges for early

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1 stage charging investments demonstrate the
2 dilemma that tends to follow EVs, where consumers
3 are less likely to buy EVs if chargers are not
4 readily available, but entities are less likely
5 to build capital-intensive chargers until greater
6 market penetration of EVs." Would you agree with
7 that?

8 A (J. Taylor) Yes. I think that is generally
9 understood by the industry, that there's a
10 balance here between the adoption rates of
11 electric vehicles and availability of public
12 charging stations. There's some interconnection
13 there between individual consumer choices and
14 competitive enterprises' choices to put capital
15 to work by building this infrastructure.

16 But, again, you know, the total utility
17 bill is just one piece of the equation that an EV
18 facility -- a charging facility would be making
19 when deciding to invest capital into a new
20 charging station or not. The cost of, you know,
21 building that facility, you know, the purchase of
22 land, the upstream distribution facilities that
23 would be required, and may very well be charged
24 to the customer through a line extension policy

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 or not, you know, the forecasted utilization and
2 load growth. You know, if the site host has, you
3 know, any other desires for the charging facility
4 based on the attraction of people to their mall
5 or to their gas station, or whatever.

6 So, there's a lot of aspects to those
7 decisions. And I don't think I'd simply state
8 that it's all about the utility bill.

9 Q Sure. I understand there are a lot of factors.
10 But you would agree that, you know, the utility
11 bill, including the demand charge component, is
12 one of the factors?

13 A (J. Taylor) Yes.

14 Q And I think you'd agree that the greater EV
15 charging availability there is, it will allow for
16 more EV purchases in the future, correct?

17 A (J. Taylor) I mean, that would be one of the
18 decisions a consumer would take into account when
19 purchasing a car for those consumers that would
20 charge at a public charging station. A lot of
21 consumers charge at home, I think some surveys
22 have indicated about 80 percent. So, you know,
23 it depends.

24 Q Now, in this docket, you initially designed a

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 demand charge alternative that would have had a
2 75 percent demand charge reduction for the first
3 year of the rate. Is that right?

4 A (J. Taylor) I think it was 100 percent the first
5 year, 75 the second, and 25 the third.

6 Q Okay. Perhaps, I got that wrong. And, you know,
7 your -- Unitil's purpose in designing this rate,
8 you know, would it be fair to say that was
9 partially to help solve this problem with, you
10 know, the demand charges being, you know, a
11 barrier to EV charging investments?

12 A (J. Taylor) I think the purpose of that initial
13 proposal was to recognize that, you know, demand
14 charges can be concerning, and to, you know, have
15 a program that was limited in duration and
16 limited in the direct subsidies that would occur
17 to just a very, you know, a small period of time.
18 You know, these things aren't built overnight.
19 So, you know, over the course of a few years, you
20 might have some participation in that direct
21 rebate, but it would represent a direct subsidy
22 to those customers.

23 So, it was in recognition of the demand
24 charge, you know, that the demand charge can be a

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 concern for facility investors. But, also, we
2 wanted to make sure that was limited to a short
3 time period. And it also is, you know, fairly
4 transparent and easy to account for.

5 Q Sure. Now, I think you just stated that, under
6 that initial proposal, Unitil proposed a 100
7 percent demand charge reduction. And, as Dr.
8 Sergici explained a little bit earlier, here the
9 Settlement proposal would -- there is only a 50
10 percent demand charge reduction, right?

11 A (J. Taylor) Yes. I did find my direct testimony
12 in Docket 21-030, in which I describe the demand
13 discount. And I did want to correct my answer.
14 It was 75 percent the first year.

15 Q Okay.

16 A (J. Taylor) So, sorry for the error there. But,
17 yes. So, the Settlement Agreement, that was a
18 compromise amongst the Parties, is to have a
19 50 percent demand charge, which represents, you
20 know, I guess the similar -- somewhat similar to
21 the second year discount, but with the remaining
22 50 percent of those costs being recovered in a
23 time-varying kWh charge.

24 Q And, you know, you just kind of alluded to the

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 fact that this, you know, your earlier proposal,
2 which was the 75 percent reduction, you know,
3 might try to sort of resolve some of the issues
4 with demand charges.

5 Have you analyzed, you know, the extent
6 to which the Settlement proposal, which is a
7 50 percent demand charge reduction, the extent to
8 which this proposal would have the same effect in
9 sort of ameliorating some of those demand charge
10 issues we just discussed?

11 A (J. Taylor) Let me think about that. I don't
12 know if we prepared a bill impact that did that
13 analysis or not. I know, in my rebuttal, the
14 last couple of tables, and the one that I had to
15 correct, we did compare the current rate with a
16 75 percent reduction, but that was not compared
17 to the final Settlement Agreement, which is, you
18 know, the 50 percent demand, 50 percent
19 time-varying.

20 So, I'm not sure if I've prepared that.
21 But I can speak to directionally, if you'd like?

22 Q Well, let me just rephrase that. Because my
23 question was really, you know, have you analyzed
24 the extent to which, you know, this new proposal,

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 the 50 percent demand charge reduction, would
2 have an impact on the economics or the viability
3 of charging stations, you know, to sort of deal
4 with that barrier?

5 A (J. Taylor) Yes, I think I can speak to that.
6 You know, I think there's a couple of points to
7 be made here. You know, first, you know, and I'm
8 most familiar with Unitil's rate structures.
9 Yes, Unitil's demand rate, if you compare it to
10 demand rates in other jurisdictions, is moderate.
11 It's not overly high. You know, it's like \$10 or
12 \$11 per kW. You know, in California, in
13 comparison, its demand rates are in the \$19
14 range.

15 So, you know, to start off with, that,
16 while there is a demand charge for commercial
17 customers, it's not as heavy as other
18 jurisdictions, because Unitil still is recovering
19 generation and transmission costs through a kWh
20 rate.

21 With that being said, obviously, you
22 know, there are some -- there would be a lower
23 bill if the demand rate was decreased. And, at
24 the level that is prepared in the Settlement

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 Agreement, you know, the assumed load factor and
2 the consumption during the different periods of
3 time, you know, it's pretty much revenue neutral.
4 So, the revenues that would be generated from the
5 current rates and those generated under the
6 proposed Settlement rates would equate to each
7 other under those load factor assumptions and
8 percentage of consumption in a different -- over
9 the three periods of time.

10 You know, to the essence of the
11 question, which is, you know, "how is this going
12 to impact the appetite for, you know, competitive
13 enterprises to build DCFC charging stations in
14 the state?" Again, there's a plethora of
15 considerations. You know, they're not seeing --
16 they won't see a demand charge in the same levels
17 as other jurisdictions, in which there are a lot
18 of EV development.

19 There is, you know, proposals related
20 to make-ready infrastructure, as well as, you
21 know, state -- potentially state and federal
22 funding that would be there to, you know, provide
23 additional subsidies to the development of this
24 industry. So, you know, I don't know to what

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 extent the 50 versus 75 is even on the radar of
2 EV charging facility owners and investors.

3 Q Now, shifting gears a little bit, I want to draw
4 your attention back to Exhibit 12, and Bates 023,
5 at Lines 5 through 7. Well, I guess it really is
6 3 through 7.

7 There you were asked "Can public
8 charging stations simply charge more for peak
9 periods than during off-peak periods?" This is
10 address time-of-use rates. And you said "They
11 may not be able to do so. EV charging stations
12 that are offered to the public or support daytime
13 charging may have limited ability to control or
14 move use from one time period to another, i.e.,
15 their price elasticity can be very low."

16 So, you would you agree -- well, you
17 stated there that "charging stations have a low
18 price elasticity of demand", correct?

19 A (J. Taylor) I stated that "some public charging
20 stations would have a low price elasticity of
21 demand." These rates aren't just available for
22 public charging stations. They're available for
23 separately-metered charging facilities, which
24 would include both residential, in which there is

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 a high elasticity of demand, as well as, you
2 know, fleet overnight, you know, offices, any
3 other Level 2.

4 So, yes. There is one subset of
5 customers that may have a lower price elasticity
6 than another subset. But, on balance, the
7 options that are provided in the settlement, you
8 know, are -- I think they're well-balanced. It
9 gives options to the customers to make the
10 choices, and to respond to the price signals when
11 they can.

12 Q And I'm not disputing here, you know, the price
13 elasticity of demand for, you know, the
14 residential proposal or for, you know, fleet --
15 fleets, for example.

16 But, you know, just focusing on the
17 public charging stations, you'd agree that the
18 price elasticity there can be low?

19 A (J. Taylor) Yes. I think it can be low.
20 Although, the nice thing about this industry,
21 which is a benefit and also a challenge, is that
22 it evolves extremely quickly. And, in
23 California, for instance, they are -- you know,
24 there is indication that public charging stations

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 are pushing down prices that reflect on and
2 off-peak differentials, and individual consumers
3 are choosing when to charge at those public
4 stations based on prices.

5 So, you know, it's a hypothetical that
6 there's some low elasticities of demand, but time
7 will tell as to, you know, to what extent there
8 is elasticity, and, you know, how that might
9 differ by uses and by states.

10 Q Looking back at Exhibit 18 again, which is,
11 again, your prefiled testimony in that
12 Massachusetts docket. And I guess, just to
13 provide the Commission with a little bit of
14 background, you know, was this testimony that you
15 filed in a Massachusetts DPU docket in regard to
16 a demand charge alternative proposal that Unitil
17 is proposing there for its Fitchburg Gas &
18 Electric Light Company territory?

19 A (J. Taylor) Yes. Just for some clarity here, you
20 know, Atrium was retained to develop the
21 time-of-use proposals that were presented in the
22 general rate case, and another project was
23 initiated between Unitil and Atrium to support
24 the development of proposals for Fitchburg, under

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 the context of a law that was passed that had a
2 specific directive that I think the Company might
3 be able to speak a little bit more to than
4 myself. But it was a collaborative effort under
5 this docket in Massachusetts between the three
6 electric utilities. And there are some
7 differences as to the directive from the
8 Commission here in New Hampshire versus the law
9 that was passed in Massachusetts.

10 Q Sure. And I don't doubt that there are. But I
11 just have a question about one of your general
12 statements again.

13 It's on, again, Exhibit 18, Bates 022,
14 Lines 15 through 18. There, so, at Lines 15
15 through 18, you say "the benefit of time
16 differentiated rates for public EV charging
17 stations may be limited given public charging
18 stations provide charging service to their
19 customers for which they have little control in
20 when their facilities are being utilized." You
21 stated that, correct?

22 A (J. Taylor) Yes. And, as I just indicated, this
23 is a changing industry, and there is some
24 indication that some time-differentiated rates in

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 California are incentivizing consumers to charge
2 during mid- and off-peak periods.

3 Q But, you know, I'm sure you acknowledge that
4 customers of public charging stations may have
5 limited ability to shift charging to other time
6 periods, right?

7 A (J. Taylor) Yes. I think the way I would put it
8 is that they would probably choose not to use the
9 public charging station, and would instead, you
10 know, charge at home. You know, if you're
11 commuting to work, and you're hitting a public
12 charging station twice a week during a peak
13 period, and that's your only time, then you'd
14 probably avail yourself of that and charge
15 somewhere else.

16 Q Okay. I know you just tried to put it a little
17 bit differently, but, you know, you did state in
18 your sworn testimony here that "public charging
19 station users" -- you know, "the benefit of
20 public charging stations may be limited" --
21 sorry -- "time-differentiated rates for public
22 charging stations may be limited given those
23 customers may have little control over when they
24 charge", did you not?

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1 A (J. Taylor) That is correct.

2 Q Okay. Turning to Exhibit 16.

3 A (J. Taylor) And what is that exhibit? Can you
4 remind me what is Exhibit 16?

5 Q I'm sorry. This is Request Number CLF -- it's
6 Request Number 1-23 from CLF and CENH. And this
7 is Unitil's response to that.

8 A (J. Taylor) Okay.

9 Q Yes. So, there, the latter part of that
10 question, CLF and CENH asks whether -- it asked
11 you to "produce all analyses and workpapers
12 relating to any evaluations that Unitil has
13 conducted regarding either the effect that its
14 proposed rates would have on shifting charging
15 station use to other time periods or the level at
16 which Unitil expects that charging station
17 owner/operators will adopt its commercial EV TOU
18 rates."

19 And I'm looking at your response, about
20 two-thirds of the way down in your response, you
21 wrote "The Company did not perform any analysis
22 or create any work papers relating to the
23 anticipated effect of commercial EV TOU rates on
24 charging station use, as customer behaviors will

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 vary significantly." So, at least with respect
2 to your initial proposal, you didn't do any
3 analysis on the impact that the time-of-use rates
4 you developed there would have on public charging
5 station use?

6 A (J. Taylor) Yes. I think we can speak generally
7 to, you know, the direction that price signals
8 can have. But, as to how much the price signal
9 is sent out to the EV owners, and, you know, when
10 they decide to charge? You know, we haven't done
11 a thorough analysis of that. And one of the
12 benefits of the Settlement Agreement is that
13 there are annual, you know, some annual
14 reporting. And, once there's more infrastructure
15 in place, there will be an opportunity to review
16 and better understand, you know, how these
17 stations are being used, so that that question
18 can be, you know, better responded to in the
19 future.

20 Q Now, with respect to that Massachusetts docket,
21 you know, there Unutil proposed a different
22 demand charge alternative than in this case.
23 Just basically a sliding scale approach to demand
24 charges. Is that kind of a correct

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 characterization?

2 A (J. Taylor) Yes, I can describe it briefly. So,
3 in Massachusetts, the three electric utilities
4 worked through a collaborative process in which
5 they jointly decided and/or were required to
6 jointly decide and file the same type of
7 structure. And that structure is that the demand
8 charge is reduced based on the load factor from
9 the facility, and the remaining costs are
10 recovered through a kWh charge. So, in fact,
11 it's somewhat similar to the Settlement
12 Agreement, where, you know, there's a portion
13 recovered in demand and there's a portion
14 recovered in kWh. The difference being that
15 there's no sliding scale in the Settlement in
16 this New Hampshire docket, so that, you know,
17 that it doesn't -- it isn't based on a load
18 factor. And, then, of course, the Commission
19 looking for time-varying rates and sending some
20 price signals in New Hampshire, the kWh is
21 time-differentiated. And, in Massachusetts, the
22 kWh is just a flat rate.

23 Q Sure. And, so, for that demand charge
24 alternative in Massachusetts, you know, you

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 didn't design it to have a time-of-use rate.

2 However, is it correct that, for the 5 percent --
3 under 5 percent utilization rate, you designed a
4 demand charge of zero, right?

5 A (J. Taylor) Yes. I don't have that filing. But
6 I'll, you know, agree to that. I think that
7 sounds about reasonable. I don't remember the
8 exact cut-offs.

9 Q Yes. I mean, I can, you know, if you are able to
10 find the testimony, I can point you to the --

11 A (J. Taylor) Oh, is that in the attachment? Yes.
12 Let me go to the attachment.

13 Q Yes. It's mentioned in the testimony, on Page, I
14 think, Bates 009 and 010. Yes, 009 and 010 has
15 just a little --

16 A (J. Taylor) Oh, yes, you're right. It is right
17 there. Okay. Yes.

18 Q Okay. So, for that, you know, given the caveat
19 that there is no time-of-use rate with that
20 proposed rate, for that demand charge
21 alternative, it would have a zero percent demand
22 charge for a utilization rate of under 5 percent,
23 correct?

24 A (J. Taylor) Yes. That was the joint proposal by

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 the three utilities in Massachusetts.

2 Q Okay. And, then, wasn't that -- wasn't the
3 Massachusetts proposal, you know, again, given
4 the caveat there was no time-of-use rate, but
5 wasn't that proposal designed to be revenue
6 neutral?

7 A (J. Taylor) Yes. I used the class load factors
8 and the existing rate design to, you know,
9 develop these sliding scale demand and kWh rates,
10 so that, you know, *ceteris paribus*, all else
11 equal, you would get the same amount of revenues.

12 Q Okay. All right. I think I'm done with my
13 questions for you, Mr. Taylor.

14 Now, for Ms. Tebbetts, I have a few
15 questions for her as well.

16 Ms. Tebbetts, so, Liberty initially
17 designed a high demand draw commercial rate that
18 was filed with the Commission in this docket, and
19 that did not include a time-of-use rate, correct?

20 A (Tebbetts) Yes.

21 Q And, in your -- in Exhibit -- do you have the
22 exhibits in front of you or do you have a
23 computer, a way to look at the exhibits?

24 A (Tebbetts) Let me pull it up.

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 Q Okay. So, the exhibit I'm going to ask you
2 questions about is Exhibit 22.

3 A (Tebbetts) Oh. That's the Liberty response to
4 DOE 2-5? Am I correct?

5 Q Exactly. Yes.

6 A (Tebbetts) Okay. Let me get there. Thank you.

7 Q Just let me know when you're able to locate it.

8 A (Tebbetts) I'm there. It's just slow. Okay, I'm
9 there.

10 Q All right. Thanks. So, in DOE 2-5(a), the
11 Department of Energy asked you to "Please explain
12 why the Company did not develop an EV TOU rate
13 proposal for separately-metered high demand draw
14 commercial customer applications." And that
15 Liberty's response was "The Company does not
16 agree that offering EV TOU rates for
17 separately-metered high demand draw commercial
18 applications is the appropriate rate design for
19 such electric vehicle charging installations."
20 Is that what Liberty's response was to DOE in
21 that data request?

22 A (Tebbetts) Yes.

23 Q And could you just please explain to me why, at
24 that point in time, it was Liberty's view that

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 time-of-use rates were not appropriate for high
2 demand draw applications?

3 A (Tebbetts) Sure. So, you know, initially, when
4 we looked at offering time-of-use rates, we were
5 unsure, really, that customers were going to want
6 to charge at really high peak hours. And one of
7 the, you know, arguments we had, I believe, in
8 our testimony initially was that "when customers
9 need to charge, they need to charge." There are
10 not enough charging stations out there where,
11 unlike a gas station, you can, you know, find,
12 like Gas Buddy, the cheapest gas price around. I
13 know that there certainly is systems in the cars
14 that allow you to find a charging station and
15 their pricing. But the concentration of charging
16 stations is not as nearly as much as gas
17 stations.

18 So, one of the concerns that we had was
19 we were not -- that offering a time-of-use rate,
20 we were not providing customers with a quick
21 charge that they may need. We were sending a
22 price signal, which is part of what the
23 Commission originally ordered us to do. But
24 sending a price signal that said, you know, "You

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 shouldn't charge at this time. And, if you want
2 to during critical peak, then you're going to pay
3 for it."

4 Q And then, also in that same response, in DOE
5 2-5(a) [b?], you know, that it asked you "Please
6 explain why the Company could not utilize the
7 same method it used to develop EV TOU rates for
8 residential and small commercial customers, and
9 develop an EV TOU rate for high demand draw
10 commercial customer applications." And then, in
11 response there, Liberty wrote "The premise of the
12 residential rate is completely different than
13 separately-metered commercial customer
14 applications. Residential customers will charge
15 when they are home, most likely on the weekends
16 and evenings, thus charging during off-peak
17 hours. Commercial applications provide charging
18 for any time during the day when drivers are out
19 in the community and need to charge; thus,
20 completely different use cases are being compared
21 in the question."

22 You know, so, what does that actually
23 mean in that response?

24 A (Tebbetts) So, when looking at the Order of

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 Notice saying to parties, in the original order
2 in this docket, saying to parties that we should
3 be creating a time-of-use rate, you know, we said
4 "We can't compare the residential use cases to
5 commercial use cases."

6 We have a residential time-of-use rate.
7 And we know that customers are going to use it
8 when they're least -- when the price of
9 electricity is the lowest. And we know a lot of
10 this information from our Battery Pilot. And,
11 you know, customers are obviously using their
12 electricity on off-peak rates.

13 And, so, when you're home, and you have
14 the option to charge, because you're not going
15 anywhere, you are going to program your car or
16 you're just not going to plug it in, if you can't
17 program it, until after that off-peak rate is in
18 effect.

19 So, the difference is a commercial
20 application would be considering that "I need to
21 charge my vehicle. I'm out and about, and I need
22 to charge my vehicle. I'm not home. I need to
23 get home or get to do more errands, *etcetera*."
24 Or, if I'm a commercial fleet customer, we'll

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 call it, and, you know, I need to get to my next
2 appointment to do whatever it is I'm doing, I
3 need to find a charging station, then I need to
4 find a charging station then.

5 And, so, we believe that those are very
6 different use cases.

7 Q So, would it be fair to say you agree that, you
8 know, if your -- somebody that's a public
9 charging station user has a limited ability to
10 shift the time when they charge to another time
11 period?

12 A (Tebbetts) I don't know that. Because I'll be
13 honest with you, like, and maybe it's me, but, if
14 I have to go purchase gas, I don't know, I pay
15 attention to the day that it's cheapest when I
16 drive by the gas stations, and I say "Meh, I
17 don't have to get it today. I can get it
18 tomorrow, because I know Wednesday is going to be
19 cheaper than Tuesday", etcetera. And that's just
20 an example, right?

21 So, if I don't have to charge, then I
22 may not decide to pull over and charge. If I
23 absolutely cannot get to my next destination
24 without charging, then, yes, I may have to bite

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 the bullet and have to go and pay the higher
2 price.

3 Q And I think in one of the tech sessions, you
4 know, you might have stated that your household
5 at one point owned an EV. You know, was it a
6 cause of concern when you owned an EV to try to
7 find, you know, be able to find charging
8 stations?

9 A (Tebbetts) Well, I had an EV in 2013. So, there
10 were no charging stations around at the time.
11 And, you know, I was perfectly okay with that,
12 and I was perfectly fine with charging at home.
13 And, when I did have to travel, which I traveled
14 frequently, from my home in Nashua, all the way
15 up to our Lebanon office, I would stop at the 93
16 and charge up, if I wanted to, and then make my
17 way back. And I actually didn't really have to
18 charge.

19 So, people do get range anxiety, I know
20 that. That's one reason why we didn't keep the
21 car, it was significant range anxiety for some of
22 us in the household. So, I do understand that.

23 But, at the same time, you know, I
24 think that customers will make that decision.

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 And I think that, you know, if they need to
2 charge, they will charge. And, if they don't
3 need to charge, then they will continue on their
4 journey until they go home to charge.

5 Q Now, a high demand draw rate that you designed
6 and filed with the Commission initially, that had
7 a 10 percent demand charge, correct?

8 A (Tebbetts) I want to say "yes".

9 Q You know, and if you have your testimony in front
10 of you, I can point to -- I think it's
11 Attachment HT/MS, I think, Attachment 1.

12 A (Tebbetts) Yes, I am there. And that is correct,
13 yes.

14 Q Yes. It's a 10 percent demand charge?

15 A (Tebbetts) Uh-huh. Yes.

16 Q Okay. And, turning to Exhibit 21, which is
17 Liberty's response to CLF and CENH 1-17. Were
18 you able to find that? Just let me know once you
19 found that.

20 A (Tebbetts) I'm there.

21 Q So, there CLF and CENH asked you whether
22 "Liberty's two proposed commercial EV rates would
23 decrease demand charges for commercial customers"
24 -- or, sorry, why -- or, "Please explain why

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 Liberty chose to reduce [demand charges to 10
2 percent], but not eliminate, the demand charges?"
3 And the response that Liberty wrote was "The
4 Company believes that the design of the rates"
5 which was at the 10 percent demand charge,
6 "provides a balance to the customer with regards
7 to the revenues necessary to serve customers with
8 higher loads, but keeping with the ideals of
9 electrification of transportation."

10 Now, your initial rate that you
11 designed had a 10 percent demand charge. And, as
12 you heard today, it's a 50 percent demand charge
13 under the Settlement proposal. Have you analyzed
14 whether this 50 percent demand charge rate sort
15 of strikes the same balance that you describe in
16 Exhibit 21?

17 A (Tebbetts) I do. I do think it does. So, first
18 of all, we have time-of-use rates that are
19 designed in the Settlement Agreement. And, so,
20 I'm looking at -- you know, if you look at the
21 breakdown of those time-of-use rates for Liberty,
22 we do not have -- in our initial proposal, we
23 don't have time-of-use rates, which means the
24 customers will be paying the full transmission

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 charge, fixed transmission charge and the fixed
2 energy service charge, if they take energy
3 service from us.

4 And, so, you know, one of the things
5 that we looked at in designing this rate was
6 trying to keep in the spirit of, and I think we
7 put it in the data response as well, a mix of
8 volumetric charges is appropriate, but we were
9 trying to keep with the ideals of electrification
10 of transportation.

11 And, you know, so, we didn't touch any
12 other parts of the rates, because those rates are
13 already recovering our costs, and they're
14 pass-throughs to customers. And I'll also be
15 really clear. We have -- Liberty/Granite State
16 Electric, you know, we looked at this and we said
17 "2022 is a test year for us. We'll be filing a
18 rate case in 2023." Which gives us an
19 opportunity to see what happens with this rate.
20 And, in the event that customers don't take it,
21 then maybe we redesign it. And, in the event
22 that customers do take it, and there's cost
23 shifting in that year, 2022, we will redesign the
24 rate.

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 So, we have a great opportunity here,
2 and that's why we filed it in the manner that we
3 did, to take a look and see what would the market
4 hold, what would they take.

5 And, so, when we look at this, I think
6 we need to add a context that we actually have an
7 opportunity in 12 to 18 to 24 months to actually
8 redesign a rate, in the case that we find there's
9 any cost shifting.

10 So, I just want to make sure that's
11 clear, and this is one reason why. And I believe
12 we had provided that in one of our responses as
13 well.

14 Q Thanks. Now, looking at Exhibit 20, this was
15 Liberty's response to then Staff 1-3. Were you
16 able to find that?

17 A (Tebbetts) I have that. Yes. Go ahead.

18 Q Okay. Great. And, so, there I think Staff
19 referenced the Commission's order in the
20 investigatory docket, to say that "we anticipate
21 that any high demand draw rate design proposals
22 filed in an adjudicative proceeding will be
23 informed by an assessment of the costs and
24 feasibility of offering a peak coincident demand

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 charge rate component." And, then, Staff asked
2 you to "Please provide the Company's assessment
3 of the costs and feasibility of a peak coincident
4 demand charge rate component." You know, and
5 then, in your response there, the second
6 sentence, Liberty wrote "Creating a rate that
7 would be higher during the potential peak
8 coincident demand hours will prohibit drivers
9 from charging when they need it most."

10 You know, wouldn't that apply to
11 time-of-use rates as well?

12 A (Tebbetts) Yes. And I still agree with that
13 sentence. I think that is absolutely the case.
14 But, in the event that what we're trying to do is
15 avoid increased peak usage, critical peak hour
16 usage, which for us would be that 3:00 to 8:00
17 p.m. period, then, you know, you're looking at
18 time-of-use rates that would make that
19 appropriate.

20 And, in this case, when we talked about
21 this, you know, what we were looking at was "how
22 do we get more EV drivers on the road?", in that
23 originally. And maybe even time-of-use rates
24 will provide more EV drivers on the road, though

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1 they'll charge at different times. But that is
2 yet to be seen for us. We certainly don't know
3 what the results of usage is going to be, because
4 we don't have any in our territory. We have a
5 few, I shouldn't say that, we have a couple that
6 have just come on line. They're not ours, but we
7 shall see how that works.

8 So, I think, for us, you know, the
9 overall arching issue for us in this whole docket
10 was "We don't have data to make decisions, so
11 we're going to go in with the best that we have."
12 And when we made our initial filing in June, this
13 was the best that we had.

14 And, so, going through the course of
15 this docket, you know, we've learned a lot.
16 There's been a lot of information shared, and
17 we're appreciative of it. And that is why we
18 looked at this as an opportunity for us to say
19 "You know what? Maybe we really should offer
20 this to our customers, and see what they think
21 about it." Let them tell us "we don't like these
22 rates, we don't want to take them", or, "You know
23 what? This is fantastic." We have more
24 customers who want to have EV charging stations

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 installed. And, you know, this is a great rate
2 design, and we're going to go forward with that.

3 So, you know, I can answer your
4 questions, and I'm very appreciative of what
5 you're getting at. But, at the same time, we
6 just don't have any data to make a decision on
7 what is right and what is wrong. So, we're
8 trying to just offer something to customers in
9 hopes that they take it, and that they give us
10 that feedback of what really we should be
11 offering our customers in the next one, two,
12 three, five years.

13 Q So, you are saying that you're not sure how
14 customers will respond to these rate proposals,
15 but that, you know, when you have more data,
16 you'll have a better idea of how they would
17 respond or do respond?

18 A (Tebbetts) Yes. I think that we don't know how
19 customers will respond. We are optimistic that
20 the rate design that we have signed in our
21 Settlement Agreement will bring about more
22 charging stations. We're very optimistic about
23 that. We're optimistic that it will allow for
24 more EV drivers in New Hampshire as well. We are

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 very optimistic that there is an opportunity
2 there. But the data will follow, and the data
3 will tell us if our optimism was correct, or if
4 we need to relook at these rates down the road.
5 But, at this time, we are optimistic that this
6 could be a benefit to drivers in New Hampshire.

7 Q Okay. Just a last couple questions for you. In
8 that initial proposal that Liberty designed, was
9 initially filed with the docket at the
10 Commission, you know, again, there was no
11 time-of-use rate there for the high demand draw
12 proposal. That was designed to be revenue
13 neutral, right?

14 A (Tebbetts) For distribution rates, yes, because
15 their energy service, transmission, other rate
16 components, would just be the rate component
17 associated with Rate G-1 or Rate G-2.

18 Q Okay. So, for the distribution component, it was
19 designed to be revenue neutral?

20 A (Tebbetts) Yes.

21 Q And, so, I think looking at, you know, your
22 testimony, the attachments again, you know,
23 Attachment -- I guess it's Bates 008 of your
24 testimony, which is Attachment 1, you know, it

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 looks like there you sort of show the revenue,
2 under the current Rate G-1 and then under the
3 proposed rates, and that's the same, correct?

4 A (Tebbetts) Yes.

5 Q And, so, there, you were able to sort of -- you
6 were able to maintain revenue neutrality by
7 increasing the volumetric charge, while at the
8 same time you were introducing this demand
9 charge, right?

10 A (Tebbetts) Yes.

11 Q Okay. Ms. Tebbetts, I have no further questions
12 for you. Thanks.

13 Okay. Finally, for Ms. -- or, for
14 Dr., excuse me, Sergici -- did I pronounce that
15 correctly?

16 A (Sergici) Sergici.

17 Q Sergici.

18 A (Sergici) Close enough.

19 Q Okay. Sorry about that, Dr. Sergici. So, in
20 this docket, your recommending time-of-use rates
21 for public charging stations, right?

22 A (Sergici) High draw charging facilities,
23 including public charging stations, as well as
24 Level 2 clustered chargers.

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 Q Okay. So, you're recommending time-of-use rates
2 for DCFC charging stations, which would be high
3 draw, correct?

4 A (Sergici) One of which it is. But it also
5 includes, like I said, Level 2/Class II charging
6 stations as well, which could be used for fleet
7 charging.

8 Q Understood. And Ms. Tebbetts just testified
9 that, you know, at least from Liberty's
10 perspective, they're not entirely sure how
11 customers -- how EV users will respond to, you
12 know, the rate design here or the time-of-use
13 rates for public charging stations or DCFC
14 charging stations. You know, DOE hasn't
15 conducted any sort of analysis here on, you know,
16 the expectations of how customers will respond
17 to, you know, your rate design proposal, is that
18 right?

19 A (Sergici) That's correct. We have not done that
20 analysis here, simply because there is no data.

21 Q Okay. So, you know, I mean, it would be fair to
22 say you don't know how the customers will
23 respond, maybe they will respond well, maybe they
24 won't, right?

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1 A (Sergici) That is correct. And I, you know, I do
2 a lot of work in the area of time-varying
3 pricing, and mostly for residential and
4 commercial customers. And, when they are given
5 these price signals, they conclusively shift
6 their usage from peak to off-peak periods. But
7 there are new applications, and definitely this
8 is a new application, how these charging station
9 customers would respond to these price signals.
10 But, again, given some of the research, you know,
11 there's all the reason why at least some of the
12 customers who would voluntarily want to be on
13 this rate find the ways to shift usage from peak
14 to off-peak periods. This could be done in the
15 form of their updating their own pricing
16 structures for customers, and, as Mr. Taylor
17 indicated, this is already happening in
18 California, or by adopting certain load
19 management technologies in solar storage devices
20 and the like to facilitate that responsiveness.
21 But, again, we --
22 Q But -- I'm sorry.
23 A (Sergici) There is not a lot of research out
24 there that quantify these impacts.

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 Q And you mentioned the California example. Have
2 you seen any research for analyzing customer
3 response to those time-of-use rates for public
4 charging stations?

5 A (Sergici) I have not. I have anecdotal evidence
6 that at least one person that I know is taking
7 advantage of peak and off-peak prices offered in
8 one of the Tesla stations in California.

9 Q But you haven't seen any more sort of empirical
10 or statistical evidence?

11 A (Sergici) That is correct.

12 Q Now, the Settlement proposal for the -- the
13 Settlement proposal for the high demand draw
14 rate, it's designed to be revenue neutral at the
15 5 percent utilization rate, is that correct?

16 A (Sergici) That is correct.

17 Q And, you know, I realize that we're not talking
18 about Eversource today, but, you know, just by
19 way of example, in your testimony on Page 19, I
20 guess it's Bates 021, sorry about that,
21 Eversource designed a demand charge alternative
22 to revenue neutral at 10 percent. And, on Bates
23 021, you stated that, you know, if it was -- if
24 the utilization rate were lower than that 10

[PANEL: Tebbetts|Carroll|Valianti|Taylor|Sergici]

1 percent, Eversource "would produce less revenue
2 which could represent a reduction in cost
3 recovery."

4 You know, wouldn't you have the same
5 issue here if utilization were under the 5
6 percent level?

7 A (Sergici) Yes. So, that's not really precisely
8 anchored around 5 percent. So, there's a range,
9 similar to Eversource, I think. These rates are
10 collecting the same amount of revenues in this,
11 you know, 5 to 10 percent range. And it's really
12 impossible to design a rate which will, you know,
13 recover the right amount of revenue for every
14 single customer. But I believe that the rate
15 design that we came up with really well balances
16 potential limited amount of those cost shifts,
17 with providing an upside that, you know, even if
18 some of these very, very low utilization
19 customers is creating some cost shifts, that
20 they're balanced by their response to these price
21 signals and shifting their usage from peak to
22 off-peak periods, and creating benefits for the
23 system and also for all customers.

24 Which was missing in Eversource's rate,

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1 it was a flat rate, no time-varying price signal.
2 So, there will be no upside for non-participant
3 customers.

4 Q Now, on Page 32 of your testimony, I guess it's
5 Bates 034, and at Lines 20 through 25, you know,
6 you were asked about Liberty's initial proposal,
7 you know, its initial high demand draw proposal,
8 and why it had not, you know, design a
9 time-of-use rate for high demand draw customers.
10 And you wrote, on Lines 20 through 25, that "the
11 Company should not second-guess the abilities of
12 its public station owners to pass on some of
13 these efficient price signals to their own
14 customers. When faced with a TOU rate that
15 charges them higher rates during the peak period,
16 the owners of the public chargers are likely to
17 respond with altering their own pricing
18 structures, and passing on these price signals to
19 this own customers."

20 Now, are you -- have you conducted your
21 own analysis of the ability of New Hampshire
22 public charging station owners to pass on price
23 signals to customers?

24 A (Sergici) No, I have not.

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1 Q And you just heard Ms. Tebbetts' testimony about
2 Liberty's, you know, Liberty's initial proposal
3 for high demand draw customers. You know, and
4 there, you know, she stated that they had
5 designed a revenue neutral proposal. And, so, at
6 least their, you know, again, given the caveat
7 that there's no time-of-use rate, but their --
8 you'd agree that Liberty was able to design a
9 revenue neutral proposal that, you know, at least
10 more significantly reduced demand charges than,
11 you know, the Settlement proposal, and that also
12 maintained revenue neutrality, right?

13 A (Sergici) That is correct. But, like you
14 indicated, it's missing the price signals.

15 MR. KRAKOFF: Sure. And, you know, I
16 acknowledge that caveat.

17 Okay. I have no further questions for
18 Dr. Sergici or for any of the other Settlement --
19 Settling Parties' witnesses.

20 CHAIRMAN GOLDNER: Okay. Thank you.
21 Mr. Below, do you have any questions?

22 MR. P. TAYLOR: Commissioner?

23 CHAIRMAN GOLDNER: Oh, sorry. Go
24 ahead.

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1 MR. P. TAYLOR: Sorry. Commissioner,
2 sorry to interrupt. This is Patrick Taylor, from
3 Unitil. I just wanted to let the Commission and
4 the other parties know that one of our witnesses,
5 Carol Valianti, is going to have to leave the
6 hearing for a period of time due to an unplanned,
7 but, unfortunately, unavoidable conflict. So,
8 she will be available later today, but, for the
9 time being, she is going to have to leave the
10 hearing, and so will no longer be visible on the
11 screen.

12 CHAIRMAN GOLDNER: Okay. Thank you.
13 Mr. Below, did you have any questions, the City
14 of Lebanon?

15 MR. BELOW: I have no questions. No
16 questions. Thank you.

17 CHAIRMAN GOLDNER: Okay. And I didn't
18 see Mr. Moran join from the New England
19 Convenience Store and Energy Marketers
20 Association.

21 Is there any other -- any other
22 requests to examine the witnesses?

23 *[No verbal response.]*

24 CHAIRMAN GOLDNER: Okay. So, we are

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1 at, I think, a natural breaking point, before we
2 go to Commissioners' questions, and also
3 following Mr. Buckley's proposed schedule. I
4 would -- let's take a break until 12:30. We'll
5 return with Commissioner questions, redirect, and
6 then we'll move to ChargePoint directly
7 afterwards.

8 So, we'll return at 12:30. Thank you.

9 *(Whereupon upon the **Day 1 Morning***
10 ***Session** was adjourned at 11:53 a.m. for*
11 *the lunch recess, and the hearing to*
12 *continue under separate cover in the*
13 *transcript noted as "**Day 1 Afternoon***
14 ***Session ONLY**".)*

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