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STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

January 28, 2022 - 9:06 a.m.
21 South Fruit Street
Suite 10
Concord, New Hampshire

DAY 2
MORNING SESSION
ONLY

[Hearing also conducted via Webex]

RE: DE 20-170
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
Liberties:
Michael J. Sheehan, Esq.

Court Reporter: Susan J. Robidas, NH LCR No. 44

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APPEARANCES (CONT'D)

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

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

Reptg. Clean Energy NH:
Chris Skoglund, Dir./Energy
Transition

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

Reptg. NH Dept. of Environ.Services:
Rebecca Ohler, Esq.

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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I N D E X

WITNESS PANEL: EDWARD A. DAVIS
 DENNIS E. MOORE
 BRIAN J. RICE
 KEVIN BOUGHAN

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E X H I B I T S

EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
26	Corrected Page 26 from Rebuttal Testimony of John D. Taylor	PREMARKED

1 P R O C E E D I N G S

2 CHAIRMAN GOLDNER: Okay. Good
3 morning, everyone. Here again is Chairman
4 Goldner, joined by Special Commissioner Ross
5 and Commissioner Chattopadhyay. We're here
6 this morning in Docket DE 20-170 for a second
7 day of hearings regarding the electric
8 vehicle time-of-use rates, which include the
9 Liberty/Unitil Settlement Agreement and an
10 Eversource proposal. We plan to continue to
11 follow the schedule from the DOE, dated
12 1/24/22, and written closings.

13 Is there anyone here today that did
14 not enter an appearance on Day 1?

15 [No verbal response]

16 CHAIRMAN GOLDNER: Okay. Mr.
17 Buckley looks different today, but we won't
18 make him enter a second appearance.

19 So moving on to preliminary
20 matters, are there any preliminary matters
21 before we have the witnesses sworn in?

22 MS. CHIAVARA: Chairman Goldner,
23 I'd like to make a couple notes regarding the
24 Eversource witness panel that we're about to

1 hear from.

2 CHAIRMAN GOLDNER: Okay. Very
3 good.

4 MS. CHIAVARA: Thank you. So
5 Michael Goldman was a witness that did
6 prefile initial testimony. He's no longer
7 with Eversource. But Brian Rice, who is a
8 witness on this docket already, will be
9 adopting Mr. Goldman's part of the testimony,
10 and we will address that on the stand when
11 he's sworn in.

12 We also have an additional
13 Eversource member here today, Kevin Boughan.
14 Mr. Boughan is not a witness in this docket,
15 but in Exhibit 13, filed by the Department of
16 Energy, there are a number of data requests
17 from different dockets to which Mr. Boughan
18 is a witness, so we have him available should
19 he need to speak to any of those. So we were
20 going to swear him in as well.

21 CHAIRMAN GOLDNER: Okay. Any
22 objections? No.

23 [No verbal response]

24 CHAIRMAN GOLDNER: Seeing none,

1 we'll proceed as recommended.

2 MS. CHIAVARA: Sorry. I have one
3 more thing. Regarding Eversource, Eversource
4 Exhibit 11, we caught a correction, a
5 calculation error in that exhibit. I filed
6 with the clerk's office at about 8:00 this
7 morning a redlined corrected exhibit. Mr.
8 Davis will also be addressing that on the
9 stand. So he will go through a narrative
10 correction of that. But there should also be
11 the corrected exhibit that was also
12 distributed this morning.

13 CHAIRMAN GOLDNER: Okay. Very
14 good.

15 MR. TAYLOR: Commissioner --

16 CHAIRMAN GOLDNER: Go ahead.

17 MR. TAYLOR: Sorry. This is
18 Patrick Taylor from Unitil. I had one note
19 regarding exhibits as well.

20 At Tuesday's hearing, our witness,
21 John Taylor, walked through some corrections
22 to Table 7 of Page 26 of his rebuttal
23 testimony, and the Commissioners had
24 requested that we file a corrected version of

1 that page. So yesterday we did file a
2 corrected version of the page, both a
3 replacement page, but I also filed a copy of
4 the corrected page as Hearings Exhibit 26.
5 And I believe that is the next available
6 number. So I just wanted to note that on the
7 record in case any other hearing exhibits are
8 marked today, that we did snatch up 26
9 already.

10 (The document, as described, was
11 herewith premarked as Exhibit 26 for
12 identification.)

13 CHAIRMAN GOLDNER: Okay. Thank
14 you. I do have some -- I'll take an
15 opportunity at the lunch break to sort some
16 things out with the clerk relative to what I
17 think are two Exhibits 25 as well. But we
18 can come back to this by the end of the day
19 to sort it out.

20 And Mr. Taylor, the first exhibit
21 you were referring to was which exhibit?

22 MR. TAYLOR: So the exhibit that I
23 was referring to -- well, on the stand on
24 Tuesday, John Taylor had made a correction to

1 his rebuttal testimony, which is marked as
2 Hearings Exhibit 12 in uncorrected form. We
3 then submitted a corrected Page 26 of that
4 testimony, and I submitted that as a separate
5 hearing exhibit, Hearing Exhibit 26.

6 CHAIRMAN GOLDNER: Perfect. Thank
7 you. Thank you. I didn't catch the first
8 exhibit, No. 12. So thank you.

9 Okay. Anything else? We've heard
10 from Unitil and Eversource. Anyone else?

11 MR. VIJAYKAR: Chairman Goldner,
12 this is Nikhil Vijaykar, counsel for
13 ChargePoint. Just one preliminary matter, if
14 I might.

15 During Tuesday's evidentiary
16 hearing, Commissioner Chattopadhyay, you
17 might, recall, in questioning of our witness,
18 asked us to prepare an analysis of payback
19 periods under various scenarios. And as I
20 understand it, my client, including a couple
21 of different people at the client, have been
22 working expeditiously to try to pull this
23 together and, you know, intend to have the
24 analysis that we described and were asked to

1 provide ready. With that said, my
2 understanding is that it is going to be a
3 challenge to get this done by today, as we
4 had -- as we had been asked to do. We're
5 going to be -- you know, the clients are
6 going to be working to get this done as soon
7 as possible and to the Commission. But
8 again, you know, the effort here is to make
9 sure that all the numbers going into the
10 analysis are representative and defensible.
11 So we want to get you the best analysis
12 possible, but I did want to let the
13 Commission know that it is possible that it
14 won't be -- we won't be able to get you the
15 analysis today.

16 CHAIRMAN GOLDNER: Okay. Thank
17 you, Mr. Vijaykar, for that update. Thank
18 you. Mr. Vijaykar, just as an estimate, if
19 it's not -- if it doesn't come today, would
20 you have an estimate of when that would be
21 available?

22 MR. VIJAYKAR: That's a fair
23 question, Chairman Goldner. I've tried to
24 figure out the answer to that. I believe

1 that Tuesday would be a reasonable deadline
2 or a reasonable guess of when we would be
3 able to get the Commission something.

4 CHAIRMAN GOLDNER: Okay.

5 MR. VIJAYKAR: That's sort of my
6 best estimate based on my conversations with
7 my client.

8 CHAIRMAN GOLDNER: Thank you.

9 Anyone else?

10 [No verbal response]

11 CHAIRMAN GOLDNER: Okay. Now
12 seeing none, we'll move on to the swearing of
13 the witnesses.

14 Ms. Robidas, would you please swear
15 in the Eversource panel of witnesses.

16 (WHEREUPON, EDWARD A. DAVIS DENNIS E.
17 MOORE, BRIAN J. RICE, KEVIN BOUGHAN
18 were duly sworn and cautioned by the
19 Court Reporter.)

20 EDWARD A. DAVIS, SWORN

21 DENNIS E. MOORE, SWORN

22 BRIAN J. RICE, SWORN

23 KEVIN BOUGHAN, SWORN

24 CHAIRMAN GOLDNER: Okay. We'll

1 move to direct examination. I'll recognize
2 Ms. Chiavara.

3 MS. CHIAVARA: Thank you, Chair.
4 I'd like to begin with Mr. Ed Davis.

5 DIRECT EXAMINATION

6 BY MS. CHIAVARA:

7 Q. Mr. Davis, can you please state your name and
8 the title of your role at Eversource.

9 A. (Davis) Yes. My name is Edward A. Davis, and
10 I am the director of rates for Eversource
11 Energy Services Company, including -- or on
12 behalf of Public Service of New Hampshire
13 today.

14 Q. And what are the responsibilities of your
15 role with the Company?

16 A. (Davis) I provide rate- and tariff-related
17 services to the operating companies of
18 Eversource Energy.

19 Q. And have you ever testified before this
20 Commission?

21 A. (Davis) Yes, I have.

22 Q. Thank you. Did you file testimony and
23 corresponding attachments as part of the
24 filing on June 15th, 2021, marked as

1 Exhibit 3, and a supplement to the Eversource
2 residential time-of-use rate filed on
3 June 23rd, 2021, which was marked as
4 Exhibit 5?

5 A. (Davis) Yes.

6 Q. And were the testimony and supporting
7 materials prepared by you or at your
8 direction?

9 A. (Davis) Yes, they were.

10 Q. Do you have any changes or updates to make at
11 this time?

12 A. (Davis) No.

13 Q. And do you adopt your testimony today as it
14 was written and filed?

15 A. (Davis) Yes.

16 Q. Thank you. Now turning to rebuttal
17 testimony. Did you also file rebuttal
18 testimony and a corresponding attachment on
19 December 10th, 2021, which was marked as
20 Exhibit 11?

21 A. (Davis) Yes.

22 Q. And were the testimony and supporting
23 materials prepared by you or at your
24 direction?

1 A. (Davis) Yes.

2 Q. Do you have any changes or updates to make to
3 that testimony at this time?

4 A. (Davis) I do. In my rebuttal testimony, on
5 Bates Page 18 of Exhibit 11, I explained that
6 the Company estimated the illustrative
7 time-of-use rate for high-demand draw
8 applications proposed ideally in its
9 testimony would collect, at most,
10 approximately 40 percent of the distribution
11 and transmission revenue that would be
12 generated under the demand charge alternative
13 proposed by the Company in Docket No. 21-078.
14 The Company omitted the customer charges when
15 estimating the revenue of the illustrative
16 time-of-use rate proposed by DOE.

17 As a result, the testimony should be
18 corrected to state that the rate proposed by
19 DOE would collect, at most, approximately
20 59 percent of the distribution and
21 transmission revenue that the demand charge
22 alternative proposed by the Company would
23 produce at low levels of station utilization.
24 Nothing changes there but the percentage of

1 revenue estimated to be recovered by the DOE
2 rate.

3 Accordingly, I'm also providing a
4 revised Exhibit EAD Rebuttal-1, which is
5 Bates Page 23 of Exhibit 11, in support of
6 this update.

7 Q. And these corrections were all filed as of
8 this morning as part of a corrected
9 Exhibit 11; correct?

10 A. (Davis) That's correct.

11 Q. So do you adopt that testimony today with the
12 corrections you've just described?

13 A. (Davis) I do.

14 Q. Thank you.

15 Now turning to Mr. Moore. Mr. Moore,
16 please state your name and the title of your
17 role at Eversource.

18 [connectivity issue]

19 A. (Moore) Good morning. My name is Mr. Dennis
20 Moore. I'm the director of IT Enterprise
21 Business Solutions at Eversource Energy
22 Service Company.

23 Q. And Mr. Moore, what are the responsibilities
24 of your role at Eversource?

1 [Court Reporter interrupts.]

2 Q. So Mr. Moore, what are the responsibilities
3 of your role at Eversource?

4 A. (Moore) I've worked with Eversource Energy
5 for 31 years, developing, implementing and
6 maintaining Enterprise Business Solutions.

7 Q. And have you ever testified before this
8 Commission?

9 A. (Moore) Yes.

10 Q. Did you file testimony and corresponding
11 attachments as part of the filing on
12 June 15th, 2021, marked as Exhibit 4?

13 A. (Moore) Yes.

14 Q. Were the testimony and supporting materials
15 prepared by you or at your direction?

16 A. (Moore) Yes.

17 Q. Do you have any changes or updates to make at
18 this time?

19 A. (Moore) No.

20 Q. And do you adopt your testimony today as it
21 was written and filed?

22 A. (Moore) Yes, I do.

23 Q. Did you also file rebuttal testimony on
24 December 10th, 2021, marked as Exhibit 11?

1 A. (Moore) Yes.

2 Q. Was that testimony prepared by you or at your
3 direction?

4 A. (Moore) Yes, it was.

5 Q. And do you have any changes or updates to
6 make to that testimony at this time?

7 A. (Moore) No, not at this time.

8 Q. So do you adopt that testimony today as it
9 was written and filed?

10 A. (Moore) Yes, I do.

11 Q. Thank you very much.

12 Turning to Brian Rice. Mr. Rice, please
13 state your name and title of your role at
14 Eversource.

15 A. (Rice) My name is Brian Rice. My position
16 has been manager of regulatory projects at
17 Eversource Energy Service Company.

18 Q. And what are the responsibilities of your
19 role at Eversource?

20 A. (Rice) Well, I manage enterprise-wide
21 regulatory initiatives across Eversource
22 Energy's operating companies, including
23 Public Service Company of New Hampshire.

24 Q. And have you ever testified before this

1 Commission?

2 A. (Rice) Yes.

3 Q. Did you file testimony and corresponding
4 attachments as part of the filing on
5 June 15th, 2021, marked as Exhibit 4?

6 A. (Rice) Yes.

7 Q. Were the testimony and supporting materials
8 prepared by you or at your direction?

9 A. (Rice) Yes.

10 Q. Do you have any changes or updates to make at
11 this time?

12 A. (Rice) Yes. I am also adopting the testimony
13 of Michael Goldman, filed jointly along with
14 my own. Mr. Goldman is no longer with
15 Eversource, but I'm directly familiar with
16 Eversource's managed charging proposal, which
17 was the substance of Mr. Goldman's testimony.

18 Q. Do you adopt your testimony today along with
19 the changes you just mentioned?

20 A. (Rice) Yes.

21 Q. Did you also file rebuttal testimony on
22 December 10th, 2021, marked as Exhibit 11?

23 A. (Rice) Yes.

24 Q. And was that testimony and supporting

1 materials prepared by you or at your
2 direction?

3 A. (Rice) Yes.

4 Q. Do you have any changes or updates to make to
5 that testimony at this time?

6 A. (Rice) No.

7 Q. So do you adopt the testimony today as it was
8 written and filed?

9 A. (Rice) Yes.

10 Q. Thank you.

11 Turning to Kevin Boughan. Mr. Boughan,
12 please state your name and the title of your
13 role at Eversource.

14 A. (Boughan) My name is Kevin Boughan, and my
15 position is manager of research and business
16 development at Eversource Energy Service
17 Company. And in that position I provide
18 service to the operating companies of
19 Eversource Energy, including the Company.

20 Q. And what are the responsibilities of your
21 role at Eversource?

22 A. (Boughan) I am responsible for development
23 strategies, including the development of
24 EV-charging programs across Eversource

1 Energy.

2 Q. Have you ever testified before this
3 Commission?

4 A. (Boughan) No.

5 Q. And did you file testimony in this docket?

6 A. (Boughan) No, but the Department of Energy
7 submitted discovery from Docket No. 21-078,
8 in which I am a witness. And I'm the witness
9 of record on some of the responses submitted
10 as Exhibit 13 in this proceeding.

11 Q. And were the responses within Exhibit 13,
12 where you are listed as a witness, prepared
13 by you or at your direction?

14 A. (Boughan) Yes, they were.

15 Q. Thank you very much.

16 So for my first question is for
17 Mr. Rice. Mr. Rice, could you briefly
18 explain why Eversource is not recommending
19 the three-period residential EV time-of-use
20 rate it proposed in the Company's June 15th
21 filing?

22 A. (Rice) Yes. Eversource is really interested
23 in opportunities to best serve EV customers
24 and encourage them to charge their

1 vehicles -- [connectivity issue]
2 [Court Reporter interrupts.]
3 A. (Rice) Eversource is very interested in
4 opportunities to best serve EV customers and
5 encourage them to charge their vehicles in
6 ways that minimize costs for the electric
7 power system. The Company just doesn't
8 believe that a separately-metered residential
9 EV time-of-use rate is the best way for it to
10 do that in the near term. Eversource would
11 incur meaningful costs to modify current
12 systems to make a three-period EV time-of-use
13 rate available to customers, but individual
14 customers wouldn't necessarily save much on
15 their bills from the rate. Eversource
16 estimated that a typical EV customer could
17 save less than a dollar per month by
18 enrolling in a separate EV rate. So it's
19 possible that few customers would actually
20 enroll in the rate after the Company spends
21 money to make the option available.
22 Eversource believes there are lower cost
23 approaches that may be more successful in the
24 near term and is also optimistic that there

1 will be better opportunities to provide EV
2 rates in the future when company systems are
3 updated and there are potentially more EV
4 customers that would be interested in
5 time-of-use rate options.

6 These considerations aren't unique to
7 New Hampshire. Eversource has evaluated
8 implementation of residential EV time-of-use
9 rates elsewhere in New England, and EV rate
10 options have been investigated by utility
11 commissions in Connecticut and Massachusetts.
12 These states have explicit EV adoption goals,
13 but regulators haven't found it necessary for
14 utilities to spend money to make
15 separately-metered EV residential rates
16 available at this time. These states are
17 pursuing other near-term approaches to serve
18 EV customers while still remaining open to
19 launching residential EV rates in the future.
20 The Company believes that's a sensible
21 approach for New Hampshire to follow as well
22 at this time.

23 Q. Eversource also proposed a managed charging
24 program in the June 15th filing. Is the

1 Company recommending that proposal at this
2 time?

3 A. (Rice) If the Commission wants to provide
4 options to EV customers in the near term that
5 encourages them to shift charging activity,
6 Eversource believes that managed charging is
7 a better solution. Eversource has launched
8 EV managed charging programs elsewhere in New
9 England, and those programs are being
10 expanded. The Company would be pleased to
11 offer similar options to New Hampshire
12 customers. Managed charging solutions can be
13 implemented in a fairly short time period
14 without the need for additional metering or
15 costly upgrades to enterprise IT systems.

16 Q. Thank you.

17 Mr. Davis, have any residential EV
18 time-of-use rates been proposed as an
19 alternative to Eversource's three-period
20 proposal? You're on mute, Ed.

21 A. (Davis) Yes. The Department of Energy,
22 through its consultant, Brattle Group, has
23 recommended in its testimony a two-period
24 time-of-use rate for Eversource to adopt.

1 Q. And does the Company agree with this
2 recommendation?

3 A. (Davis) No, it does not. The Department's
4 recommendation includes time-varying
5 components for all parts of the rate -- what
6 I mean by that is the generation and
7 transmission and distribution components.
8 That would require modifications to our
9 enterprise billing systems, which is costly
10 and time-consuming, and would vary depending
11 on the change that would ultimately be
12 required to the systems in question.

13 Additionally, Eversource has not seen
14 any analysis from the Department or its
15 consultant that demonstrates that customers
16 would see any meaningful savings, which means
17 there will still likely be few or no
18 customers that would enroll in the rate.
19 Without sufficient added value to customers
20 that would result in sufficient customer
21 enrollment, the customer [sic] does not see a
22 justification for investing time and effort
23 funded by customers to implement such a rate.

24 Q. Mr. Davis, is there a rate similar to the

1 rate that the Department proposed in its
2 testimony that the Company has offered in
3 lieu of the Department's proposal?

4 A. (Davis) Yes. In our rebuttal testimony, I
5 discussed rate alternatives that could more
6 readily be relied upon to develop and
7 implement a form of time-of-use rate,
8 including adaptation of a rate from the
9 Company's Connecticut affiliate, which is
10 Rate 7. That's a residential time-of-day
11 rate. However, instead of three rate
12 components being time-varying in that rate,
13 all of the generation and transmission
14 components would be time-varying from its
15 adoption and used for the Company's New
16 Hampshire residential customers. Because of
17 this being already offered by the Company's
18 affiliate, it would still require time and
19 cost to implement, but not to the same extent
20 of system modifications that the Department's
21 recommendation rate design would.

22 Alternatively, the Company's proposed
23 modified residential time-of-day rate,
24 designated rate R-OTOD-2, which is being

1 considered in Docket DE 21-119, would
2 theoretically be applied or could be
3 theoretically applied as a separate EV
4 time-of-use rate at a lower cost as a version
5 of the residential time-of-day rate that's
6 already being offered by the Company.

7 The Company's residential time-of-day
8 rate is also a two-component time-varying
9 rate; however, analysis and consideration of
10 that rate are ongoing. And they're part of
11 that separate docket, and of course they're
12 not complete. So the proposed modified rate
13 suitability for application as a residential
14 time-of-day rate has not been adequately
15 considered or analyzed at this time.

16 Q. Thank you. In your opinion, is there added
17 value to making all three rate components
18 time-varying as opposed to the two components
19 currently offered in either Rate 7 or the
20 residential time-of-day rate you just
21 described?

22 A. (Davis) Not really, no. There is no analysis
23 to support that there would be any real
24 measurable, additional savings to a customer

1 taking the rate. To the extent that price
2 signals are a benefit or priority to this
3 Commission, having two time-varying
4 components sends a price signal to customers
5 comparable to a rate with all three
6 components being time-varying.

7 Q. And does the Company recommend the
8 implementation of even a two-period
9 time-of-use residential EV rate at this time?

10 A. (Davis) Not at this time. The Company still
11 doesn't see sufficient value in implementing
12 a time-of-use rate in the near term in New
13 Hampshire, as there would still only be
14 minimal savings, which would not be expected
15 to motivate customer behavior to adopt the
16 rate. While few customers would be taking
17 the rate, the cost of implementation of the
18 rate would still be borne by all customers.
19 So at this time, even an adopted Rate 7
20 structure does not appear to the Company to
21 be a reasonable rate to implement; though, of
22 all the residential time-of-use rates being
23 discussed here today, for Eversource to
24 potentially implement a structural copy of

1 Rate 7 appears to be the most reasonable.
2 And for that reason, the Company would
3 recommend that, if the Commission were to
4 order Eversource to implement the residential
5 EV time-of-use rate, that it chooses such a
6 design as appropriate for the Company.

7 Q. Thank you. The next question is for Mr.
8 Moore.

9 Mr. Moore, Mr. Davis referenced
10 modifications to enterprise billing systems
11 that would make implementation of these
12 time-of-use rates costly and requires a
13 substantial amount of time and labor.

14 Can you explain why this is the case and
15 if there will be any upcoming changes to
16 these systems that would remove this cost
17 barrier for future implementation of
18 time-of-use rates?

19 A. (Moore) Eversource has historically sought to
20 minimize the enterprise IT costs ultimately
21 that are borne by our customers by utilizing
22 standard solutions and minimizing the use of
23 our -- maximizing the use of our current
24 systems and capabilities to defer those types

1 of costs. The existing enterprise systems,
2 they were implemented, you know, nearly 15
3 years ago. And in those early times, the
4 companies were still -- these systems are
5 still effective and still providing service,
6 but there was less interest back then on
7 these types of rate structures that varied
8 with the three-period time-of-use rates. And
9 those prior investments were made so that
10 these standard business solutions weren't
11 necessarily designed for these types of rate
12 structures. So even now we have structures
13 with more advanced rates emerging in the
14 industry and through most utilities
15 throughout the country to serve under these
16 fixed rate structures.

17 The cost to modify these billing systems
18 and rate structures can be high because we
19 implement them not only on the base system,
20 but it's across enterprise systems, given the
21 complexity of our delivery, which sometimes
22 includes third-party supply. As a result,
23 the process requires a good deal of work for
24 our internal company staff, both our

1 personnel and contractors.

2 Eversource does recognize, you know, the

3 trend towards these complex rates and will

4 continue to grow and expect that expanding

5 billing capabilities are the future

6 investment that's in the best interest of our

7 customers. Eversource has already begun sort

8 of that journey as we're replacing older

9 billing systems in our affiliates, and we

10 expect, you know, that trend to actually go

11 throughout the enterprise, including New

12 Hampshire, and ultimately moving us on a

13 common, more capable billing system in the

14 future. This should pave a way for a lower

15 cost implementation of these types of rates

16 in the future, as we're discussing today.

17 But seeing how the Company plans to upgrade

18 these systems in the future here in the

19 normal course of doing our business,

20 investments like structuring a complex EV

21 rate at this time may not be the best

22 alternative for our customers, as it may be

23 rendered obsolete, or we have to replicate

24 that work on the other side of a new billing

1 system implementation.

2 So in the next several years, we expect
3 the system will be, you know, modernized and
4 in better capability to handle these types of
5 rates at a much more reasonable cost and
6 obviously delivering that capability faster.

7 As I mentioned, any of these types of
8 costs are borne by our ratepayers, and they
9 incur these costs. And we ultimately want to
10 minimize the entire footprint as we look at,
11 you know, value to delivery with any new
12 system that may ultimately be replaced if
13 we're doing it in our current legacy system.
14 So for those reasons, we do somewhat see the
15 Company going through a more complex EV rate
16 structure may be problematic.

17 Q. Thank you, Mr. Moore.

18 Mr. Davis, I'd like to discuss a
19 particular kind of commercial customer and
20 user, the high-demand draw EV charging
21 station.

22 As discussed by the Department of Energy
23 on Tuesday, Order No. 26,394 from Docket IR
24 20-004, provided guidance regarding EV rates

1 to be developed, which prompted the opening
2 of this docket. That order stated that
3 electric vehicle time-of-use rates are an
4 appropriate rate design for residential and
5 commercial customers and that a separate
6 proceeding to adjudicate the merits of
7 various proposals from each utility is
8 warranted.

9 Did Eversource propose such a commercial
10 time-of-use rate in this docket?

11 A. (Davis) Not in this docket, no. Eversource
12 has ultimately tried to put forward solutions
13 that the Company believes best meet the needs
14 of the New Hampshire EV market at this time,
15 and we're going to do that through multiple
16 dockets. And that's what we're actually
17 doing. Eversource agreed to propose a
18 commercial EV charging rate that provides an
19 alternative to demand charges as part of a
20 settlement approved by the Commission in its
21 last rate case. The EV Charging
22 Infrastructure Commission created by Senate
23 Bill 517 identified demand charges as a
24 barrier that needed to be addressed, and we

1 know other stakeholders believe that as well.
2 So the Company has sought to address those
3 barriers with its proposal currently under
4 review in Docket DE 21-078.

5 The language in Order 26,394 also didn't
6 foreclose other approaches to rate design.
7 The order states that time-of-use structures
8 are appropriate for EV charging. And the
9 Company agrees time-of-use rates can be
10 appropriate. However, the order ultimately
11 described a starting point and provided an
12 opportunity to review actual proposals as the
13 next step in this docket. The Company worked
14 within that guidance and also considered
15 parallel EV activities as it tried to come up
16 with what it believed were the best proposals
17 to put forward to the Commission. Given that
18 the Company has already proposed the
19 commercial EV rate designed to meet the
20 near-term needs of the market, the Company
21 didn't believe it would be efficient to also
22 ask the Commission and the parties to review
23 a commercial EV time-of-use rate in this
24 docket that would serve a redundant purpose

1 to the demand charge alternative rate being
2 considered in DE 21-078.

3 Q. Thank you. The Department of Energy's
4 consultant, Dr. Sergici, in her testimony,
5 recommended a commercial time-of-use rate for
6 Eversource to adopt. Do you agree with this
7 recommendation, and could you please explain
8 your reasoning?

9 A. (Davis) I don't believe that Dr. Sergici's
10 commercial time-of-use rate should be adopted
11 at this time. Dr. Sergici used a class
12 average profile for Rate GV to design her
13 proposed commercial time-of-use rate. But
14 the type of customer this rate and
15 Eversource's demand charge alternative rate
16 are designed for, the commercial electric
17 vehicle charging station, has a drastically
18 different utilization profile than the class
19 average for Rate GV. And to be clear, the
20 design of Rate GV reflects a 55 percent load
21 factor. While Eversource's Rate GV is the
22 rate that EV commercial charging stations
23 would use, their usage does not fit the
24 average customer taking this rate. As I

1 stated in rebuttal testimony, by using the
2 Rate GV rate class average, Dr. Sergici's
3 proposal -- proposed commercial EV
4 time-of-use rate would risk higher
5 cross-subsidization by other customers to
6 cover the lack of revenue that would be
7 generated by any commercial EV charging
8 stations taking this rate. What's more, the
9 current state of development of the New
10 Hampshire EV market does not support offering
11 a commercial time-of-use rate for EVs. A
12 commercial EV time-of-use rate does not
13 sufficiently address what has been identified
14 as a priority market barrier for DC
15 fast-charging stations, that of demand
16 charges.

17 Q. Thank you. You just mentioned
18 cross-subsidization by other customers to
19 compensate for the lack of revenue generated
20 by the Department of Energy's proposed
21 commercial time-of-use rate. Dr. Sergici has
22 testified that Eversource's demand charge
23 alternative would also create
24 cross-subsidization between customer classes.

1 While the demand charge alternative is
2 not being considered in this docket, could
3 you provide a brief response regarding any
4 cross-subsidization that would be created by
5 the Company's demand charge alternative.

6 A. (Davis) Sure. Eversource was directed in the
7 Settlement Agreement from its distribution
8 rate case to design a rate that specifically
9 provides an alternative to demand charges
10 which have been identified by EV commercial
11 charging station customers to be the most
12 significant barrier to market entry. The
13 demand charge alternative that the Company
14 designed eliminates demand charges in favor
15 of a higher volumetric rate. To address
16 subsidies, we designed the rate such that we
17 had parity at a reasoned 10 percent
18 utilization level based on demand, such that
19 early market adoption where utilization may
20 be less than but growing to 10 percent would
21 not have a demand charge to deal with. It is
22 true that we used the utilization level of
23 10 percent as the target that achieves
24 revenue neutrality. And charging stations

1 that have a lower utilization will generate
2 less revenue than that of Rate GV customers.

3 But there are two things to keep in
4 mind. First, Eversource was directed to
5 address this parity to market entry so that
6 more EV charging stations could open in New
7 Hampshire, and this rate does exactly that.

8 Second, I've done an analysis that
9 compared side by side Dr. Sergici's
10 commercial time-of-use rate proposed by her
11 testimony with Eversource's demand charge
12 alternative rate. And as I've attested to in
13 rebuttal testimony, the Eversource demand
14 charge alternative creates less
15 cross-subsidization than Dr. Sergici's
16 time-of-use rate.

17 Q. And finally, Mr. Davis, do you believe that
18 the Commission should order Eversource to
19 implement either residential or commercial
20 time-of-use rates at this time?

21 A. (Davis) No. Eversource agrees that
22 time-of-use rates can be appropriate for EV
23 charging under the right conditions. The
24 Company just doesn't believe that there is a

1 supportive business case for the
2 implementation at this time. The Company
3 believes there are better alternatives to
4 provide EV customers in the near term, in
5 advance of potentially offering EV
6 time-of-use rates in the future.

7 Q. Thank you very much to all the witnesses.

8 MS. CHIAVARA: That is all I have
9 for direct examination. Thank you.

10 CHAIRMAN GOLDNER: Thank you. Just
11 a moment.

12 (Commissioners confer off the record.)

13 CHAIRMAN GOLDNER: Okay. Very
14 good. We'll start cross-examination,
15 beginning with Liberty Utilities. And I'll
16 recognize Mr. Sheehan.

17 MR. SHEEHAN: No questions for
18 these witnesses. Thank you.

19 CHAIRMAN GOLDNER: Thank you.
20 We'll move to Unitil, and I'll recognize Mr.
21 Taylor.

22 MR. TAYLOR: Thank you,
23 Commissioners. I have no questions for these
24 witnesses.

1 CHAIRMAN GOLDNER: Thank you.
2 We'll move to Clean Energy New Hampshire, and
3 I'll recognize Mr. Skoglund.

4 MR. SKOGLUND: Thank you,
5 Commissioners. Clean Energy New Hampshire
6 has no questions at this time.

7 CHAIRMAN GOLDNER: Thank you. And
8 we'll move to ChargePoint, and I'll recognize
9 Mr. Vijaykar.

10 MR. VIJAYKAR: Thank you, Chairman
11 Goldner. ChargePoint has no questions for
12 these witnesses.

13 CHAIRMAN GOLDNER: Thank you.
14 We'll move to the Conservation Law
15 Foundation, and I'll recognize Mr. Krakoff.

16 MR. KRAKOFF: Thank you, Chairman.
17 Just a few questions for Eversource's
18 witnesses.

19 CROSS-EXAMINATION

20 BY MR. KRAKOFF:

21 Q. I just had a question about the rebuttal
22 testimony, specifically Bates 20. Just let
23 me know once you find that page.

24 A. (Rice) I'm at Page 20. I don't know if that

1 question was directed to myself or another
2 witness.

3 Q. I'm sorry. I didn't quite hear you, Brian --
4 Mr. Rice.

5 A. (Rice) I'm at Page 20.

6 Q. Okay. And Mr. Davis and Mr. Moore --

7 A. (Davis) Yes.

8 Q. I think it's likely to be for Mr. Davis, but
9 it's really for any of the witnesses.

10 My question's about Lines 8 through 14.
11 I'll just read what was written in rebuttal.
12 It says Eversource is concerned that
13 introducing much higher rates for charging
14 during peak periods would make it more
15 difficult for charging station owners to
16 anticipate operating costs in a way that
17 would provide needed confidence in the
18 financial results of the charging station
19 operations. Furthermore, even if end-user
20 charging rates were aligned with TOU rate
21 structures, such higher rates would be
22 punitive to EV customers who have little
23 discretion to select the time at which it is
24 necessary for them to use high-demand draw at

1 DCFC charging facilities.

2 Could you just explain to me what you
3 meant by the second sentence in that
4 paragraph, please.

5 A. (Rice) You mean even if end-use charging
6 rates were aligned with time-of-use rate
7 structures, such high rates would be punitive
8 to EV customers?

9 Q. Correct. Yes, that sentence.

10 A. (Rice) Yeah. So, again, I think what we're
11 thinking about here is the DC fast-charging
12 application. Our understanding is this is an
13 application that will probably be used very
14 occasionally by most EV drivers. But when
15 they need to use a DC fast-charging station,
16 they will very much need to use it. For a
17 lot of driving needs, EV customers are going
18 to be able to charge at home. That's a
19 unique benefit of having an EV; you basically
20 have a gas station at your home. But in
21 those instances where an EV driver needs to
22 travel further beyond the range supported by
23 a single charge, they really need access to a
24 DC fast charger to do that effectively and

1 without a lot of disruption that would
2 ultimately deter a lot of people from owning
3 an EV. So this is a pretty critical
4 application to be available to encourage
5 further adoption of EVs. But as I've
6 explained, it's the type of application that
7 isn't very discretionary. If EV customers
8 were kind of concerned about, you know, what
9 the rate might be and when they might happen
10 to use a DC fast-charging station in the
11 course of their road trip, we'd be concerned
12 that that would be a deterrent to those
13 customers from purchasing EVs.

14 Q. Okay. So based on your testimony, I think
15 it'd be fair to say that users of DCFC
16 charging stations have limited ability to
17 shift charging time to other periods. Would
18 that be a correct statement?

19 A. (Rice) In most cases we believe that's
20 correct, for the use of DC fast-charging
21 stations, yes.

22 Q. Okay. And was that one of the reasons why
23 you did not design a commercial time-of-use
24 rate that would apply to charging stations?

1 A. (Rice) I think that's part of it. And Ed may
2 be able to respond.

3 I think what we'd be concerned about is
4 that, if we try to take the approach of
5 having a time-of-use rate while also
6 minimizing cross-subsidization, as Mr. Davis
7 noted, the illustrative time-of-use rates
8 initially proposed by Dr. Sergici in initial
9 testimony weren't high enough to mitigate
10 potential cost-subsidization. So to get to
11 generate revenue that was closer to Rate GV,
12 those rates would have to be higher, and that
13 would mean the peak rate could be quite high
14 and might rise to the level that it would be
15 a deterrent if that was passed on to retail
16 EV customers.

17 A. (Davis) I could add that that's correct.
18 There would be a sort of compounding effect
19 by having the higher volumetric rate, when
20 particularly under this scenario, as Mr. Rice
21 described, the demand charge really is the
22 fundamental barrier that we were addressing
23 in our design. But when you recognize also
24 having a higher peak period, particularly

1 when there's non-discretionary load, you
2 know, that adds to that effect of a higher
3 and perceptively punitive effect of the rate.

4 MR. KRAKOFF: Thank you very much.
5 I have no further questions for Eversource
6 witnesses.

7 CHAIRMAN GOLDNER: Thank you. Then
8 we'll move to the City of Lebanon and Mr.
9 Below.

10 [No verbal response]

11 CHAIRMAN GOLDNER: Okay. We'll
12 move to the Department of Environmental
13 Services. Ms. Ohler.

14 MS. OHLER: Thank you. I have no
15 questions.

16 CHAIRMAN GOLDNER: And we'll move
17 to New England Convenience Store and Energy
18 Marketers Association. Mr. Moran. I don't
19 see Mr. Moran.

20 [No verbal response]

21 CHAIRMAN GOLDNER: Okay. We'll
22 move to the Office of Consumer Advocate, Ms.
23 Desmet.

24 MS. DESMET: Thank you, Mr.

1 Chairman. I had discussed previously with
2 Attorney Buckley possibly following him, if
3 that pleases the Commission.

4 CHAIRMAN GOLDNER: Okay. Thank
5 you.

6 And we'll move to the New Hampshire
7 Department of Energy, and I'll recognize Mr.
8 Buckley.

9 MR. BUCKLEY: Thank you, Mr.
10 Chairman.

11 CROSS-EXAMINATION

12 BY MR. BUCKLEY:

13 Q. So I think that we will start with rebuttal
14 testimony of Mr. Davis.

15 And so we just heard some corrections
16 before that rebuttal testimony, Mr. Davis,
17 where you had suggested that your observed
18 40 percent of revenues that the DOE testimony
19 would have recovered compared to the demand
20 charge alternative rate proposed by
21 Eversource in its other docket would be
22 raised to 60 percent of compared revenues
23 after you factor in the customer charge; is
24 that correct?

1 A. (Davis) That is correct. Approximately
2 60 percent, yes.

3 Q. And so would that percent of compared
4 revenues raise even further under the -- if
5 Eversource were to embrace a rate similar to
6 that proposed in the settlement proposal,
7 where there is the addition of a half-demand
8 charge?

9 A. (Davis) Well, that design really hasn't been
10 developed. But in concept, if you modify the
11 rate design, there could be differences
12 compared to the analysis reflected in
13 rebuttal testimony. Certainly could be
14 higher or lower, depending on a number of
15 factors.

16 Q. Is it likely to be higher or lower if we're
17 simply adding a demand charge, half a demand
18 charge?

19 A. (Davis) Depends on the price level not only
20 for that demand charge, but also the
21 volumetric rates as well.

22 Q. Would you have reason to believe that
23 Eversource's rate, if it were to embrace a
24 rate similar to that described in the

1 settlement, would not approach the
2 revenue-neutrality levels described in the
3 settlement for the other two utilities?

4 A. (Davis) At the design point or at a given
5 usage point?

6 Q. At the 5 percent utilization point that
7 exists for Facility No. 1 in Attachment B
8 that we talked about yesterday.

9 A. (Davis) Certainly based on my understanding,
10 certainly of what was developed, presented
11 earlier in this docket, I would expect
12 that -- I would not expect to not be --
13 that's a double negative there. I would
14 expect that it would probably be higher.
15 Less of a difference, if you will.

16 Q. Okay. That's helpful.

17 All right. If I could ask you to turn
18 to Exhibit 3 -- that's your testimony --
19 Bates Page 3. And so that page, to me, seems
20 like a good summary of exactly the rate
21 that -- the residential rate that Eversource
22 developed responsive to the Commission's
23 directives in the order closing the
24 investigation that preceded this proceeding.

1 Is that accurate?

2 A. (Davis) Yes. In terms of the pricing for
3 those components of service, yes.

4 Q. And to me, that looks like a well-designed
5 rate, maybe with a qualifier here or there,
6 consistent with the various directives in the
7 Commission's previous order, you know, based
8 on cost causation, focus on marginal costs,
9 the three-period time-varying distribution,
10 transmission and generation. Is that
11 accurate?

12 A. (Davis) Yeah, I believe you see it that way.
13 And I certainly believe that's reflective of
14 all those factors, yes.

15 Q. Now, I mentioned the one small caveat, from
16 my perspective, or a few qualifiers. And so
17 I want to move to one aspect of the rate that
18 is at least discussed in the testimony, if
19 not proposed for implementation, and that is
20 the customer charge. So at -- it looks like
21 the customer charge here is proposed for
22 \$16.50; is that correct?

23 A. (Davis) That's correct.

24 Q. And so if I could ask you to turn to

1 Exhibit 13, Bates Page 11.

2 A. (Davis) Triangulating a lot of documents
3 here, but hang on.

4 Q. Certainly.

5 A. (Davis) Okay. Bates 11 you mentioned?

6 Q. Yes.

7 A. (Davis) Okay. I have that.

8 Q. And so this isn't actually a data response or
9 any sworn-to document, but it is in fact a
10 rate schedule I believe; is that correct?

11 A. (Davis) This is a summary of rates in effect
12 as of August 1st of 2020, and it includes
13 residential and a small general service rate
14 or pricing under the various rate structures
15 for the rate classes and the subclasses shown
16 on that page.

17 Q. And would you agree that this is -- well,
18 would you believe me if I told you that this
19 is a document that has been borrowed from a
20 another docket in this proceeding, some sort
21 of a rate change, and could be something
22 that, if the Commission so chose, they could
23 take administrative notice of because it's
24 something that's been filed by Eversource in

1 a different docket before them?

2 A. (Davis) If this is on the record and is a
3 published document, it certainly appears to
4 be reflective of the actual pricing as I
5 described in effect at the time.

6 Q. Great.

7 A. (Davis) So certainly I think it would reflect
8 any -- again, this is a summary. But it
9 certainly, I would expect, would match what's
10 approved by the Commission in our tariffs,
11 again, in effect at that time.

12 Q. And so we mentioned the customer charge of
13 \$16.50 as proposed -- or as discussed in your
14 testimony. How does that compare to the
15 customer charge for a standard residential
16 customer as observed in this rate schedule?

17 A. (Davis) For a regular-use customer, we
18 have -- okay. Standard on this schedule,
19 \$16.50 is higher than the customer charge in
20 the standard rate.

21 Q. And can you explain to me the basis for that
22 difference?

23 A. (Davis) \$13.81 is the customer charge in the
24 standard rate for a residential customer, and

1 that is the rate approved in our settlement
2 in Docket DE 19-057. The basis of that, in
3 spite of cost of service indicating a higher
4 cost, was reached through settlement.

5 Q. And so your justification for those two rates
6 differing is that one is a settled rate and
7 one reflects the marginal cost of serving the
8 customer?

9 A. (Davis) No, not -- well, partially. But more
10 importantly, the customer charge -- again,
11 first of all, the true basis is ultimately
12 settlement. The cost of service -- and let's
13 recognize this standard rate is for what I'll
14 refer to "whole house service" -- in other
15 words, all the costs to provide service to a
16 residential customer are part of the overall
17 accounting or embedded or allocated cost of
18 service for this class. And there are pure
19 customer costs, there are local facilities
20 costs, and there are demand-related costs,
21 all associated with the cost of providing
22 service to this rate class. And by
23 application of rate design principles, all
24 consideration and ultimately deciding on how

1 and where those costs are recovered -- and
2 what I mean by that is whether they're
3 through a customer charge or a volumetric
4 rate. And I'm just going to focus on the
5 distribution rates in this case. I presume
6 that's what you're focusing on. But each of
7 these rates are designated to be recovered in
8 a certain way based on the approved
9 allocation of revenue requirements and cost
10 of service for these classes.

11 The customer charge, \$13.81, does not
12 reflect the full cost of service to this
13 class for customer-related and local
14 facilities costs under the distribution
15 system. They reflect a portion of that that
16 is designated as fixed and charged monthly.
17 Any differences are spread and recovered from
18 the volumetric rate. And for a standard
19 residential Rate R customer on this table,
20 any cost not recovered through the fixed
21 customer charge of \$13.81 is spread and
22 included as part of the 4.508 cents in the
23 volumetric rate.

24 So, again, what's really critical here

1 is that ultimately the cost of providing
2 service to this class, being what it is, the
3 agreement and settlement to set the customer
4 charge was agreed to be \$13.81.

5 Q. Okay. Can you tell me about the controlled
6 water heating rate also on the schedule?

7 A. (Davis) What would you like to know?

8 Q. Does that rate -- I see that rate includes a
9 meter charge.

10 A. (Davis) It does.

11 Q. And can you tell me what might make up -- why
12 that meter charge might be different from the
13 residential customer meter charge?

14 A. (Davis) There's two primary reasons. First
15 of all, let's recognize that controlled water
16 heating is really complementary to the
17 service to the whole house, meaning a service
18 comes in to provide service to the
19 residential customer, and there's a split
20 service, meaning we're not adding an
21 additional transformer, maybe using the same
22 primary service into the home. But we split
23 that service and put a simpler, less
24 expensive meter to capture that split-off

1 service, if you will, to provide electricity
2 to specifically water heating load, again, at
3 the same residence. But rather than include
4 the water heating within the whole house
5 rate, it is recognized as a separate service,
6 again, still from the same main transformer
7 and service to that home.

8 Q. In your discussion, was that --

9 A. (Davis) So the costs -- I apologize. I just
10 want to finish.

11 So the costs are simply lower for
12 providing service to that, to the water
13 heating service for residential customers.

14 Q. In your description of the split service and
15 how it makes the costs simply lower, wouldn't
16 that also apply to a separately-metered
17 electric vehicle rate?

18 A. (Davis) It could. On that same schedule,
19 down below we have Rate R-OTOD. And for
20 example, there you're seeing a customer
21 charge of \$32.08. But that is a separate,
22 really, whole house service. However, if one
23 were to look at, for example, the water
24 heating rate -- again, you're really

1 splitting the service to the whole home. So
2 when you started this line of questioning,
3 you had me focused on the \$16.50 per month
4 charge. And I note that in Exhibit 5 we also
5 flag a point -- and I'll just say it here,
6 that the \$16.50 rate design and the pricing
7 that is recognized in Exhibit 3, Bates 3,
8 that you referred to earlier, are all
9 predicated on a split service again to the
10 same -- to a residential customer.

11 So, for example, in that standard rate,
12 if you're a residential customer, and
13 analogous to the water heating, if you were
14 to separately meter, split the service and
15 separately meter service to an electric
16 vehicle charger, the meter cost reflected in
17 the \$16.50 is required. There's a cost --
18 there's a meter that needs to be added and
19 cost of that meter, which is more costly and
20 more complex because it's a time-of-day
21 meter. But it's certainly included in the
22 \$16.50.

23 You're assuming, as with water heating,
24 that the customer is not going to incur a

1 higher cost or cause that entire service to
2 that home to drive a higher cost to serve
3 that home, meaning, for example, they
4 wouldn't need a larger transformer if they
5 weren't adding their additional six or
6 seven-plus kilowatt load to the load of the
7 whole home. All right.

8 Q. Right. It assumes that --

9 A. (Davis) That's where other pricing comes into
10 play. So if they were to -- there's
11 additional costs that would be incurred. And
12 the rate design on Bates 3 of Exhibit 11 --
13 I'm sorry, Exhibit 3, we have factored in the
14 amount of costs for local facilities into the
15 mid-peak and peak rates, assuming that
16 customers would charge off-peak and they
17 would not incur a larger demand. But if they
18 did, what I've done is taken additional costs
19 above the \$16.50 and spread those into the
20 volumetric rate.

21 Q. Okay. So returning to the split-service
22 idea. The water heating rate itself you said
23 is lower to some degree because there is that
24 split service. And I think you also said

1 that the electric vehicle rate would share a
2 similar split service and not have additional
3 line-related costs if it were charging
4 off-peak primarily.

5 Can you tell me a little bit about the
6 meter for the controlled water heating rate?
7 Where is it located?

8 A. (Davis) So, first, just back to finish your
9 statement just a moment ago, and I'll jump
10 right to your question. But it's an
11 assumption that a customer would, as a
12 condition of the proposed rate, that they
13 would be on a split service. I just want to
14 make that point, to make sure it's clear.

15 Where is the meter located? I believe,
16 my understanding is it's located adjacent to
17 or along with the existing home meter at the
18 premise, you know, the customer's premise.

19 Q. Does the Company have some meters that are
20 located inside a customer's premises?

21 A. (Davis) I don't know factually, but I would
22 assume they may. I can certainly check on
23 that and get an answer for that.

24 Q. I think your assumption is probably fine for

1 our purposes today.

2 And so as we're looking at this \$13.81
3 customer charge for residential customers,
4 the 16, I think, 80 proposed customer charge
5 for residential time-of-use rate EV
6 customers, and the \$8.58 customer charge that
7 is currently for the so-called
8 "split-service" controlled water heating
9 customers and their meter, how does that
10 compare to the rates observed in Attachment A
11 for both Unitil, and I think Liberty as well,
12 of the settlement? So that's Exhibit 24,
13 Bates page...

14 A. (Davis) What is the Bates page?

15 Q. I think we're at Bates Page 16.

16 A. (Davis) All right. You just want me to read
17 what's on this page?

18 Q. Sure.

19 A. (Davis) Bates Page 16. You mentioned what?
20 Both Liberty and Unitil?

21 Q. Yes, their customer charges.

22 A. (Davis) Okay. So those customer charges are
23 lower.

24 Q. And so would you agree --

1 A. (Davis) It depends. You mentioned three
2 different rates. I think you mentioned
3 \$16.80, but I think you meant \$16.50. But
4 regardless, relative to the water heating
5 rate, they're lower and higher for Unitil and
6 Liberty respectively, and they're both
7 lower -- those two rates on Bates 16 are
8 lower than all the other rates that you
9 mentioned.

10 Q. And so just to add a little more color into
11 what's in those customer charges, or what the
12 basis is for those customer charges, would
13 you agree with me, subject to check, that
14 that \$5.26 customer charge for Unitil
15 represents only the carrying costs associated
16 with the additional meter and --

17 A. (Davis) I have no insight into the basis for
18 those charges.

19 Q. So we do not have the testimony of John
20 Taylor as an exhibit in this docket, though
21 it is much of the analysis that underpins the
22 Unitil time-of-use rates. It is included
23 along with their proposal within DE 21-030.
24 And if you were to look at -- and that's at

1 Tab 6. If you were to look at Bates
2 Page 1,408 of that, you would see exactly
3 that. That represents only the carrying
4 costs associated with the additional meter.
5 I'm not asking you to do that. I'm just
6 observing here.

7 And then I would also ask, are you aware
8 that the customer charge for Liberty's
9 separately-metered residential EV time-of-use
10 rate, which you've just observed is \$11.35 a
11 month, represents the monthly revenue
12 requirement for the meter of \$6.62 plus the
13 cellular data cost to read the meter for each
14 month of \$5?

15 A. (Davis) I'm not aware of that. I'm just
16 looking at the prices that you asked me to
17 look at. And if they're facts that you're
18 identifying, I have to take them at face
19 value that they are what you say they are.

20 Q. Okay. Now if I could ask you to move to
21 Exhibit 3, Bates Page 9, starting at Line 11.

22 A. (Davis) I apologize. Which Bates page again?

23 Q. Bates Page 9 I think it is.

24 A. (Davis) Nine? Okay.

1 Okay. And which line again?

2 Q. Line 11, I believe.

3 A. (Davis) The question?

4 Q. So it looks here like you discuss the bill
5 savings under the Eversource-modeled TOU rate
6 as compared to the regular residential rate
7 which is presented in more detail at
8 Attachment EAD-4; is that correct?

9 A. (Davis) That's correct.

10 Q. And the bill savings you calculated here,
11 does it rely at all on cost savings
12 associated with gasoline versus the cost of
13 electricity?

14 A. (Davis) This is strictly a rates and bill
15 impact.

16 Q. So it does not.

17 A. (Davis) This design does not rely on that.

18 Q. Okay. Great. If you could turn now to
19 Bates 15, Line 12 in that same exhibit.

20 A. (Davis) Correct.

21 Q. And what are we looking at here, this overall
22 page?

23 A. (Davis) Well, this says this page is to
24 illustrate or evaluate -- illustrate the net

1 savings for either a battery or plug-in
2 hybrid electric vehicle, you know, given the
3 assumed kilowatt hours per charging in a
4 given month, and further, how much of that
5 could be considered charging at home. So
6 there's an assumption of 80 percent here, how
7 many kilowatt hours would the customer be
8 charging at home.

9 So, for example, the battery electric
10 vehicle 2021 at-home charging kilowatt hours
11 is assumed to be 260 kilowatt hours. So that
12 would be our starting point. And then we are
13 illustrating what the savings would be for
14 that customer charging for that month when
15 you compare the off-peak rate to the
16 residential Rate R rate. So the flat rate
17 versus the off-peak rate, how much lower
18 would the bill be, or what are the savings
19 that are presented as positive values, \$7.93,
20 \$4.71, \$4.16, totaling \$16.81.

21 So, again, just to keep in mind, you're
22 comparing what they would pay if they just
23 charged using their regular standard rate, as
24 you referred to earlier, versus having a

1 three-period time-of-use rate, with the
2 off-peak rates listed down on Lines 31
3 through 33, and how much additional -- how
4 much lower would their bill be comparatively
5 on those off-peak rates. And then because
6 it's a separately-metered rate, you have
7 to -- there's an additional customer charge
8 because you're adding a meter. And the rate
9 includes \$16.50, as shown on Line 20.

10 So while you might have -- again, this
11 is best case, if the customer charged all of
12 their usage off-peak --

13 Q. So I want to ask you about a certain --

14 A. (Davis) Did you want me to finish?

15 Q. -- at least one of the assumptions in here.

16 A. (Davis) Did you want me to finish?

17 Q. Sure.

18 A. (Davis) Okay. So all the savings
19 volumetrically, if they charged entirely
20 off-peak, is \$16.81, offset by the need for
21 an additional meter and additional customer
22 charge nets out to a net savings of 31 cents.
23 Sorry. I just had to finish that. I wanted
24 to make sure we had a complete explanation to

1 answer your question of what we're looking
2 at.

3 Q. No, that's helpful.

4 So I want to ask you about one of the
5 assumptions in here, and that relates to the
6 total monthly charging. And that was
7 estimated by the Company at 325 kilowatt
8 hours; is that correct?

9 A. (Davis) That's correct.

10 Q. Can you tell me where that figure comes from?

11 A. (Davis) I received -- we had a projection,
12 just an estimate, of what a customer with a
13 battery electric vehicle would charge if they
14 were using the vehicle regularly. I did rely
15 on information from Mr. Boughan to --
16 actually, that's a number I actually did
17 receive from our internal evaluation of what
18 that type of vehicle would utilize in a given
19 month. So, sorry. Long story short, it's
20 our internal estimate of what such a vehicle
21 would charge typically in 2021.

22 Q. And Mr. Boughan, this was an estimate you
23 provided?

24 A. (Boughan) That's correct. It's based on an

1 average EV efficiency, an average number of
2 miles driven. In this case, we used 12,000
3 or 12,500. I need to check. One of the two.
4 But it's based on the average New Hampshire
5 driver drives in a year, based on Federal
6 Highway Association numbers. So there's a
7 set of assumptions, but it's a derived
8 number, a calculated number.

9 Q. Okay. That's very helpful. And so I was
10 trying to back my way into this number to
11 figure out how many miles per month are
12 assumed, and you just told me that it's
13 around 1200 or so.

14 A. (Boughan) It would be 12,000 miles per year.

15 Q. Oh, okay. So about 1,000 miles a month or
16 so.

17 A. (Boughan) Correct.

18 Q. And so can you tell me how far it is from
19 Nashua to Boston, or Manchester to Boston?

20 A. (Boughan) Not without looking it up, no.

21 Q. Would you agree, subject to check, that if
22 you Googled it, it's about 50 miles?

23 A. (Boughan) Sure. Yes.

24 Q. And so if you took that 50 miles one way,

1 that would result in about 100 miles a day.
2 And if you worked, let's say five days a week
3 commuting from Nashua to Boston, that brings
4 us to about 2,000 miles a month; is that
5 correct?

6 A. (Boughan) Essentially.

7 Q. And for a customer who commutes from Nashua
8 to Boston, or Manchester to Boston, what
9 would their bill savings look like compared
10 to the 31 cents that was modeled by the
11 Company?

12 A. (Davis) As you increase the kilowatt hours
13 and depending on how much home charging
14 occurs?

15 Q. Correct.

16 A. (Davis) Then the higher the volume, the
17 greater the savings, the net savings.

18 Q. And so if we were to assume that that
19 2,000-mile-a-month ratepayer is charging at
20 home every night for its regular commute --
21 so you've got that approximate 300 and --
22 well, not 325. Would we essentially be able
23 to take that \$16.81 and double it? Would
24 that customer have closer to, let's say round

1 numbers, \$17 a month or \$20 a month in bill
2 savings if we were to assume they were
3 charging every night at their home?

4 A. (Davis) If it's truly 20 percent. I mean,
5 again, that scenario, higher usage would --
6 could double it. Depends on whether they
7 charge on the way, at work, et cetera. But
8 any use case is going to be different. So if
9 you have a higher volume of home charging --
10 again, we're talking about that service to
11 the home -- then of course the economics will
12 be higher or lower, depending whether there's
13 more or less usage.

14 Q. And if Eversource were to adopt the method
15 used by Unitil for determining a customer
16 charge that is including only the carrying
17 costs associated with a separate meter and
18 the customer charge, that number would be
19 even higher than the \$17, \$20 a month,
20 ballpark; is that correct? Might be 25 --

21 A. (Davis) I don't know. First of all, our
22 costs are different. Second, I don't think
23 those costs would be spread over all or
24 just -- I think it would include spreading

1 costs over the off-peak. You have to be
2 careful. So I don't know if I would agree
3 with that or disagree.

4 But you have to recognize two things
5 first. You have to look at Eversource's
6 specific costs, regardless of method or
7 methodology, whatever you want to refer to it
8 as, for setting the customer charge. But to
9 the extent costs are recovered through the
10 volumetric rate in one or more of the time
11 periods, clearly -- and this is certainly
12 true with the standard rate and water heating
13 and any other rate. If we have fixed costs
14 that need to be recovered, and they, for some
15 reason, aren't included in the customer
16 charge, they would have to be spread over the
17 volumetric rate because that's the structure
18 typically for residential. And that's
19 certainly the structure we're referring to
20 here. And I don't think you can just push it
21 all into the -- out of the off-peak. It's
22 fixed costs that have to be recovered. So I
23 would not advocate a design that does two
24 things: Reduces what's truly a fixed monthly

1 cost and then further avoids recovering that
2 through the volumetric rate by throwing it
3 into a period of usage that the customer
4 wouldn't be charging. So there's a trapped
5 or unrecovered cost, in my opinion.

6 Q. And how about if, let's just say in the
7 hypothetical world where Eversource were to
8 embrace the use of net metering and the
9 charging, where there wouldn't be the
10 additional carrying charge of the customer
11 meter. And I understand that this is not
12 something that Eversource has proposed to
13 embrace in its testimony. But that would
14 increase the savings to the electric vehicle
15 customer as well, right, by reducing --
16 probably reducing the overall charge by --
17 the customer charge by that \$5 to \$6,
18 depending on if you're going with Liberty or
19 Unitil's estimates per month; is that
20 correct?

21 A. (Davis) Mathematically, if you reduce the
22 customer charge, then of course that will
23 affect the economics and the savings
24 calculation. That seems like a non-sensical

1 assumption, because you need a meter. And
2 even without a meter, there are still other
3 fixed costs associated with the service.

4 Q. Associated with that split service; correct?

5 A. (Davis) That's correct.

6 Q. Okay. Now, aside from bill savings to
7 participating customers -- those EV owners,
8 that is -- is it conceivable that price
9 signals associated with time-of-use rates at
10 scale would avoid capacity-related
11 investments at some point in the future, in
12 particular at let's say a substation or bulk
13 substation level?

14 A. (Davis) I don't think it guarantees anything.
15 It provides an opportunity, provides a signal
16 that customers can respond to --

17 Q. I would agree with you --

18 A. (Davis) Go ahead.

19 Q. I would agree with you. There are no
20 guarantees in life. But would that price
21 signal have the potential to avoid future --
22 or encourage customers to behave in a way
23 that helps avoid future capacity-related
24 investments?

1 A. (Davis) Well, it certainly would encourage
2 them, if they were to behave and respond to
3 that, to reduce usage, which could have an
4 effect on such investments.

5 A. (Rice) One thing that I would jump in and add
6 to Mr. Davis' response is that --

7 [Court Reporter interrupts.]

8 A. (Rice) For that to happen under the rate
9 proposals that are proposed now, which are
10 all optional EV time-of-use rates, customers
11 would have to enroll in the rate in order to
12 respond to those price signals. And I think,
13 as Eversource has indicated, one of our
14 primary concerns is that customers will not
15 elect to enroll in these rates in high
16 numbers at this time.

17 Q. Right. And one of your bases for that
18 assertion is that there's only 31 cents bill
19 savings. And I think we just spent the last
20 15 minutes or so discussing that that bill
21 savings number could in some scenarios be
22 much higher. Is that correct?

23 A. (Rice) It's possible in certain scenarios
24 that the savings calculations for an

1 individual customer could be higher. But,
2 you know, a potential exception to averages
3 doesn't relate -- you know, get rid of
4 Eversource's general concern about low
5 enrollment in an EV time-of-use rate that the
6 Company would have to devote time and
7 resources to implement.

8 Q. Understood. And I would pose the same
9 question to you relative to transmission
10 rates. Is the same true, that the price
11 signal sent related to transmission rates
12 could, you know, in theory at least, help to
13 avoid, at scale, capacity-related
14 investments?

15 A. (Davis) Look, this is an interesting set of
16 assumptions. Long run, for example --

17 Q. Yes.

18 A. (Davis) -- if that pattern prevailed, so it's
19 not just shifting load, but having an effect
20 on those investments -- and I think we're
21 getting into a very deep, perhaps
22 out-of-scope topic.

23 But in any event, remember the pricing
24 here is optional now for transmission. We

1 are a customer of the transmission system, a
2 distribution company, and our rate design
3 which allocates transmission costs to each of
4 our classes. We are still a price taker. As
5 I think you're familiar, transmission
6 service, not all the costs of transmission
7 service, but transmission services primarily
8 charge on a demand basis. So the time of day
9 when that demand occurs is important for
10 total costs billed to the Company, as with
11 any transmission customer. It further is
12 allocated based on each class's contribution
13 to that peak. And if you're bringing on new
14 load, such as electric vehicles, and they
15 don't charge -- don't incur -- you know,
16 cause a load to be incurred during the time
17 of those transmission peaks, the bill would
18 be lower --

19 Q. Thank you, Mr. Davis.

20 A. (Davis) -- to the utility.

21 Q. And that bill to the utility being lower
22 would flow through to customers; is that
23 correct, hypothetically and conceivably?

24 A. (Davis) It would, yes. Exactly.

1 Q. And that would flow through not just to the
2 electric vehicle customers, both those
3 avoided transmission- and possibly
4 distribution-related, long-run investments,
5 but it would also flow through those savings
6 to non-participating customers -- is that
7 correct -- non-EV owners, all else being
8 equal?

9 A. (Davis) Well, you know, if you're including
10 electric vehicles or designating them as a
11 separate class, I guess it would just be a
12 proper allocation. I don't know if it would
13 have a net overall effect.

14 Now, if you're referring to what's
15 billed -- that's what I'm talking about --
16 that's true. And remember, this is new load,
17 so you're simply not adding costs and adding
18 charges.

19 I also want to point out, you asked
20 about investments in transmission. And
21 that's a whole different story, right. That
22 extends to investments in the process and
23 need, determination of need. And marginal
24 costs being the basis for pricing, you know,

1 reflects any change in investment versus
2 change in load. You know, that is a long,
3 kind of convoluted thread of how you get to
4 answer that question. I don't think we can
5 address it or even answer it here.

6 But from what's billed to the Company,
7 and whether that billing not only reduces the
8 allocation of, like, lower costs and
9 therefore the allocation of transmission
10 costs billed to the Company among classes, it
11 could. I think it would be a much deeper
12 analysis. But it could have an effect on
13 what is allocated to any class because you're
14 looking at total cost, then allocated among
15 classes. So that's a long answer, but, you
16 know, it's not -- it doesn't preclude that
17 possibility.

18 Q. And so one more question on this topic and
19 then I'll move on.

20 Would you further agree with me that, if
21 we encourage kilowatt-hour usage during
22 off-peak periods that are not likely to
23 trigger capacity upgrades, that would spread
24 the cost of the existing system over more

1 kilowatt hours, thereby creating a downward
2 pressure on rates?

3 A. (Davis) I guess that would be determined at
4 the time we would evaluate the cost and --
5 you know, to be determined.

6 Q. But in concept, we have fixed system costs
7 largely related to kilowatt; is that correct?
8 And to spread those costs, if we wanted to
9 increase peak over more kilowatt hours, would
10 place a downward pressure on rates; is that
11 correct?

12 A. (Davis) If you're just looking at the
13 mathematics of it, obviously X-amount of cost
14 divided by higher volume is going to give you
15 a lower average rate. And you -- and I think
16 what you characterize there, there are both
17 fixed and demand -- you know, the
18 distribution system, if that's what you're
19 referring to, has both fixed and variable
20 costs -- variable meaning demand-related.
21 And so, you know, it's really still a matter
22 of capacity. But if you're trying to spread
23 and get an average rate effect,
24 mathematically that would be true I guess.

1 Again, I'd have to see the numbers and, you
2 know, see what falls out of those. And that
3 would require an evaluation of cost for a
4 given period, a process that we normally
5 would go through to evaluate, to make that
6 kind of evaluation.

7 Q. All right. Thank you, Mr. Davis.

8 Now I want to move to a few questions
9 about the cost of billing system
10 modifications.

11 If I could ask you to turn to Exhibit 3,
12 Bates Page 9, Lines 6 through 10. Would I be
13 correct in observing that, I think it's you,
14 Mr. Davis -- oh, actually, I'm directing you
15 to the wrong Bates page. I should have said
16 Bates Page 7, Lines 14 through 22.

17 So am I correct in observing that you
18 state that this rate was designed to address
19 pricing of company-provided energy service,
20 and it does not resolve the issue of how to
21 set or bill prices on a time-of-use basis for
22 competitive supply?

23 A. (Davis) That's correct.

24 Q. And to bill on a time-of-use rate basis and

1 allow competitive suppliers to participate,
2 that would require modifications to your
3 systems, including your EDI system; is that
4 correct?

5 A. (Davis) I believe we provided information to
6 that effect. And if Mr. Moore would like to
7 further respond --

8 Q. Maybe I'll move to Mr. Moore in just a
9 moment.

10 But one more question for you, Ed, which
11 is, in the Commission's order preceding this
12 proceeding, they directed that the
13 time-of-use supply offering be for default
14 service customers -- is that correct -- not
15 competitive supply customers? Or they didn't
16 require it be for competitive supply
17 customers, and rather that it would be
18 imputed from the utilities' default service
19 rate; is that correct?

20 A. (Davis) I don't remember all of those
21 specific references. But my understanding is
22 that it targeted the generation component in
23 general. But if you have a specific
24 reference, I'd be glad to look at that.

1 Q. Maybe a follow-up to you, Mr. Davis. In
2 Connecticut, Eversource offers an imputed
3 time-varying generation offering; right? Can
4 you just give me 15 seconds on that, if you
5 can?

6 A. (Davis) Sure. So if you're referring to
7 Connecticut residential Rate 7, which we've
8 referenced here a couple times, that takes
9 our cost of supply and imputes and forces,
10 for residential, a 3-1/2 cent differential
11 between -- it's a two-period time-of-use
12 rate, so it's 3-1/2 cents, you know, AB
13 algebra, to equal the total rate by creating
14 a difference of 3-1/2 cents between the peak
15 and the off-peak rates. Did that take 15
16 seconds?

17 Q. That was perfect, Mr. Davis.

18 And do you remember any safeguards
19 proposed in the Commission order around
20 soliciting a separate tranche of these
21 imputed customers once you get to a certain
22 amount of customers from the default service
23 market using their new load shape, which is
24 going to be different from the load shape of

1 the overall residential rate class?

2 A. (Davis) Well, I'm not sure what you mean by
3 "safeguards." But I don't recall any,
4 offhand.

5 Q. Okay. I don't have that order in front of me
6 right now, but we could potentially return to
7 it later.

8 Now I'll turn to Mr. Moore. Can you
9 turn to Exhibit 13, Bates 29 through 33.
10 Would I be correct in saying that this
11 portion of this exhibit describes the costs
12 that underpin the Company's \$9 million
13 estimate that relates to offering
14 three-period time-varying generation,
15 transmission and distribution rates
16 consistent with the Commission's order
17 preceding this proceeding?

18 A. (Moore) That is correct -- [connectivity
19 issue]

20 [Court Reporter interrupts.]

21 A. (Moore) That is correct.

22 Q. Now, can I ask you to tell me about, at
23 Bates 30, Key Assumption No. 2, that says
24 "Assumes that three-part usage data will be

1 sent to competitive suppliers for purposes of
2 pass-through billing and that changes will be
3 made to C2 billing system for Eversource to
4 bill three-part prices on behalf of
5 competitive suppliers for complete billing."

6 A. (Moore) Yeah, in the current --[connectivity
7 issue]

8 [Court Reporter interrupts.]

9 A. (Moore) Yeah, in our traditional rates, when
10 we bill for competitive suppliers, we have to
11 bill on behalf of them within our system. We
12 actually get their price signals and share
13 information through our EDI with those
14 suppliers for rate changes, adjustments and
15 those billings. So if we are actually
16 allowing these new EV rates to encompass
17 competitive supply, it requires us to change
18 those enterprise EDI and supplier systems.
19 As those change, those do allow for these new
20 components.

21 Q. And so I'm curious. Why, given that Mr.
22 Davis's testimony said that the Company would
23 not be making a time-varying supply component
24 available to competitive suppliers, or

1 through competitive suppliers, why that was
2 factored into the cost estimate provided
3 here.

4 A. (Moore) I won't speak for Mr. Davis, but I
5 believe when that price was filed, that was
6 not the case. It was asked for all three
7 components to be varying.

8 But Ed, you can chime in.

9 A. (Davis) Yeah. Remember the timing of this
10 and when we filed our proposal, you know, it
11 is -- you know, what I described is what I
12 said. But this was a request to evaluate
13 what it would take to do what is detailed in
14 this response.

15 Q. I'm not sure I understand that.

16 A. (Davis) What's the question again, please?

17 Q. So the question was why the Company included,
18 in the costs of offering the time-varying
19 rate that the Commission directed and that
20 the Company developed, a cost for offering
21 that time-varying component for competitive
22 suppliers. In your testimony, you said that
23 this won't be available for competitive
24 suppliers and that it would, instead, like in

1 the Connecticut rate, be imputed through your
2 default service. But then in the cost
3 estimate that's provided, it does include
4 costs related to overhaul of the Company's
5 EDI system in order to offer that rate to
6 competitive suppliers.

7 A. (Davis) I was simply describing what's done
8 in Connecticut to your earlier question.

9 A. (Rice) I think I can help explain, because I
10 think we're getting somewhat confused with
11 what's being -- [connectivity issue]

12 [Court Reporter interrupts.]

13 A. (Rice) I'll take an attempt to clarify
14 because I think we're getting our hairs
15 crossed a bit. And Mr. Davis can correct me.

16 But the imputing that we do in
17 Connecticut does not apply -- we're not
18 imputing any price difference on pricing
19 provided by a third-party competitive
20 supplier that a customer may choose in lieu
21 of utility supply default service. We're
22 imputing a price differential on the version
23 of default service in Connecticut because
24 that is also put out to bid and based on, you

1 know, competitive market pricing. But we
2 typically don't receive time-differentiated
3 pricing from our default service suppliers.
4 So we impute a price differential.

5 Is that correct, Mr. Davis?

6 A. (Davis) That's correct.

7 A. (Rice) And then --

8 Q. And Mr. -- go ahead, Mr. Rice.

9 A. (Rice) And I'll also say the Company did make
10 a conscious decision to estimate the cost of
11 making a EV time-of-use rate available both
12 to default service customers of the utility
13 and customers that might choose to take
14 service from a third-party supplier, or,
15 importantly, perhaps going forward in New
16 Hampshire, a community aggregation that
17 sought to provide supply to its customers.
18 We just didn't -- we took a conservative
19 approach, not wanting to assume that we would
20 be able to provide a rate option only to
21 those customers that chose to take service
22 from the utility out of concern that that
23 might not be, you know -- that that might
24 limit opportunities for other suppliers to

1 serve customers in a similar way.

2 Q. Right. But we already heard from Mr. Davis
3 that, at Bates 7, Lines 14 through 22 of his
4 testimony, it says that the proposed rate
5 does not resolve the issue of how to set or
6 bill prices on a TOU basis for competitive
7 supply. And the \$9 million figure used to
8 justify -- used to set the price for offering
9 Mr. Davis's proposed rate includes costs
10 related to setting or billing prices on a TOU
11 basis for competitive supply. Is that
12 correct?

13 A. (Rice) Well, I mean, the reason we didn't
14 address setting third-party competitive
15 supply pricing is because the utility doesn't
16 set third-party supply pricing; the market
17 sets that. So that's one item.

18 And then in terms of billing, I mean, I
19 think you're really drilling down into one
20 word. I think my interpretation of Mr.
21 Davis's response was very sensible. You
22 know, we don't really get into setting prices
23 or, you know, getting into the relationship
24 between a third-party supplier and their

1 customer. But that doesn't change what we
2 felt was appropriate to do, which was not
3 assume that we could limit this type of
4 option to only utility-provided default
5 service.

6 Q. And I'm drilling down into that one word,
7 "billing" competitive suppliers on
8 time-of-use basis because I think that in the
9 Commission's order preceding this proceeding,
10 at 14 through 15, it's fairly clear that the
11 time-varying offering is for the Company's
12 default supply. And I think if you were to
13 look through that investigation earlier, this
14 is a topic that we went over, whether or not
15 it should be okay to offer it just for
16 default supply or not. And now, in the cost
17 estimates that we have -- or that Eversource
18 has put forth, it says that it's for offering
19 it to competitive suppliers. And I'm curious
20 if you can tell me, orders of magnitude or
21 ballpark, how much of that \$9.1 million is
22 attributable to the overhaul of the Company's
23 EDI systems so that it can offer that
24 time-of-use rate offering for competitive

1 supply.

2 A. (Rice) I think Mr. Moore can answer that.
3 But I'd first like to clarify that I don't
4 have any specific recollection of us
5 addressing and deciding that time-of-use EV
6 pricing wouldn't be supported for competitive
7 supply. I don't think -- I'm not a lawyer,
8 but my interpretation is not that -- I don't
9 believe that's what the Commission's order
10 said in the prior investigation at Page 14.
11 I think they sensibly recognized that the
12 investigation really didn't need to get into
13 setting pricing for third-party competitive
14 supply because that's a competitive market,
15 and suppliers and customers are free to set
16 their own pricing. But --

17 Q. Fair enough.

18 A. (Rice) So, yes, clarifying that, Mr. Moore
19 can explain the various cost components and
20 how much of the estimate is associated with
21 updates to EDI.

22 A. (Moore) So in our traditional development
23 model, we approach most IT enhancements,
24 including any type of new rate development,

1 in a pretty systematic way. We start off by
2 hopefully getting a high-level requirement
3 like we have here and giving a cost estimate
4 based on what we know and what we can compare
5 to in our current system. Given that we did
6 not have a rate that was structured quite
7 like this in our system, we had to make some
8 additional estimates for a good combination
9 of all three varying parts of the rate.

10 But it traditionally starts off by
11 gathering those requirements, looking at our
12 system components, and then we go through the
13 traditional waterfall of estimating the time
14 of the actual detailed requirement phase that
15 we would have to do once we actually start
16 the work. We then take those requirements,
17 collectively, create the detailed technical
18 specs and move forward with our base
19 development. Using those requirements, test
20 cases are developed. We start our testing
21 phases, which overlaps to remediation. And
22 that's done across all the enterprise
23 sections.

24 So if you look at it, it's our core

1 billing engine that gets the initial
2 treatment and change, where we go and we look
3 at these EV rates and we move forward and try
4 to recreate and simulate those in a manner
5 that make those accurate and meet the rate
6 requirement. But then we reach out to
7 systems, like our EDI component, and we say
8 what changes have to be made there. And from
9 those requirements, typically we assess the
10 time and give an estimate of the time it
11 takes to, in essence, interact with those
12 suppliers, because we can't do this in a
13 vacuum. So the cost that goes into that is
14 the time of sharing those requirements with
15 suppliers, maybe picking a handful of them
16 out as test cases to push the information
17 back and forth as we go through the various
18 testing phases. As we make those actual IT
19 changes, we actually have to do the
20 validation that follows. And then we follow
21 that with a round of final wrap-up and
22 deployment, which then -- it requires
23 coordination from, say, a project manager,
24 individuals who lead, go live, or any types

1 of ceremonies that are necessary to make the
2 work. So all that's factored in at a high
3 level. So when we're giving these estimates,
4 we factor the cost for all of that activity.

5 Q. And so just to return to the question, if you
6 weren't overhauling your EDI system to offer
7 the time-of-use to competitive suppliers,
8 what would that \$9.1 million look like? Can
9 you just give me a ballpark?

10 A. (Moore) Well, I think we've been on record
11 where we would -- it would honestly be less
12 than the \$9 million. And if we could mimic a
13 rate that's already in place, we believe that
14 cost can be significantly reduced. That's
15 our hope is that if we could use an existing
16 rate structure that had time-varying rates,
17 we typically can mimic that in a shorter
18 duration than going ahead and making that
19 change to our EDI structure. That's because
20 we eliminate that part of the work, so there
21 is a sizeable reduction.

22 Q. So are we talking \$8.9 million, or are we
23 talking --

24 A. (Moore) No, I think --

1 Q. -- one and a half million dollars?

2 A. (Moore) No. The EDI represents a good
3 portion in that estimate. It is fairly
4 complex to make these changes in our system,
5 especially with the time-varying piece that
6 we currently don't deal with now.

7 Q. All right. So I also want to ask you about
8 in the data response --

9 CHAIRMAN GOLDNER: Excuse me, Mr.
10 Buckley. Is there a natural break in your
11 questions so we could break and then come
12 back?

13 MR. BUCKLEY: Yeah, we could break
14 now if that's helpful.

15 CHAIRMAN GOLDNER: Okay. Thank
16 you. Let's come back at 11:10. Thank you.

17 (Brief recess was taken at 10:55 a.m.,
18 and the hearing resumed at 11:15 a.m.)

19 CHAIRMAN GOLDNER: Okay. We'll go
20 back on the record and continue with Mr.
21 Buckley's questioning.

22 MR. BUCKLEY: Thank you, Mr.
23 Chairman. I'm going to try to move a little
24 quicker through my questions here, seeing

1 we've now passed the time allotted to the
2 Company's cross-examination. I will note, I
3 think -- and I don't see him on here right
4 now, but I'd previously spoken with the City
5 of Lebanon, and they had noted that they were
6 not likely to need the entire hour allotted
7 to them. So that might give us some degree
8 of cushion here as I continue onward.

9 CHAIRMAN GOLDNER: Thank you. Mr.
10 Buckley, just before we proceed, will anyone
11 be handling the City of Buckley [sic] as an
12 attorney today? I think Mr. Below filed as a
13 pro se witness. Maybe you've had some
14 discussion?

15 MR. BUCKLEY: Yeah, I could
16 certainly do that.

17 CHAIRMAN GOLDNER: Okay. Thank
18 you. Okay. Please proceed.

19 MR. BUCKLEY: Thank you.

20 BY MR. BUCKLEY:

21 Q. So I think we just left off -- for a little
22 recap, we just left off that Mr. Moore
23 suggested that the overhaul of the EDI
24 offerings were a substantial part of the \$9

1 million estimate.

2 Was that correct, Mr. Moore?

3 A. (Moore) Yeah, a good part of it was that. I
4 mean, obviously we've got to deal with the
5 fact that our billing system doesn't account
6 for the three-part rate. So that's obviously
7 a large part as well. But it is a good part.
8 Given the complexity, and typically the back
9 and forth we have to do with the suppliers,
10 it adds in a degree of complexity.

11 Q. Okay. That's helpful.

12 Now, in this request that resulted in
13 the provision of these estimates, or this
14 detailed estimate, it says, "Please provide
15 any documents prepared in order to identify
16 costs and timeline, including minutes,
17 agendas, memos, presentations or other
18 materials." And I just emphasize that it
19 says "provide any documents." And then I
20 noticed today, actually, that at the very top
21 of this document it says "Updated March 11,
22 2021, V13." Are there other versions of this
23 that were not provided but were developed?

24 A. (Moore) Not to my knowledge. It may be --

1 and when we logged them into -- we track our
2 systems in this in a tracking system and for
3 review and for, you know, typos, words like
4 that. But not from a cost estimate, no.

5 Q. Okay. Has the Company ever developed systems
6 for time-varying rates which would have been
7 based on either the existing R-OTOD rate,
8 that two-period, but offering also a
9 time-varying generation component?

10 A. (Moore) All three you mean --

11 Q. Yes.

12 A. (Moore) -- including the supplier?

13 Q. Correct.

14 A. (Moore) Yeah. No, not to my knowledge.

15 I mean, Ed, you could probably answer
16 that. But I don't believe we --

17 A. (Davis) No, I'm not aware of that either.

18 Q. And how about a cost estimate that would
19 borrow, I think we heard Mr. Moore had
20 suggested, from the Rate 7 in Connecticut,
21 but also including a time-varying
22 distribution component that Rate 7 does not
23 have?

24 A. (Moore) So your question is do we have a rate

1 that's like that currently? We do not.

2 Q. My question is if you've ever developed a
3 cost estimate for essentially offering a rate
4 that is based on Rate 7, but also includes a
5 time-varying distribution component?

6 A. (Moore) So we've looked at that structure,
7 and we said we could develop a rate that was
8 based starting with the basis of Rate 7 and
9 actually put it into a rate. I'm not sure we
10 did a full-fledged estimate on it, but we did
11 say that would be feasible to start there.
12 That's how we could go about, you know,
13 making these changes is looking at the basis
14 of what was done in Rate 7, switch -- add
15 another component. But then obviously it
16 drives the costs that we're talking about
17 right now.

18 Q. And so you said you didn't do a full-fledged
19 estimate. But it sounds like you did do, you
20 know, a "horseshoes and hand grenades"
21 estimate.

22 A. (Moore) Well, I think there was just a
23 high-level discussion about it, yes.

24 Q. And can you tell us what that approximate

1 estimate was?

2 A. (Moore) Well, we don't have a -- we didn't
3 really put a -- it was more of a feasibility
4 that, you know, could we clearly take the
5 Rate 7, clone it, turn it into a situation
6 where you would vary that. And that, in
7 essence, is the basis of the estimate we
8 provided at the \$9 million level, given, you
9 know, the EDI components and all the
10 necessary bill changes. That's basically
11 when we give these estimates, that's where we
12 got it from. I think I mentioned earlier, we
13 look at our internal rates, we see a rate
14 that's similar, and then we add the
15 additional requirements and components.

16 Q. Could the Company develop a cost estimate
17 without the EDI component? Is that something
18 that could be done?

19 A. (Moore) Yeah, that's feasible.

20 Q. Okay. That's helpful.

21 And just to clarify, the reason it's --
22 the reason your starting point is the
23 Connecticut Rate 7 is because you have a
24 shared billing system -- is that correct --

1 across at least Connecticut and New Hampshire
2 portions of the enterprise called "C2"?

3 A. (Moore) Yeah. Fundamentally, the way we
4 design our rates internally, it's a common
5 platform. But it has the nuances of the
6 various differences between the Connecticut
7 and New Hampshire rates that have to be
8 amended. So we don't -- you start with that
9 format, and then you search for the
10 jurisdictional differences between the rates.

11 Q. And so in Exhibit 4, at Bates Page 12,
12 there's some -- there's a citation around the
13 costs associated with the EV TOU offerings.
14 And then the Company goes on to describe a
15 forthcoming and enterprise-wide billing,
16 metering and customer information system
17 upgrade as a reason why near-term
18 alternatives to EV TOU rates should be
19 considered. Is that correct? That can be a
20 "Yes" or "No." I think this might be --

21 A. (Moore) I think the question -- I think I
22 lost the intent of the question. Say it
23 again? I apologize.

24 Q. So you have an enterprise-wide upgrade to

1 your customer and meter systems plan; is that
2 correct?

3 A. (Moore) Correct.

4 Q. And can you tell me what the time frame is
5 for the final deployment of that upgrade?

6 A. (Moore) Well, we've planned for our initial
7 affiliate for sometime in 2022.

8 Q. And when would it be complete so that the
9 Company would be able to fully utilize its
10 customer, the new customer information system
11 and meter data managements system in New
12 Hampshire?

13 A. (Moore) Well, although we have plans for the
14 affiliate, I think the timing of the
15 remaining companies are being assessed within
16 those jurisdictions. And to get obviously
17 regulatory treatment before moving forward
18 with those types of investments would always
19 be something that would be done outside of my
20 sphere of control. So I don't believe I can
21 answer that question.

22 Q. So would it be accurate to say that the
23 Company doesn't really have a time frame for
24 that enterprise-wide upgrade being executable

1 in New Hampshire?

2 A. (Moore) No. I think what we do have is
3 between now and say the next five to six
4 years, we have plans to look at what the
5 obvious pressures are within our
6 jurisdictions from age of the systems --
7 because as I mentioned, they're legacy
8 systems. We know they do have to be replaced
9 within a time period, but also seeking the
10 right sort of, you know, cost and benefit to
11 the customer time frame that makes sense.

12 And there's also the physicality of you
13 can't change the world at once because, you
14 know, taking on and trying to change all
15 states at the same time would probably end up
16 with a less than desirable outcome. So we
17 plan both from a physicality standpoint of
18 delivery, as well as, you know, what are the
19 other related items. For example, if there's
20 AMI being proposed in the state, our
21 infrastructure and the demands of the
22 customer all are factors would come into the
23 time frame we put on each of the affiliates
24 going forward.

1 Q. And so am I correct in understanding that you
2 just provided a time frame of, it sounded
3 like at least five to six years for New
4 Hampshire --

5 A. (Moore) By the time -- I mean, once again,
6 just ideally I'm throwing that time frame out
7 there. I don't know. There obviously could
8 be accelerators one way or the other. If,
9 for example, New Hampshire decided they
10 wanted to do full-fledged AMI, we're on
11 record saying the only way really to do those
12 types of activities is to move forward with a
13 new billing system if our current ones
14 wouldn't handle it. So there's other factors
15 that come in place. But ideally, if I were
16 to look forward -- and once again, I'm not
17 committed to a time frame -- [connectivity
18 issue]

19 [Court Reporter interrupts.]

20 A. (Moore) Ideally, from my perspective, the
21 replacement of these systems would happen in
22 that time frame in our road map.

23 Q. Okay. Thank you, Mr. Moore. I think I'm
24 going to move to metering costs now again.

1 So if we look at Exhibit 4, Bates
2 Page 7, Line 14, and then I think it bleeds
3 over a bit into the next page, I believe
4 there is discussion of meter-installed costs
5 of approximately \$500 and additional
6 installation costs of several hundred dollars
7 for the customer to hire an electrician to
8 install wiring and meter socket for the new
9 service. Does that sound about right?

10 A. (Moore) Is that question for me?

11 Q. Whoever feels like they can answer it.

12 A. (Rice) Yes, that's correct. And I might be
13 the best person to answer, but we'll see what
14 the question is.

15 Q. Okie doke. And so what does that \$500 figure
16 look like on a monthly basis for the
17 customer? We've seen the Unitil rate is
18 based solely on the Company's carrying costs
19 for the installed meter, and that's about
20 5-1/2 dollars, I think. How does that
21 compare to what this \$500 install cost per
22 meter would look like on a customer charge --

23 A. (Rice) I don't recall specifically
24 calculating, at least myself specifically

1 calculating the monthly carrying costs of
2 \$500 a meter. But Mr. Davis may have another
3 reference point in mind, or not.

4 A. (Davis) Yeah, I could maybe just give
5 perspective.

6 It's important just to say in our
7 original testimony, in the proposal for
8 three-period time-of-use rate, the cost we
9 use there reflects a lower installed cost of
10 a meter. Our current systems and current
11 two-period time-of-day rate has a meter on
12 the order of a couple of hundred dollars just
13 for the investment. Actually, that might be
14 the installed cost. And that comes out of
15 our distribution marginal cost study.

16 So if we think about the \$16.50, that
17 includes both metering service costs and
18 customer service-related costs. So,
19 certainly that would put upward pressure on
20 the \$16.50 to incrementally -- you know, the
21 difference in the meter cost would probably
22 certainly put upward pressure on that \$16.50.
23 So we could perhaps dissect, you know, break
24 down what's meter only and then, you know,

1 flow these higher costs through that to see
2 just purely what the meter portion of
3 marginal meter costs is, or the effect on
4 that.

5 Q. Okay. So to the -- how about now to the
6 additional cost of several hundred dollars
7 for a customer to hire an electrician and
8 install wiring and meter socket for the new
9 service? How does that compare to the other
10 example we've been talking about this morning
11 relative to the controlled water heating
12 rate? That also requires some degree of
13 wiring and metering of that water heater,
14 doesn't it?

15 A. (Rice) Yeah, but those are all costs that the
16 customer is responsible for and work that
17 they'll get completed with a contractor. So
18 the utility doesn't necessarily have a direct
19 lens into specifically what it costs. We
20 have a general sense, and that's what we
21 include in the testimony. But ultimately
22 we're not doing that work, so we don't know
23 exactly what the customer's paying.

24 Q. Okay. But just sort of intuitively, is it

1 conceivable that if a customer happens to be
2 wiring up a Level 2 charger in their garage,
3 for example, there would be some synergies
4 there for that customer to also run a line to
5 a meter socket at the same time? Is that
6 possible?

7 A. (Rice) I don't know. I'm not a licensed
8 electrician that does this type of work.

9 Q. That's fair.

10 All right. Moving on to Exhibit 4,
11 Bates Page 9. I'm going to talk a little bit
12 now about alternative metering and data
13 sources.

14 So in Exhibit 4, Page 9, and I'll just
15 take a moment to pull this up as well, it
16 says at Line 4, "Eversource has determined
17 that it is not readily feasible for
18 alternative data sources to be used in place
19 of utility metering for billing purposes at
20 this time." Is that correct?

21 A. (Rice) That is correct.

22 Q. And I'm curious what that qualifier near the
23 end of the sentence, "for billing purposes."
24 Can you expand on that just for a moment?

1 A. (Rice) Yeah. So what we assessed with
2 respect to feasibility was the ability to
3 utilize an alternative data source -- in this
4 case, a customer-owned charger -- as part of
5 an end-to-end, you know, meter-to-bill
6 solution. That ultimately resulted in the
7 Company being able to issue an accurate bill
8 to the customer. For interval -- for a
9 time-of-use rate like this, and interval
10 meters, the Company utilizes MV-90 xi as its
11 meter data management system. So for us to
12 feasibly use another alternative data source
13 in the same solution, it would need to be
14 compatible with MV-90 as well. And as the
15 Company was working to address the various
16 items that would be -- would need to be
17 satisfied for a feasible solution, we reached
18 out to Itron, that MV-90 vendor, talked with
19 them about the ask. They were very familiar
20 with the question, that they get it a lot on
21 whether, you know, their system could utilize
22 charger data in the same way as a
23 utility-owned meter. Their answer was no.
24 And this is probably where I'm getting out of

1 my depth and Mr. Moore might have more
2 detail. The big item that -- the big barrier
3 was the availability of a TIM. And I'm going
4 to hand it over to Mr. Moore now before I
5 incorrectly say what a "TIM" is.

6 You're mute.

7 A. (Moore) Apologize for that. Basically a TIM
8 is what Itron uses to communicate with a
9 meter. It acts like it's kind of like a
10 middle component that allows the meter and
11 their systems to communicate effectively,
12 which also provides the accuracy that they're
13 seeking to keep the meter reads at when they
14 supply that for us for billing quality and
15 billing quality billing determinants.

16 So those TIMs are designed with the
17 meter manufacturers. So there's a limit of
18 meter manufacturers and TIMs that are
19 exploited. And as Mr. Rice said earlier,
20 currently Itron does not support or have a
21 TIM for the charging station.

22 Q. Thank you. That's helpful.

23 And now with respect to the Company's
24 proposed load management program. How can

1 you tell whether a customer has curtailed
2 within that program when the Company -- when
3 an event is called? What data source is used
4 there?

5 A. (Rice) It's based on a communications
6 capability between a distributed energy
7 resource management system and the charger
8 itself. Typically that is completed through
9 a Wi-Fi connection, the customer's Wi-Fi
10 connection. And again, it's a very different
11 solution. You know, we're not trying to
12 gather accurate, validated interval data that
13 we can use to calculate a bill with. We're
14 really just trying to establish a binary
15 condition. Is the charger, you know, on or
16 off? Is it being curtailed? Yes or no. So
17 that's a much more easier data point to
18 validate. And we're able to do that with,
19 you know, a different communications setup.

20 Q. And so I think you addressed some of this in
21 a data response. I think if you could turn
22 to Exhibit 13, Bates Page 24. There's some
23 discussion of this topic, where the Company
24 suggests that third-party software as service

1 offerings outside of the traditional billing
2 system are used for data collection relative
3 to the program. And there's that focus on it
4 measures a binary, that you're essentially
5 just looking at whether it's on or off rather
6 than, for example, interval metering that
7 would measure volumes at a given time. Is
8 that correct?

9 A. (Rice) That's correct.

10 Q. And so has the Company ever solicited
11 third-party software as service offerings to
12 utilize embedded chargers for billing
13 purposes in that manner where we'd just be
14 looking at or would be looking at the volumes
15 instead of a binary?

16 A. (Rice) For billing purposes? Not to my
17 knowledge.

18 Q. And are you aware that the Department of
19 Energy's testimony I think suggests something
20 like that, where the Company would issue an
21 RFI, and maybe RFP, to see if such
22 offerings -- if the market could offer such
23 things? Is that correct?

24 A. (Rice) I'm aware of that recommendation.

1 [Court Reporter interrupts.]

2 A. (Rice) I am aware of that recommendation.

3 Q. And we heard testimony from ChargePoint
4 earlier this week that their meters are
5 capable of measuring volumes for billing
6 purposes rather than just the binary on and
7 off, and that their meters are the same as, I
8 think he said ANSI standards that generally
9 cover metering more broadly, including
10 utility meters, and that their meters are
11 compliant with that standard. Is that
12 correct?

13 A. (Rice) I don't have the transcript from the
14 other day in front of me. I think they
15 referred to NIST standards, not ANSI.

16 Q. Okay. Thank you for that correction.

17 A. (Rice) But I'm aware of the general sentiment
18 of what they explained and understood it.

19 Q. That's helpful. Now, returning to the idea
20 of the binary data off and on versus interval
21 volumetric data. Can you please turn to
22 Exhibit 4, Bates Page 29? I think it's the
23 very last page of that exhibit.

24 A. (Rice) I'm there.

1 Q. And so my reading of that paragraph at the
2 top, No. 7, called Data Collecting, is that,
3 at least for data collection purposes,
4 Eversource is proposing to measure energy
5 consumption in kilowatt hours rather than
6 just the binary on and off. Is that correct?

7 A. (Rice) Yeah, we hope to gather data that we
8 can analyze to learn more from. Again, that
9 is different than using that data as part of
10 an integrated billing solution. But, yeah,
11 we -- that's actually one of the benefits we
12 see of managed collection is we can utilize a
13 customer-owned device in the near term,
14 provide them value through being able to
15 offer incentives, and also gather data that
16 can be useful to the Company and its
17 stakeholders going forward as the EV market
18 grows.

19 Q. And the Company has offered a very similar
20 program in Massachusetts for I think several
21 years now; is that correct?

22 A. (Rice) That's correct. And we are -- we've
23 been directed to develop one in Connecticut
24 as well.

1 Q. Okay. And has the Company ever evaluated
2 whether the energy consumption data that's
3 provided by this type of program is adequate
4 for billing purposes or inadequate for
5 billing purposes?

6 A. (Rice) I haven't specifically done that
7 analysis. But Mr. Davis might be familiar
8 with some of the opportunities we've had to
9 look at EV charger data and compare that to
10 other data sources. Or Mr. Boughan, for that
11 matter.

12 A. (Davis) Yeah, I have not used managed charge
13 data for any kind of evaluation like that.
14 We have utilized, where we have a revenue
15 meter, if you will, you know, the utility
16 standard meter for that purpose.

17 Q. And are you aware that multiple utilities and
18 multiple jurisdictions throughout the country
19 have in fact determined that it is feasible
20 for alternative data sources, such as an
21 embedded meter within a Level 2 charger, or
22 the vehicle telemetry, to be used in place of
23 utility metering for billing purposes?

24 A. (Rice) We're certainly aware that other

1 utilities have developed solutions to utilize
2 these data sources for billing purposes. Dr.
3 Sergici specifically mentioned Baltimore Gas
4 & Electric Company and Xcel Energy in
5 Minnesota. Those are both programs that
6 we're very familiar with. So we completely
7 understand -- or I won't say completely. But
8 we have a strong understanding of how each of
9 those respective utilities implemented those
10 solutions. So it's a great opportunity to
11 learn and get more information and
12 perspective. And it kind of drives home the
13 capabilities that are necessary to
14 effectively use that solution, as well as the
15 limitations of it, which kind of further
16 informs Eversource's perspective on the
17 feasibility of it executing a similar
18 solution with its current systems.

19 Q. And you're aware that Unitil has proposed a
20 pilot, where it would, over time, evaluate
21 the ability of these third-party systems to
22 provide data that is adequate for their
23 billing purposes; right?

24 A. (Rice) My understanding of the Unitil

1 pilot -- and I don't want to speak for
2 them -- is they intend to collect and
3 evaluate charger data and compare that to the
4 data that's received from the corresponding
5 utility meter and see if there are
6 differences in quality or, you know, that
7 should be reconciled. It's not my
8 understanding that Unitil is evaluating what
9 would be necessary to integrate charger data
10 with its other billing systems as part of
11 that effort. I don't know if that's an
12 activity that would come later, after the
13 accuracy and quality of charger data was
14 evaluated.

15 Q. Fair enough. And so moving to Exhibit 4,
16 Bates Page 8, you detailed that the basis
17 for the feasibility of using embedded
18 metering is that Itron has confirmed that
19 such capabilities relative to the MV-90 xi
20 are not presently available. Is that
21 correct?

22 A. (Rice) Correct. We wouldn't be able to use
23 charging data as part of an end solution with
24 our existing MV-90 interval data management

1 system.

2 Q. And so it's based on this premise that any
3 alternative metering must be consistent with
4 and portable to the Company's legacy MV-90
5 system; right?

6 A. (Rice) To be readily feasible in the near
7 term and to be a solution that Eversource
8 would recommend implementing, that's the
9 criteria that we would recommend. I don't
10 know if Mr. Moore has anything to add to
11 that.

12 A. (Moore) Can you repeat the question again?
13 Sorry.

14 Q. Maybe I'll just move on. I think that it's
15 been already asked and answered.

16 So I want to turn to the question of
17 meters that are not owned by the Company
18 itself.

19 Does the Company utilize meters that are
20 not owned by the Company in any other
21 applications, either in New Hampshire or its
22 affiliates?

23 A. (Rice) Yes, and I think we described those
24 examples in the February responses which were

1 included in Attachment 13. I'd be happy to
2 go to that, unless you are intending to go to
3 it and had a specific question --

4 Q. I do have a question or two for that. So if
5 you could turn to Exhibit 13, Bates Page 15.
6 And I will do my best to also try and find
7 Exhibit 13.

8 A. (Rice) So the large example that we
9 identified in response to DOE 2-021 on
10 Bates Page 16, where we talked about 1,791
11 customers who participate in the Eversource
12 commercial distributed generation program in
13 Connecticut. So that's, you know, known in
14 Connecticut as the "LREC ZREC program." And
15 those meters are production meters that are
16 owned by customers, measure the output of a
17 customer-owned solar facility, and the
18 Company pays incentives based on that output
19 pursuant to a company tariff.

20 Q. And you cited at Bates Page 15 some issues
21 related to that program, specifically
22 connectivity issues and issues related to
23 troubleshooting problem meters; is that
24 correct?

1 A. (Rice) Correct.

2 Q. And then if you move to Bates Page 16,
3 there's the about 1800 number.

4 And then if you move to Bates Page 17,
5 out of those 1800 customers who use their own
6 meter essentially for the company billing, it
7 seems like the Company has had -- in 2021 it
8 had issues with 113 of those customers
9 related to those two items discussed earlier,
10 the connectivity and the troubling shooting
11 issues; is that correct?

12 A. (Rice) Correct.

13 Q. And so my, you know, law school math says
14 that 113 is about 6 percent of 1800. Is that
15 correct?

16 A. (Rice) Subject to check, I'll take the risk
17 in accepting a lawyer's math.

18 Q. Haha. Much appreciated.

19 And would you agree with me that the
20 scenario presented by those DG customers who
21 have connectivity issues would be a little
22 different from a customer that would, say, be
23 using their embedded metering in a charger?
24 Because in the case of the embedded metering,

1 there could still be a backstop of that
2 customer's home meter to measure usage during
3 those times when the embedded metering might
4 have connectivity issues and you could just
5 cease offering the TOU rate for that period;
6 is that correct?

7 A. (Rice) I don't think I could reach any
8 conclusions on the potential challenges and
9 implications of using kind of one data source
10 over another.

11 Q. Okay. That's fair.

12 A. (Rice) I mean, I think, yeah -- I mean, there
13 may be a data backstop with the charger. I
14 don't know. There might be opportunities for
15 there to be a data backstop with a
16 conventional revenue-grade meter. And
17 there's also a revenue-grade meter as opposed
18 to a different type of device. So I think
19 there's a wide range of factors that could
20 impact the types of challenges they'd have to
21 troubleshoot for potential areas of failure
22 with respect to connectivity. So I don't
23 think I could really draw a conclusion to
24 compare the two solutions.

1 Q. Right. But you would agree with me,
2 intuitively, that the embedded meter
3 approach, which generally I think utilizes
4 some degree of subtractive billing, so you're
5 not double-counting at the whole home meter,
6 if you lost the embedded meter, you would
7 also then get rid of the subtraction. So
8 you'd still be counting the overall premise
9 use, just not offering that additional
10 time-of-use adjustment.

11 A. (Rice) Yeah, I mean, it's a solution. I
12 don't know if it's the only solution. I
13 think that's the way Baltimore Gas &
14 Electric's tariff is structured is that it's
15 the customer's responsibility to maintain
16 their data source charger, maintain a Wi-Fi
17 connection. And if the utility is unable to
18 collect that data for any reason, then just
19 the discount wouldn't apply. So that is an
20 approach.

21 Again, it's -- you know a concern
22 Eversource would have is, even if that's what
23 the tariff says, you can still get into a lot
24 of back and forth with the customer, who

1 would probably be readily upset if they're
2 not seeing the credit that they wanted. And
3 you're going to get into a situation of
4 troubleshooting what's the source of the
5 missing information. It's not always clear
6 whether the problem is on the customer end or
7 the utility end. So it's -- even though you
8 can kind of build a tariff around it, it
9 still is a solution that might have some
10 drawbacks.

11 Q. Okay. So I am now going to move to the
12 concept of manual billing.

13 Now, at Exhibit 4, which I think is your
14 testimony, at Bates Page 8 you mentioned
15 manual billing processes. Can you tell me,
16 does the Company manually bill customers in
17 New Hampshire or elsewhere?

18 A. (Rice) Yes.

19 Q. And what's the basis for the need to manually
20 bill certain customers?

21 A. (Rice) Mr. Davis would probably know better
22 than I or Mr. Moore.

23 A. (Davis) Sure. There's truly a variety of
24 reasons. Part of it's the nature of the

1 service or the tariff. Sometimes there are
2 special conditions for a given customer, and
3 those could be within a tariff or within a
4 special contract, but the tariff itself might
5 require certain information.

6 But anytime there's either the inability
7 of a system to, through a standard process,
8 implement a given rate structure for billing
9 purposes or have to process meter data or
10 other information, particularly when there's
11 any kind of manual step involved, you're
12 likely to see some degree of manual billing.
13 Sometimes there's manual billing that then
14 feeds the result into a standard billing
15 process. So this is super high level because
16 there's so many different reasons, but --

17 Q. So it sounded like you said one of the
18 justifications is for those rates that are
19 more complex, it's sometimes -- it might be
20 more cost-effective, right, to offer a manual
21 billing option? Is that correct?

22 A. (Davis) It could. Certainly the complexity I
23 think is a big factor, particularly for C&I
24 customers. It's not necessarily

1 cost-effective. Sometimes that's the only
2 way to implement it.

3 For example, in New Hampshire, we have
4 backup service for customers who either are
5 generated or have generation. And there are
6 some parameters that have to be captured
7 perhaps. We have to actually, for example,
8 print a report, you know, evaluate data, and
9 then input the results and send the key
10 information that's required by the billing
11 system to then process that for whatever the
12 appropriate billing system is.

13 Q. And so if we look at -- oh, sorry.

14 A. (David) Go ahead. Yeah.

15 Q. If we look at Exhibit 13 again, Bates Page 26
16 through 27, the Company provides a price,
17 more or less, for a number of customers that
18 are manually billed in New Hampshire. I
19 think that's 52 -- no, it's 63 accounts that
20 are manually billed in the Company's large
21 power billing system each month; is that
22 correct?

23 A. (Davis) That's correct.

24 Q. And it says that it takes one full-time

1 employee approximately 10 hours a month, with
2 a fully loaded rate of \$52 an hour,
3 approximately, to handle existing manually
4 billed accounts. So that's the 63 manually
5 billed accounts; is that correct?

6 A. (Davis) Yes. These are, I think, legacy
7 accounts. I mean, it's not growing. It's a
8 pretty static, fixed number of accounts. But
9 that's what it says, yes.

10 Q. So by my law school math again, if you can
11 trust me on that one, 10 hours a month at \$52
12 an hour-ish means I think that it's about
13 \$6,000 annually to bill those 63 accounts in
14 aggregate; is that correct? Manually.

15 A. (Davis) Yeah, if you multiply that out for
16 the operating expense, that looks right. I
17 right, there's probably work that was done
18 behind that to set it up and implement it.
19 And it depends -- this is an old system. So
20 yeah. But that's correct -- or that's --
21 I'll accept your math. How's that?

22 Q. Awesome. Does the Company have a sense of
23 how many high-demand draw charging sites it
24 has in its territory that would be eligible

1 for a rate, let's say if the Company were
2 hypothetically to adopt a high-demand draw
3 time-of-use rate?

4 A. (Davis) Well, Mr. Boughan can add to this.
5 But there's certainly in New Hampshire, if
6 that's what you're referring to, you know, an
7 expectation that there would be a relatively
8 small number of accounts who would initially
9 be enrolled. So I don't know the actual
10 number or what number to give you. But
11 yeah --

12 Q. And so maybe I can direct you to Exhibit 13,
13 Bates Page 23, where the Company provided, on
14 request, the known high-demand draw chargers
15 within its service territory.

16 A. (Davis) Oh, sure. Yeah. So for existing
17 accounts, that's right. And this is a mix of
18 charging stations that are either a
19 standard-alone, separately metered, and their
20 own individual accounts, or charging stations
21 that are part of an overall customer service
22 load.

23 Q. And so that is approximately nine customers
24 or so?

1 A. (Davis) We list nine stations. That's
2 correct.

3 Q. And if we were to ask the same question
4 regarding low-demand draw customers, would
5 you be able to provide some approximation for
6 that?

7 A. (Davis) I don't have that. But I just want
8 to clarify, when you say "low demand," it's
9 pretty much residential, small C&I, for
10 example.

11 Q. Yeah. Exactly.

12 A. (Davis) Yeah. I don't know --

13 Q. Would it --

14 A. (Davis) I don't know whether my colleagues
15 have a --

16 A. (Rice) Yeah. I mean, I think, you know, we
17 testified that the rate designs that have
18 been proposed for that customer group may not
19 result in high enrollment. So we don't --
20 Eversource doesn't offer a separately-metered
21 EV time-of-use rate a day. We've said we're
22 concerned that if we were to do so, we
23 wouldn't necessarily have a high volume of
24 customers. Even if there are a high volume

1 of customers that have EVs in Eversource's
2 territory, we don't know what percentage of
3 those would be likely to enroll in a
4 low-demand draw rate for their home or
5 business charging.

6 Q. And so that sounds like a scenario which is a
7 bit like the one described for the large
8 business customers with the complex rates,
9 where the Company could conceivably manually
10 bill, as long as it's not a rate that grows
11 to a scale of let's say 10,000 customers or
12 something like that. Is that correct?

13 A. (Rice) I mean, it's feasible. It's not -- we
14 wouldn't recommend it.

15 Q. Though that manual billing for the 62
16 customers that you currently have costs about
17 \$6,000 a year, and the estimate that you
18 provided for full overhaul of the billing
19 system is about \$9 million a year; is that
20 correct?

21 A. (Rice) Well, so --

22 Q. Not a year. Nine million total. Sorry.

23 A. (Rice) I mean, sure, that's the math. But we
24 wouldn't recommend manual billing as a

1 solution. I think the customers that we're
2 manually billing right now, Mr. Davis
3 indicated we're doing that because we
4 actually don't really have another option.
5 That number of customers also isn't growing.
6 So if we were expecting those types of
7 service into those types of rates to grow, we
8 would probably reconsider.

9 And there are drawbacks with manual
10 billing. For starters, you're doing it --
11 humans are doing it, and humans can make
12 mistakes. So that can become kind of a
13 source of customer dissatisfaction. I mean,
14 you're also not -- I mean, we wouldn't expect
15 that we'd be able to justify hiring
16 additional staff to do these permanent -- you
17 know, making permanent hires to do this work.
18 So, really, you'd be pulling resources from
19 your existing pool and ultimately taking work
20 away from other productive uses of those
21 personnel.

22 Another big one is when we manually
23 bill, the customer loses a lot of
24 functionality. They can't view their bill

1 online, for example. So it detracts from the
2 customer experience.

3 And I think the last big one is, I mean,
4 if we think that customer enrollment is going
5 to be so low that manual billing can be a
6 solution, I think that would prompt
7 Eversource to challenge itself and consider,
8 you know, is this the best option to put
9 forward to customers. Because I think, as
10 you indicated, you know, and Eversource
11 hopes, that if we were to offer an EV
12 time-of-use rate, that adoption would grow
13 with the EV market. So we would want to be
14 putting forward solutions that are going to
15 provide value to customers that they're going
16 to want to enroll in, in growing numbers.

17 Q. And so we've seen the nine or so high-demand
18 draw charging stations. But if I were to
19 kind of try to find an upper bounds for what
20 low-demand draw customers might be interested
21 in participating in, in a TOU rate, to
22 understand if manual billing was maybe a
23 near-term opportunity until the full overhaul
24 of the Company system happens five to six

1 years from now, what kind of numbers would I
2 find relative to your proposed enrollment for
3 your load management proposal?

4 A. (Rice) So we've -- you know, we provided an
5 estimate that we're optimistic that we would
6 be able to enroll maybe 200 customers per
7 year, reach 1,000 customers within five
8 years. And that's an estimate. That's our
9 projection. And again, we assume this
10 because we, you know, view what we're able to
11 offer through load management as a much more
12 customer-friendly and compelling option that
13 customers would be more likely to enroll in.
14 Not all, of course, but more than I think we
15 would presently feel might enroll in a
16 separately-metered EV time-of-use rate with
17 the rate structures that's been presented in
18 this docket. So, I mean, if you're
19 suggesting that that's an upper bound for an
20 EV time-of-use rate, I would very much
21 disagree.

22 Q. Thank you. That's helpful.

23 So now I'm going to move to
24 your proposed -- we've already discussed a

1 bit your proposed load management program.

2 So if we go to Exhibit 4, Bates 5, would
3 I be accurate to say that the Company views
4 load management programs as offering
5 incentives to a relatively small number of
6 current EV customers without making large,
7 fixed investments to modify the enterprise IT
8 systems, and that's a benefit to the Company?
9 Is that correct?

10 A. (Rice) That's correct, yeah. We can -- we
11 feel it's an option that we can launch in a
12 much shorter period of time, and it doesn't
13 utilize the existing enterprise systems that
14 we use for billing. They would have to be
15 modified.

16 Q. And that seems to be a similar benefit of
17 manual billing to me. Is that correct or...

18 A. (Rice) I mean, there still would be system
19 modifications for a new rate structure. Mr.
20 Moore or Mr. Dennis -- excuse me -- Mr. Moore
21 and Mr. Davis -- I mean, we'd still need a
22 new service plan for a new rate. There would
23 still be work.

24 Q. Okay. That's fair.

1 All right. Now if I could ask you to
2 turn to Exhibit 6 at Lines 8 through 12.
3 Exhibit 6.

4 [connectivity issue]

5 A. (Rice) The page number again?

6 Q. Just give me just a moment. No, I think I
7 have the wrong exhibit number here. That is
8 probably Exhibit 4. I'm going to guess it's
9 Page 6 at Lines 8 through 12, where... okay.
10 Yeah. So that is the right spot. Exhibit 4,
11 Page 6, Lines 8 through 12, where there is an
12 almost direct quote of a paragraph from the
13 order preceding this proceeding. And that's
14 Order No. 26,394, at Page 8. And the Company
15 quotes almost directly, that the Commission
16 also found that load managements offerings
17 may provide near-term ratepayer benefits
18 without installation of metering
19 infrastructure and other associated upgrades.
20 For that reason, it found that load
21 management techniques may be an appropriate
22 strategy for EV rate design. Is that
23 correct?

24 [Court Reporter interrupts.]

1 A. (Rice) Yes.

2 Q. And if I were to turn to that order, is there
3 another clause that goes after "may be an
4 appropriate strategy for EV rate design"?

5 A. (Rice) Let me turn to the order myself.

6 Q. Sure.

7 A. (Rice) Yes. So on Page 8 of Order 26,394, it
8 also states that the Commission finds that
9 load management techniques may be an
10 appropriate strategy for electric vehicle
11 rate design, "especially when offered in
12 conjunction with EV time-of-use rate
13 offerings."

14 Q. Okay. Thank you.

15 And moving to Bates Page 12, there's
16 discussion of how Eversource's proposal
17 leverages existing demand management
18 capabilities and builds upon successful
19 demand response programs that have been
20 implemented in Massachusetts and Connecticut.
21 So there's some mention in that section of
22 customer incentives.

23 But can you tell me, at least in
24 Massachusetts and Connecticut, does the

1 Company earn a performance incentive on those
2 programs?

3 A. (Rice) My understanding is we do.

4 Q. And but under the Company's proposal here, it
5 has not proposed to earn a performance
6 incentive on those programs; is that correct?

7 A. (Rice) That's correct.

8 Q. If the Commission were to approve the load
9 control program proposed in this proceeding
10 as a complement to time-of-use rate offering,
11 would the Company commit to a future for that
12 program that does not include a utility
13 performance incentive?

14 A. (Rice) I mean, no, I can't commit to anything
15 here right now. I mean, I think the Company
16 would evaluate the implementation of the load
17 management program. It would learn from
18 that. If there were opportunities to expand
19 it, to refine it in the future, and we felt
20 that it was appropriate and it was in the
21 interest of customers to, you know, also
22 include a performance incentive to incent the
23 Company in its management of future programs,
24 I wouldn't want to -- I don't think I could

1 commit today that we wouldn't evaluate that.

2 Q. Okay. That's fair.

3 Can you tell me about the programs? And
4 specifically, can you tell me which peaks
5 those programs target, the load management
6 programs?

7 A. (Rice) I can't speak to all of the load
8 management programs. I'm doing my best to
9 assume Mr. Goldman's prior testimony. But I
10 know in -- you know, I think there's general
11 overlap with the peaks that are addressed
12 through a time-of-use rate design. And to
13 the extent that price signals in a
14 time-of-use rate design are intended to
15 encourage customers to shift charging
16 activity away from certain peak periods,
17 those frequently overlap with, significantly,
18 with the peak periods that we might target
19 through a load management program.

20 One of the advantages, though, of a load
21 management program is it does provide kind of
22 the flexibility to target different peaks.
23 We think that's kind of interesting with EVs,
24 particularly as EV adoption grows. We've

1 seen in other markets you have instances of
2 pocket load growth. With that potential
3 scenario, you have maybe an affluent
4 community where adoption of EVs is higher.
5 Everybody on the street goes out and buys a
6 Tesla. You can start having local peaks on
7 parts of the system, and load management is
8 an interesting tool to address that. You
9 know, you can start staggering the periods in
10 which you're targeting individual customers
11 so that you don't have a scenario where
12 everybody on the street who has an EV
13 programs their charger to turn on at 8 p.m.,
14 and then you have a timer peak at that hour.
15 Load management provides you kind of a tool
16 kit to stagger that peak and mitigate the
17 potential for a load peak.

18 Q. So you mentioned the sort of circuit-specific
19 targeting, where a whole neighborhood goes
20 out and gets electric vehicles. Does the
21 Company currently offer that capability
22 anywhere?

23 A. (Rice) Yeah, I don't know. I couldn't say if
24 we're specifically doing that today. We're

1 definitely trying -- our goal is to develop
2 distributed energy resource management
3 systems that have that capability. And we
4 think it could be an opportunity that we want
5 to be able to pursue in the future. But I
6 couldn't say that we're doing it today. And
7 I also wouldn't say that we'd intend that
8 type of activity would necessarily occur
9 right out of the gate if we were to try to
10 launch a managed charging program in New
11 Hampshire as well.

12 Q. Yeah, my understanding and recollection from
13 some technical session discussions with the
14 gentleman who's now moved on from Eversource
15 was that the Company systems could offer
16 that, but it would require some degree of
17 additional investment. Does that ring a bell
18 for you at all?

19 A. (Rice) I mean, I wasn't involved in those
20 specific discussions. But, I mean, it's
21 possible.

22 Q. Okay. How many peaks during the year would
23 the load management offering target?

24 A. (Rice) I don't know, off the top of my head.

1 I could comb through Mr. Goldman's previously
2 provided testimony to see if it's there,
3 but...

4 Q. Would it be accurate to say, subject to
5 check, that the load management program
6 generally targets transmission system peaks,
7 specifically the one CP of that peakiest day
8 per year through which much of the costs are
9 assigned for our transmission system rates to
10 customers through their distribution system
11 utilities?

12 A. (Rice) That's absolutely a criteria. I don't
13 think it's the only criteria. But as I said
14 you know, we're looking at periods that
15 certainly overlap with that one CP peak
16 frequently.

17 Q. Right. And so is it possible that one
18 benefit a time-of-use rate might have as
19 compared to the load management offering is
20 that an electric vehicle's load would be, at
21 least in theory, shifted to off-peak hours
22 every day as compared to the load management
23 offering which is more limited? I think
24 there are 20 calls in the testimony that are

1 suggested, 20 calls a year. And many of them
2 would be targeting the system peak, and then
3 some I think are targeting other monthly
4 peaks.

5 Is that correct, the idea of 20 calls
6 versus daily shifting of load away from peak?

7 A. (Rice) I mean, I haven't done any analysis to
8 compare the potential value of either
9 approach, so I don't think I could confirm
10 that.

11 Q. But you would agree that, intuitively, a
12 time-of-use rate, in theory, shifts load away
13 from the peak every day, but the load
14 management proposal would shift load away
15 from the peak on just a few targeted dates
16 that relate to the transmission system
17 largely.

18 A. (Rice) I mean, it's reasonable. I mean,
19 yeah, you describe kind of the scenario --
20 I'm just trying to make sure I'm not missing
21 anything that we previously said.

22 A. (Davis) I just wanted -- this is Ed. I just
23 wanted to note Bates 25 does talk a little
24 bit about dispatching. And apparently

1 dispatching would be daily, every summer
2 weekday, covering up to eight hours with some
3 opt-out potential. So there's some
4 information there about sort of the plans.
5 And then the actual conduction of that plan
6 would be probably circumstantial to what's
7 happening in a given period.

8 A. (Rice) Thank you, Ed. I had it in mind, and
9 that's what I was looking for --

10 A. (Davis) It's not the 20 days. It's an
11 opt-out of 20 percent, if that's -- but it's
12 the daily summer weekday dispatch which I
13 think is sort of a core part of that.
14 Anyway, that's all. I just wanted to point
15 that out.

16 Q. That's very helpful. I misrecalled that 20
17 figure.

18 But you say that it's summer weekdays.
19 Is that -- that's for, you know, a
20 three-month period during the summer?

21 A. (Davis) Yeah. I mean, that's not defined
22 here. I know from our original cost analysis
23 and probability of peak analysis, when you
24 look at distribution or transmission or

1 generation in the market, there's clearly a
2 high/low, particularly in New Hampshire,
3 during three to four summer months, but
4 particularly July and August. So my
5 assumption would be that it could be two to
6 four months perhaps. And that probably
7 wouldn't necessarily preclude other times of
8 the year, either.

9 A. (Rice) Yeah, and I think -- I wanted to pick
10 up on that because I think one of the
11 important things is, I mean, Eversource isn't
12 proposing load management as a static
13 offering. That's one of its big advantages
14 is it's a flexible solution. And on Bates
15 Page 29, Section 8, we talk about how, you
16 know, we do kind of intend to continue to
17 make improvements and enhancements to the
18 program as we learn more.

19 So I think you had a scenario in which
20 we discovered that we were maybe leaving
21 value off the table by only focusing on
22 summer and that, you know, customers would be
23 amenable to having the load curtailment or
24 restrictions more frequently, then you can

1 certainly expand those periods to continue to
2 offer targeted certain peaks throughout the
3 year.

4 Q. So in the contract that you -- that your
5 customer signs, if there is one -- I assume
6 maybe there is -- there's not a limitation on
7 the overall number of calls that can be done
8 in a given year?

9 A. (Rice) I don't know. I haven't seen the
10 contract. And again, here we've described it
11 at least as a starting point, you know, we'd
12 be targeting summer peaks -- or actually the
13 summer period every day in the summer.

14 Q. And so it sounds like, because you're
15 targeting that one CP and other peaks during
16 the summer, it seems like it would do a
17 pretty good job of avoiding transmission
18 costs. But the manner in which the Company
19 has proposed to recover costs for this
20 program is through distribution rates; is
21 that correct?

22 A. (Rice) That's correct.

23 Q. Can you tell me why it's appropriate to
24 recover the cost of a program that targets

1 reducing transmission via the cost allocation
2 that the Company does for distribution?

3 A. (Rice) Because these costs will be
4 distribution company costs. We're not
5 recovering transmission charges or, you
6 know -- yeah, we're not recovering wholesale
7 transmission charges. There are no wholesale
8 transmission charges included in the cost of
9 this program.

10 Q. But it would tend to reduce your share of RNS
11 and LNS costs. That's sort of one of the
12 goals here, right, that are passed through to
13 the customers?

14 A. (Rice) Potentially, yeah.

15 A. (Davis) I just wanted to add that,
16 effectively what I think Mr. Rice just said
17 is that this program would be part of the
18 overall set of distribution services. And
19 that would be, in my opinion, why it would be
20 appropriate for that to be a distribution
21 service cost that would be recoverable, you
22 know, included in part of the rates,
23 distribution rates themselves.

24 Q. Okay. Now moving on to Exhibit 4, Bates

1 Page 13. And we're almost done here. I'm
2 almost done.

3 I think you suggest that the cost of the
4 load management is somewhere between one
5 million dollars and one and a half million
6 dollars; is that correct? And that's I think
7 450,000 estimated for incentives. And then
8 the rest is what exactly?

9 A. (Rice) Let me just get to the information to
10 help answer the question.

11 (Witness reviews document.)

12 A. (Rice) Yeah, so the budget is summarized in
13 Exhibit 4, Bates Page 28. And you're
14 correct. It includes \$450,000 for customer
15 incentives. And then the balance of costs
16 would be administrative costs and
17 software/vendor costs.

18 Q. And so that category of administrative costs,
19 is that -- that's essentially the cost of the
20 utility administering the program?

21 A. (Rice) That's correct.

22 Q. And the software/vendor costs, that's -- how
23 does that differ from the cost of the utility
24 administering the program?

1 A. (Rice) I believe those were mostly license
2 fees for third-party software.

3 Q. Okay. And so as a percentage of overall
4 cost, the incentive paid to the customer is,
5 you know, somewhere around 33 percent; is
6 that accurate?

7 A. (Rice) Yeah, somewhere in that range.

8 Q. Okay. And how -- it shows the Company
9 acquiring about 200 customers per year. Can
10 you tell me how the Company might target
11 existing customers for enrollment?

12 A. (Rice) Just give me a moment. I'm making
13 sure we haven't... say anything or repeat
14 anything we've already said.

15 (Witness reviews document.)

16 A. (Rice) Yeah, I might phone a friend to Mr.
17 Boughan, who might be more familiar with some
18 of these activities. I mean, I know
19 obviously the Company does have a variety of
20 marketing strategies that it deploys through
21 its energy efficiency programs, which in
22 other states include demand management
23 offerings like this. So we'd probably follow
24 similar approaches. I know we have, for the

1 Massachusetts and Connecticut programs,
2 there's detailed information on our web sites
3 for customers to enroll. That's part of
4 information that we provide for EV customers
5 generally, directing them to the options and
6 the resources that are available to them from
7 the Company.

8 Q. Are vendor channels, for example, like a
9 ChargePoint or some other charger
10 manufacturer, are they a means to be able to
11 have direct access of targeted marketing to
12 existing customers?

13 A. (Rice) There's likely a channel. Again, I'm
14 not a marketing expert. So I can't say if
15 "direct access" is the right word. But
16 certainly I know we have opportunities with
17 other demand management programs to leverage
18 equipment vendors and be able to provide --
19 help provide options to the purchasers of
20 their equipment.

21 Q. And is it conceivable that those same
22 channels could be used to offer a time-of-use
23 rate via targeted marketing?

24 A. (Rice) I don't know. That's a good question.

1 I mean, the -- so in this scenario, I think
2 those vendors have a reason to partner with
3 the utility because we're increasing the
4 value to the customer of the device that they
5 sell. So, I mean, I don't -- you know, if
6 you didn't have that kind of direct
7 connection with the device, I don't know how
8 that would impact the opportunities to
9 partner with those equipment vendors.

10 Q. That's fair.

11 Okay. Now I'm going to move just very
12 briefly to the high-demand draw rate.

13 So at -- in the initial testimony,
14 Exhibit 4, Bates 7, Lines 8 through 10, I
15 think I have found the only reference to a
16 high-demand draw rate that's in the initial
17 testimony. It says, "The high-demand draw
18 rate developed by Eversource was filed to and
19 being evaluated separately in Docket No. DE
20 21-078." Is that correct?

21 A. (Rice) That's correct.

22 Q. And so I'm just wondering how that squares
23 with the Commission's directive in the
24 preceding proceeding, which actually happens

1 to be excerpted almost in its entirety at the
2 bottom of the Settlement Agreement in
3 Footnote 2, where it cites the Staff
4 recommendation around a -- that the
5 Commission -- maybe I'll just briefly read an
6 excerpt of it.

7 Staff recommended that the Commission
8 open a new proceeding and direct each
9 electric utility to file within 120 days,
10 consistent with the guidance above: One, an
11 EV TOU rate proposal for separately-metered
12 residential and small commercial customer
13 applications; two, an EV TOU rate proposal
14 for separately-metered high-demand draw
15 commercial customer applications. Based on
16 our review of the record in this
17 investigation, we find that EV time-of-use
18 rates are appropriate rate designs for
19 residential and commercial customers, and we
20 believe a separate proceeding to adjudicate
21 the merits of the various proposals from each
22 utility is warranted. We also see value in
23 the distinction Staff has drawn between
24 residential and small commercial customers

1 and high-demand draw applications that may
2 incorporate DC fast charging or clustered
3 Level 2 charging.

4 It seems to me like, from that quote,
5 they do see the distinction between
6 high-demand draw and low-demand draw, but
7 that they have ordered the utilities to file
8 EV TOU rates for both.

9 A. (Rice) I mean, I'm not a lawyer. But as you
10 know -- [connectivity issue] -- but we didn't
11 interpret the Commission's directive the same
12 as you. As you know, it was Commission
13 Staff's recommendation that the utilities be
14 directed to file both a separately-metered
15 residential time-of-use rate and a commercial
16 time-of-use rate for high-demand draw. What
17 the Commission ultimately ordered was just
18 that a new docket be opened to consider
19 utility-specific EV time-of-use rate
20 proposals. And that could include "various"
21 proposals I think was another word that was
22 used.

23 So I think the way Eversource approached
24 this is it absolutely appreciated all the

1 work that went into the investigation,
2 appreciated the guidance with respect to
3 time-of-use rates. We took that, we listened
4 to it, and we set about coming up with what
5 we believe were the most effective approaches
6 that we could put forward to best serve the
7 New Hampshire EV market at this time.

8 As we've explained previously, when we
9 did that, we thought a big need in the
10 near-term is addressing demand charges
11 because that's a pretty well-known barrier, a
12 potential barrier to development of DC
13 fast-charging infrastructure, which, in turn,
14 is understood to be pretty critical to
15 enabling any further electrification of the
16 transportation sector.

17 So we did that because we agreed to do
18 it as part of the Settlement Agreement. We
19 were required to file that in a separate
20 docket, and we did. And we think that's
21 really the best near-term approach for
22 serving this segment of the market. And we
23 didn't think it was either necessary, or
24 necessarily, you know, a good use of

1 everyone's time to put together and put
2 forward a redundant rate in this docket.

3 [Court Reporter interrupts.]

4 Q. Okay. That's helpful. And I suppose maybe
5 you and I will just have to disagree -- or
6 agree to disagree about the interpretation of
7 that order.

8 But you mentioned the demand charge
9 rate. And just I have one or two questions
10 about that, and then that's it for the day,
11 for me at least.

12 So can you tell me that your current
13 Rate GV -- do you have some sense of how much
14 of the overall revenue for that class is
15 derived from the demand charge? Are we
16 talking 20 percent? Are we talking
17 90 percent?

18 A. (Davis) Yeah, if you assume GV customers as a
19 class taking generation service, all in,
20 you're well over 50 percent --

21 Q. Over 50 percent --

22 A. (Davis) -- for demand charge.

23 Q. Over 50 percent. Okay.

24 A. (Davis) Correct.

1 Q. And can you tell me, that demand charge, does
2 that have a temporal characteristic to it?
3 Is it assessed based on time of day?

4 A. (Davis) It does have a characteristic -- a
5 temporal characteristic. It's really how we
6 determine the demand charge itself. We look
7 at current and prior peaks. And there's a
8 couple of factors in there. So we define a
9 peak period, which happens to be, you know, a
10 13-hour peak period, and then we evaluate
11 that along with kW versus kVA components. So
12 there's a complex set of criteria. But that
13 is looked at both temporally and ultimately
14 is used to set the billing demand, and then
15 the demand charge is applied to those
16 accordingly.

17 Q. So for all other Rate GV customers, or all of
18 your existing Rate GV customers, there is a
19 time-based aspect to that demand charge that
20 is used to collect, you know, about
21 50 percent of the total revenues.

22 A. (Davis) Yeah. And if I have a few minutes,
23 maybe I can just come back and give you, from
24 a class perspective, the actual proportion.

1 I think it would be helpful just to get order
2 of magnitude. I don't have that handy, but I
3 can certainly get that if I have a couple
4 minutes off, you know, offline.

5 Q. Okay. So --

6 A. (Davis) But yeah.

7 Q. So while I think I understand that the
8 Company's point is that the high-demand draw
9 rate proposed in the other docket, which
10 removes the demand charge and is not
11 time-based, and actually removes the
12 time-based price signal that all customers
13 receive, that that stands in place of the
14 time-varying high-demand draw rate that, for
15 example, Unitil filed in this proceeding; is
16 that correct?

17 A. (Davis) I apologize. Could you just restate
18 that? I was just trying to reconcile
19 something I said. You know, make sure I was
20 listening. So I apologize. Could you repeat
21 that?

22 Q. Yeah, certainly. So the demand charge
23 alternative rate that the Company filed in
24 21-078, that is volumetric and does not vary

1 by time --

2 A. (Davis) Correct.

3 Q. -- and in fact removes the price signal that
4 all of the customers get from the GV class --
5 that is, the demand charge -- that stands in
6 place of a high-demand draw rate that the
7 Company would -- could have filed in this
8 proceeding, essentially, the electric vehicle
9 time-of-use rate proceeding.

10 A. (Davis) I think it meets the same end
11 purpose. But I do want to say that, you
12 know, whatever that characteristic is, that's
13 imputed in setting the average rate. So
14 it's -- I don't know if it's just a
15 replacement or it's just equivalent.

16 Q. Okay. That's helpful.

17 And maybe one last question about -- so
18 that rate, it's about 36 cents per kilowatt
19 hour; is that correct?

20 A. (Davis) The proposed rate design converts all
21 the demand charges, as well as carries in the
22 other, the volumetric charges, and all
23 combined equate -- yeah, they come out to
24 36 percent. And we designed the rate to be

1 on par with a 10 percent utilization level,
2 if you will, or load factor for electric
3 vehicles.

4 Q. Have you had a chance --

5 [connectivity issue]

6 A. (Davis) Go ahead.

7 Q. There's a party to this proceeding that I
8 don't think I've seen on the screen at all
9 today, but I understand was planning to
10 attend. They didn't file any testimony, but
11 they did file comments, and that is the Town
12 of Derry. And it's possible they may want to
13 at some point weigh in here.

14 MR. BUCKLEY: Town of Derry, if you
15 are listening, you can speak at some point
16 maybe by letting the host know. It's
17 possible they're not participating as well.

18 Q. But in their comments -- did you get a chance
19 to read their comments?

20 A. (Davis) I saw them and I started to. I just
21 didn't have a chance to fully read that.
22 And, you know, if we need to put some
23 attention on it, if I could have just a
24 little time to do that, I'm glad to do that.

1 Q. Okay. I would just highlight, subject to
2 check, that the 36 rate -- the 36 cents rate
3 that Eversource has proposed for its demand
4 charge alternative, the flat volumetric rate,
5 it compares two numbers that they provided,
6 dollars per kilowatt hour. One is the rate
7 they were initially paying for their charging
8 stations, separately-metered charging
9 stations; that was 16 cents. And then the
10 other is the rate they are currently paying
11 as a regular GV customer, and that is
12 approximately 70 cents -- 70.

13 A. (Davis) Seven zero?

14 Q. Does that sound about accurate to you and
15 sort of provide some context for the 36-cent
16 demand charge alternative?

17 A. (Davis) I'll need to look at that. But I
18 can pick -- you know, if you just take an
19 average revenue per kilowatt hour, depending
20 on the proportion of volumetric usage or
21 consumption during a month versus demand
22 charges, I mean, I suppose in a given month
23 you could see a swing.

24 Q. That's fair. Okay.

1 A. (Davis) But I would have to see the
2 information to better understand that before
3 I can truly opine.

4 Q. Thank you, Mr. Davis.

5 MR. BUCKLEY: And thank you,
6 everyone, for your patience. The Department
7 of Energy has no further questions.

8 CHAIRMAN GOLDNER: Thank you, Mr.
9 Buckley. We'll take a break until 1:15 and
10 come back, starting with Commission
11 questions. Thank you. Off the record.

12 (Lunch recess taken at 12:42 p.m. and
13 concludes the MORNING SESSION. The
14 hearing resumes under separate cover in
15 the transcript noted as AFTERNOON
16 SESSION ONLY.)

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C E R T I F I C A T E

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accurate transcript of my stenographic
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Licensed Shorthand Court Reporter
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