

STATE OF VERMONT  
PUBLIC UTILITY COMMISSION

CASE NO. 23-1364-INV

2023 INVESTIGATION INTO EV RATES

June 23, 2023  
9:30 a.m.

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Via videoconference

Workshop held before the Vermont Public  
Utility Commission, via GoToMeeting, on June 23, 2023,  
beginning at 9:30 a.m.

P R E S E N T

COMMISSION MEMBERS: Anthony Z. Roisman, Chairman  
Margaret Cheney  
J. Riley Allen

STAFF: Micah Howe, Staff Attorney  
Andrea Poppiti, Utilities Analyst

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P R E S E N T

Sarah Braese, VPPSA  
Philip Picotte, DPS  
Erin Brennan, DPS  
Aidan Breen  
Connor Daley, VPPSA  
Isla Kennedy, ChargePoint  
Zach Casey, GMP  
Julie Raboin  
Michael Lazorchak, Stowe Electric  
Lisa Morris, VEC  
Amber Widmayer, BED  
Brian Evans-Mongeon, Hyde Park  
Tiana Smith, GMP  
Andrea Cohen, VEC  
Bill Powell, WEC  
Jim Cater, GF Power  
Jeff Cram, GF Power

1 MR. HOWE: All right. We'll get going.  
2 Good morning, everyone. This is a workshop in Case  
3 No. 23-1364-INV, which is an investigation into rates  
4 related to electric vehicles. It was opened by the  
5 Vermont Public Utility Commission pursuant to Act 55  
6 of 2021.

7 My name is Micah Howe. I'm a staff  
8 attorney at the commission. Also attending from the  
9 commission today is Commission Chair Roisman,  
10 Commissioner Cheney and Commissioner Allen as well as  
11 Andrea Poppiti, who is a utilities analyst at the  
12 commission.

13 This workshop is being conducted  
14 remotely, and we are using the web-based platform  
15 GoToMeeting. Before we get started with the  
16 workshop, I will go over some procedures for using  
17 the GoToMeeting platform. I encourage workshop  
18 participants to keep their cameras on when they are  
19 speaking. Each time you begin talking, please  
20 identify yourself by name for the court reporter. If  
21 you plan to only listen, it is helpful if you turn  
22 your camera off so the pictures of active  
23 participants are larger.

24 The commission staff will not mute  
25 anyone's microphone, whether a participant or member

1 of the public, so please keep yourself on mute unless  
2 you are speaking to minimize background noises.

3 To indicate that you want to speak,  
4 please turn your camera on and unmute your microphone  
5 or raise your hand. Periodically I will ask are  
6 there anyone participating by phone, which I believe  
7 there is only one person, who wishes to speak. If  
8 your internet connection cuts out, please try to  
9 rejoin GoToMeeting or call into the workshop using  
10 the GoToMeeting telephone number that was provided in  
11 the workshop notice. If the audio or video from the  
12 workshop has cut out, let me know when you are able  
13 to rejoin, and I will summarize what happened.

14 If you are unable to call in or rejoin,  
15 please notify the clerk's office immediately by email  
16 or phone, and we will pause the workshop to try to  
17 resolve the issue. If anyone needs to present  
18 materials, we will make you the presenter in  
19 GoToMeeting so that you can share the slides on your  
20 screen by clicking the "Share Screen" icon.

21 With that covered, we will now begin  
22 the substantive portion of the workshop. I will  
23 start by taking attendance just so we have a record  
24 of everyone who is here. I will -- since there are  
25 quite a few folks on the line -- I will basically

1 call on participants starting with a list of the  
2 entities that filed comments in this proceeding. And  
3 then I'll ask if there is anyone else that would like  
4 to state their name for the record.

5 So I will start, is there anyone here  
6 from the Department of Public Service?

7 MS. BRENNAN: Yes. My name is Erin  
8 Brennan. I'm special counsel with the Department of  
9 Public Service, and here with me today is Philip  
10 Picotte who is a utilities economic analyst with the  
11 Department.

12 MR. HOWE: All right. Welcome.  
13 Burlington Electric.

14 MS. WIDMAYER: Hello. Amber Widmayer  
15 for Burlington Electric Department.

16 MR. HOWE: Hello. Welcome. GF Power.

17 MR. CATER: Hi. My name is Jim Cater,  
18 and I'm calling in today on behalf of GF Power.

19 MR. HOWE: Can you spell your last name  
20 for me?

21 MR. CATER: It's C-A-T-E-R.

22 MR. HOWE: Okay. Perfect. Welcome.  
23 Green Mountain Power.

24 MS. SMITH: Hi. Tiana Smith from Green  
25 Mountain Power. And also with me today is Zach

1 Casey.

2 MR. HOWE: Welcome. All right. Hyde  
3 Park Electric.

4 MR. EVANS-MONGEON: Good morning. This  
5 is Brian Evans-Mongeon. I'm the acting general  
6 manager, and it is only I today.

7 MR. HOWE: Okay. Stowe Electric.

8 MR. LAZORCHAK: Good morning. Michael  
9 Lazorchak with Stowe Electric. Thank you.

10 MR. HOWE: Vermont Electric Co-op.

11 MS. MORRIS: Good morning. This is  
12 Lisa Morris, and Andrea Cohen is on as well for VEC.

13 MR. HOWE: Morning. And then the VPPSA  
14 utilities. So I'm not sure if -- I could run down  
15 the list or --

16 MS. BRAESE: Sarah Braese with VPPSA.  
17 And Connor Daley is also on with me, too.

18 MR. HOWE: And anyone from the  
19 individual utilities, or are you here on behalf of  
20 all of them?

21 MS. BRAESE: We are here on behalf of  
22 them.

23 MR. HOWE: Great. Washington Electric.

24 MR. POWELL: Bill Powell for Washington  
25 Co-op. Good morning.

1 MR. HOWE: And then ChargePoint. Is  
2 there anyone from ChargePoint on this morning?

3 MS. KENNEDY: Yes. Good morning. Isla  
4 Kennedy with ChargePoint.

5 MR. HOWE: Isla Kennedy. Welcome. Is  
6 there anyone on the call that I have not called on?  
7 That was my list of comments or commenters that filed  
8 comments in this proceeding.

9 All right. I think we have covered  
10 that. Moving on. Just sort of a highlight of or an  
11 outline of what we are going to talk about today. I  
12 planned to initially talk just generally about Act 55  
13 and the commission's order opening this investigation  
14 and then move into questions that I had for the  
15 individual utilities. I've got them organized by --  
16 in alphabetical order, so I was going to proceed in  
17 that fashion. But we can see how the workshop  
18 progresses and other questions that come up and where  
19 it takes us. So I'm not tied to that, but that's --  
20 will at least be my starting point and finish up with  
21 the discussion of some of the additional workshop  
22 topics that were raised in the comments that were  
23 filed.

24 I think -- I don't plan to get into  
25 those substantively, but perhaps figure out some -- a

1 plan for discussing those more in depth going forward  
2 in this investigation.

3 So for the first part, the commission  
4 -- the commission's order opening this investigation  
5 gave a little overview and interpretation of the  
6 requirements of Act 55 and its take on it. And in  
7 particular, it explained that the commission  
8 understands Act 55 to require each distribution  
9 utility to offer multiple EV rates, including rates  
10 for public and private EVSE, as well as for the  
11 relevant rate classes, market segments and customer  
12 segments within the public and private EVSE  
13 categories, as applicable.

14 That's based on the exemption provided  
15 in Act 55 and section 33 as well as the overarching  
16 requirement that the EV rates have to be available  
17 for public and private EVSE. And I just wanted to  
18 get a sense from any utilities that care to comment  
19 on that whether that is also their understanding, or,  
20 in particular, whether they don't understand Act 55  
21 in that same way.

22 All right. Seeing no green  
23 microphones, I'm going to assume that anyone --  
24 everyone is reading this the same way. I don't know  
25 -- yes.



1 MS. COHEN: Sorry I'm late.

2 MR. HOWE: Ms. Cohen. Yes.

3 MS. COHEN: Is it appropriate for me to  
4 comment on that right now?

5 MR. HOWE: Yes. Absolutely. Love to  
6 hear from you.

7 MS. COHEN: Respectfully I'm not sure  
8 that VEC actually reads the statute the same way. So  
9 whether -- I just wanted to get that on the record.  
10 And something that we can, you know, talk about as we  
11 proceed.

12 Our understanding was that the statute  
13 didn't necessarily require multiple rates, and it  
14 definitely allowed for that, you know, whole house  
15 time-of-use rate which meant you didn't have to do  
16 multiple rates. And certainly not, you know,  
17 necessarily different rates for public or private,  
18 you know, provided they all had access to, you know,  
19 that opportunity. And so that's just a different  
20 framework of how we are approaching things. So when  
21 it's appropriate to dive into that more, we can.

22 MR. HOWE: Okay. And I will be walking  
23 through each utility so we can discuss that more in  
24 depth in the context of the rates you've described.  
25 And the goal of this discussion is not to hash out

1 anything in the context of -- or that is definitive  
2 about Act 55. It's just our -- we are trying to  
3 develop an understanding of what to expect from the  
4 utilities when the filings come and make sure  
5 everyone is more or less on the same page as to  
6 what's required and what's expected.

7 So we don't know what the rate filings  
8 that will come, if any, or if they are claiming -- or  
9 if you plan to claim an exemption, but we would like  
10 to have a better picture of that just, you know, even  
11 just for work load purposes what's coming in.

12 Ms. Smith.

13 MS. SMITH: I'll just add that GMP is  
14 in agreement with VEC's interpretation as well. So  
15 just for the record, respectfully. Thanks.

16 MR. HOWE: Sure. All right. Before we  
17 move on to the individual utility discussions, did  
18 any of the commissioners or staff have anything they  
19 would like to add on this?

20 (No response)

21 MR. HOWE: All right. Hearing nothing,  
22 I will move on to the individual utilities. So the  
23 first one, and again, I just have these in  
24 alphabetical order. I have Burlington Electric next.  
25 And as I explained, I'll just call these in

1 alphabetical order. I think this discussion is  
2 really for the benefit of the commission's  
3 understanding of your rates so that when we do write  
4 the report at the end of the year for the  
5 legislature, we can have a clearer understanding of  
6 where individual utilities are, but I think also  
7 sharing information about your rates may help the  
8 other utilities in developing their own and have some  
9 ideas.

10 COMMISSIONER ALLEN: Micah, can I just  
11 add something? This is really a question to you.  
12 But I feel like Act 55 is not necessarily kind of  
13 constraining in any way. That is, we can essentially  
14 look at the goals and ambitions of Act 55 and  
15 essentially tailor the requirements to things that  
16 frankly make sense broadly. Does that sound correct?  
17 I just don't want people to interpret Act 55 as  
18 somehow constraining or -- the abilities on this  
19 topic.

20 MR. HOWE: On -- I missed the last part  
21 of what you said. On what?

22 COMMISSIONER ALLEN: On the topic of  
23 electric vehicle rates. You know, establishing, you  
24 know, a just and reasonable rates that apply to  
25 electric vehicles that, you know, may make sense

1 given the individual circumstances of each utility.

2 MR. HOWE: Right. Yes. Of course.

3 CHAIR ROISMAN: And I just want to  
4 underscore what Commissioner Allen has said. The  
5 commission obviously has the authority to recommend  
6 and ultimately implement rates that we think are  
7 necessary to achieve the goals of the statute. And  
8 the process starts obviously with the utilities  
9 giving us input as to what they are proposing to do  
10 and how they propose to do it. But at the end of the  
11 day, the commission could decide that something more  
12 is needed than what is proposed in order to meet the  
13 goals of the statute, particularly encourage electric  
14 vehicle use, and make it more attractive than  
15 alternative things.

16 So this workshop doesn't have as its  
17 goal that purpose. But it is important to recognize  
18 that our generic authority, independent of Act 55,  
19 extends as Commissioner Allen has laid out.

20 MR. HOWE: Great. Thank you, Chairman  
21 Roisman. All right. I will go back to BED unless  
22 someone has something else to add. Burlington  
23 Electric.

24 MS. WIDMAYER: Hello.

25 MR. HOWE: All right. I guess the

1 first question I had for Burlington Electric was  
2 whether or not Burlington Electric plans to file any  
3 more -- any new tariffs under Act 55.

4 MS. WIDMAYER: Well for starters, just  
5 to clarify, we do fall under the exemption in section  
6 D, because we had EV rates in effect back in 2018.  
7 We are continuing to work on rates that are approved.  
8 For instance, under our EV rate, we expanded that to  
9 include our small general and large general rate  
10 classes. And most of our customers are currently on  
11 the fixed timing so that they can't charge between --  
12 they can only charge between 10 p.m. and 12 noon.

13 But we are working with a few customers  
14 to roll out the -- more people to be on the flexible  
15 load and the flexible real time, so we are  
16 experimenting with a few customers to make sure we  
17 have all the kinks out before we actively recruit  
18 more people onto those other options. But those are  
19 already approved in the tariff.

20 MR. HOWE: Okay. Great. In terms of  
21 the exemption -- oh, yes.

22 COMMISSIONER ALLEN: Another question  
23 for you. When is it appropriate to essentially, you  
24 know, be probing deeper into the experience of the  
25 utilities? Would that be kind of covered later in

1 the agenda?

2 MR. HOWE: Is that a question for me?

3 COMMISSIONER ALLEN: Yes.

4 MR. HOWE: I think we would do that  
5 now. So my plan was to walk through each utility, so  
6 while we have them, I would probe deeper as we go.

7 Do you have a question now,  
8 Commissioner Allen?

9 COMMISSIONER ALLEN: Well it's a broad  
10 question for Ms. Widmayer. It really relates to  
11 essentially the takeup of the rates. I mean that is,  
12 is there a way of essentially estimating or measuring  
13 the adoption of the rates by BED customers and, you  
14 know, essentially the responsiveness of customers  
15 who, through those rates, get some sense of, you  
16 know, impact and potentially a benefit cost as well?  
17 Is there kind of an analytic process that is  
18 associated with the introduction of these rates that  
19 can be shared with the commission?

20 MS. WIDMAYER: I'm happy to provide any  
21 information you would like. I don't know that I have  
22 those details on hand right now. But I can certainly  
23 get those for you. I do know that we do not have  
24 participation from all EV drivers in the BED  
25 territory. And a number of reasons for that are the

1 cost of installing a charger. A number of customers  
2 feel like level 1 charging is sufficient so they  
3 haven't opted to install the level 2 charger in order  
4 to participate.

5 We have also heard some people don't  
6 want to be limited by the hours, so that will be  
7 interesting to see if more people join once the  
8 flexible load options are more readily available.  
9 But yeah, those are ongoing questions we are working  
10 on answering.

11 COMMISSIONER ALLEN: Just to follow up  
12 on that. As I think about this workshop and the  
13 opportunities that we have, I mean I think, you know,  
14 as an example Green Mountain Power and Burlington  
15 Electric were essentially trailblazers in essentially  
16 the introduction offering of rates. And they may  
17 provide experience that may actually help inform, you  
18 know, steps taken by other utilities.

19 So having, you know, some experience  
20 that we can kind of engage around and dig into,  
21 understand what really is working and what really is  
22 not working, and as you allude to what are the  
23 reasons that things are and are not essentially  
24 taking place so that we can kind of share the  
25 experience, and that experience might help inform the

1 judgment of other utilities and the commission as we  
2 move forward.

3 MS. WIDMAYER: I would be happy to  
4 provide follow-up information.

5 CHAIR ROISMAN: And I also have a  
6 question for Ms. Widmayer. We are blessed in this  
7 state with so many creative utilities and certainly  
8 BED is one of them. I wonder what thoughts you have  
9 had or ideas you have about having different rates  
10 for the customer who has the -- their own charging at  
11 home primarily and those sites where there are  
12 commercial chargers available; the malls and places  
13 like that.

14 Have you had -- have you given any  
15 thought to -- and how do you deal with differences  
16 that might arise in rates for those different kinds  
17 of charging places?

18 MS. WIDMAYER: Well so far we do have  
19 two different rates. We have a public charging rate,  
20 which is just on all the time, so there is no  
21 time-of-use component to it. That's about 18 cents  
22 -- well 19 cents -- will be 20 cents in the rate  
23 case.

24 And then that's differentiated from our  
25 EV rate which is for the residential small general



1 and large general which has those time components to  
2 incentivize charging off-peak.

3 CHAIR ROISMAN: All right. And so with  
4 regard to the commercial, the non-home based, if it's  
5 -- let's say it's a large mall and they have a big  
6 electric bill, obviously for everything that goes on  
7 at the mall. Are the charging systems just rolled  
8 into that rate or are they separated? And do you  
9 have the technology, if you wanted to, to separate  
10 the rate that was paid for the charger as opposed to  
11 then this is a wholesale rate, I assume, unless BED  
12 owns the charger. The rate for the charger versus  
13 all the other electricity used in the mall.

14 MS. WIDMAYER: I'm not sure I'll be  
15 able to fully answer your question, but under the EV  
16 rate for the large general rate class there is a  
17 demand credit included in the rate. I'll probably  
18 need to go back and revisit how the rate was written  
19 to fully answer your question. But I know that we  
20 have considered those questions. So for --

21 COMMISSIONER ALLEN: If I could, Ms.  
22 Widmayer, if I could, you said that's a demand  
23 credit.

24 Do you mean -- is it energy based like  
25 the rates that are applied to the residential class

1 or is it actually a demand -- a discount that is  
2 offered on essentially the demand charge component of  
3 rate?

4 MS. WIDMAYER: The way it's written is  
5 it's a demand credit, \$21.53 per kilowatt calculated  
6 based on the difference between the billing demand  
7 and the non-EV charging billing demand.

8 COMMISSIONER ALLEN: Okay.

9 CHAIR ROISMAN: Okay. Just I'm not  
10 that -- I don't live in the Burlington area so I'm  
11 not familiar with it. But are the chargers that are  
12 not home based in the Burlington area owned by  
13 independent companies? Or does BED own all of those  
14 chargers also?

15 MS. WIDMAYER: For now, all of the  
16 chargers that are on our public EVSE rate are owned  
17 by BED. So if there are non-home-based commercial  
18 chargers, they would have to fall under our EV rate,  
19 they would have to be compatible with our rate. And  
20 they would have to fall into those small general or  
21 large general categories.

22 CHAIR ROISMAN: Okay. So I'm sorry to  
23 dig into this so much, but this is so new that it's  
24 important, as I think Commissioner Allen said, that  
25 everybody know what everybody's doing.

1                   So you own the chargers, the non-home-  
2                   based chargers. You -- BED owns them; is that  
3                   correct?

4                   MS. WIDMAYER: We own a number of them  
5                   downtown. And I'm fully -- full disclosure, I'm  
6                   probably not the best person -- I'm not the one that  
7                   tinkers with the rates and has the vision for  
8                   proposing them. So I'm happy to follow up, get more  
9                   information. So there could be commercial chargers  
10                  that are not BED owned if they are able to fall under  
11                  our small general or large general rate. But I can't  
12                  give you specifics right now.

13                 CHAIR ROISMAN: Okay. So with regard  
14                 to the ones that you own, when you talk about the  
15                 rate, that's the rate that someone who -- if I drive  
16                 my electric vehicle into one of those locations and I  
17                 plug it in, the rate I'm going to pay probably on my  
18                 credit card is going to be the rate that BED has set  
19                 for its own charger.

20                 MS. WIDMAYER: Correct.

21                 CHAIR ROISMAN: At that particular  
22                 location. There is no middleman involved or anything  
23                 else. It's just a direct; I'm paying the utility and  
24                 you're selling me the electricity.

25                 MS. WIDMAYER: That's correct.

1 CHAIR ROISMAN: Right. And if I'm in a  
2 commercial setting, and it's not one that's owned by  
3 BED, the rate that I'm going to pay is the general  
4 rate that that commercial establishment is paying for  
5 its electricity. Is that what you're saying? So if  
6 they are paying 15 cents a kilowatthour, that's what  
7 I'll pay. And I'll pay it to them or I pay it to  
8 BED?

9 MS. WIDMAYER: Well unless they are on  
10 our EV rate, I believe they would be able to charge  
11 whatever they want as a commercial charger.

12 CHAIR ROISMAN: Okay. All right. So  
13 they are buying electricity from you at whatever rate  
14 they have tapped into, and they can then charge me  
15 more or less than that. And that's completely up to  
16 them. Like they might say if you buy a hundred  
17 dollars worth of stuff in our mall, we will give you  
18 a better rate when you go to check out than if you  
19 just show up, park here for a little bit, and leave.  
20 But that's all in their control, not in BED's  
21 control. Correct?

22 MS. WIDMAYER: Correct. And others can  
23 feel free to jump in and correct me if I've misquoted  
24 anything.

25 CHAIR ROISMAN: All right. Good.

1 Thank you. I appreciate it.

2 MS. WIDMAYER: Sure.

3 COMMISSIONER CHENEY: I'm curious to  
4 see -- I know that Mr. Cram had his mic on. Was that  
5 something that you wanted to speak about?

6 MR. CRAM: No, I apologize. I just  
7 joined late and was trying to get myself organized  
8 here. So thank you.

9 COMMISSIONER CHENEY: Understood.

10 MR. HOWE: All right. Do any of the  
11 commissioners have other questions for BED that -- I  
12 think I had my initial one, and then people probably  
13 covered others that I had already. So I don't have  
14 any more questions for BED.

15 COMMISSIONER ALLEN: No. Not right  
16 now. I think I want Ms. Widmayer to have essentially  
17 the benefit of knowing -- kind of having specific  
18 questions that we would ask of her. So I'm imagining  
19 that we would follow up and offer specific questions  
20 rather than, you know, just throw a wide or a broad  
21 net out there for her to kind of provide more of an  
22 analytic frame on their experience.

23 MR. HOWE: Okay. Great. Thank you,  
24 Ms. Widmayer. I think that's all the questions we  
25 have right now. But we will -- may circle back as we

1 go.

2 MS. WIDMAYER: Okay. Thanks.

3 MR. HOWE: The next utility on the list  
4 was GF Power. I just had one question because you're  
5 in sort of a unique situation in this under Act 55.  
6 Your comments stated that the existing tariff meets  
7 all the Act 55, or you believe that the existing  
8 tariff meets the Act 55 requirements. Just in terms  
9 of sort of filing and meeting the obligation under  
10 Act 55, do you have thoughts at this point on whether  
11 you'll file some kind of request or petition? How  
12 will the commission deal with that, or how will that  
13 be presented to the commission?

14 MR. CATER: Yeah. You know, this is  
15 Jim Cater again on behalf of GF Power. I don't think  
16 that GF Power has a firm plan in mind for that at  
17 this point in time.

18 MR. HOWE: Okay. So maybe some  
19 guidance would be useful in the future on how to  
20 address that.

21 MR. CATER: Yes.

22 MR. HOWE: All right. Do any of the  
23 commissioners have any questions or staff have  
24 questions for GF Power before we move on?

25 (No response)

1 MR. HOWE: All right. Seeing no green  
2 light, actually I do you have one more question.  
3 Does GF Power have electric vehicle charging  
4 equipment at its facility?

5 MR. CATER: No. That wouldn't be --  
6 Global Foundries -- I actually don't know whether  
7 they have charging facilities on their campus or not.

8 MR. CRAM: So this is Jeff Cram. And  
9 we do not have chargers at this point. We are kind  
10 of mapping out what our needs are at the moment. We  
11 will likely have them installed next year.

12 MR. HOWE: Okay. Great. Thank you.

13 COMMISSIONER ALLEN: If I could, Micah,  
14 just to follow up on that. Is the expectation, Mr.  
15 Cram, I'm sorry. Can you hear me?

16 MR. CRAM: Yeah, I can hear you.

17 COMMISSIONER ALLEN: Is the expectation  
18 that you would essentially have chargers there for  
19 kind of employees of GF or -- and if so, is the  
20 expectation that you would essentially just offer it  
21 as a free service or that you might be charging for  
22 that service?

23 MR. CRAM: Yeah. So we are close to  
24 campus, so it would be for employees, visitors,  
25 contractors, anybody that's there. We haven't made

1 the determination on how to do that and probably  
2 could use some guidance on that, on whether we could  
3 recoup some of the costs of the electricity, and --  
4 in some type of program or whether we would do it as  
5 a free service. We are kind of evaluating both.

6 COMMISSIONER ALLEN: Okay. Thank you.

7 CHAIR ROISMAN: I had one question I  
8 should have asked of Ms. Widmayer but I'm really  
9 asking of it everyone. And my focus is primarily on  
10 these commercial chargers, that is not the ones that  
11 people have at home, but all the others. If you have  
12 a special rate, or are talking about the commercial  
13 charger, it would be helpful to let us know if the  
14 chargers we are talking about are level 2 or level 3  
15 chargers.

16 So now that GF Power is there, the  
17 chargers that you're putting on campus, are you  
18 intending to use level 2 or the fast charger level 3  
19 for your campus ones?

20 MR. CRAM: Yeah. So what I would  
21 expect the GF is to go with a level 2. The majority  
22 of our employees are 8 to 12-hour shift employees,  
23 and we think that would likely fit in the best for  
24 the needs of what we would be doing.

25 CHAIR ROISMAN: All right. And my



1 recollection is, happily, you employ a great many  
2 Vermonters. We expect sometime in the next, say five  
3 years, that an increasing number of people will be  
4 driving electric vehicles. Are you thinking that  
5 you'll install now an adequate number of chargers to  
6 allow all the people with electric vehicles who want  
7 to charge while they are at work to charge, or are  
8 you thinking to put in just enough for now and then  
9 build out as the demand increases? And if neither of  
10 those, will you be planning to implement some program  
11 by which people will be able to use the charger but  
12 only for a finite period of time and then need to  
13 remove their car from that spot so that somebody else  
14 can charge at that spot?

15 What have you thought about or what are  
16 you planning to do about that?

17 MR. CRAM: Sure. So our initial  
18 thought is that we are going to build -- put the  
19 infrastructure in place for the future for some  
20 period of time. It's not just to address today's  
21 need. But if we have to run power through our  
22 buildings and our parking lots, we don't want to  
23 repeatedly go and put that infrastructure in place.  
24 So we would build out at least the infrastructure,  
25 maybe not all the charging stations, but the

1 infrastructure to support those for some period of  
2 time.

3 It is a -- we would put in some type of  
4 ability for people to move vehicles during the course  
5 of the shift, but we do need to be conscious of, you  
6 know, the needs of the manufacturing. So we do want  
7 to put some structure around how we do that.

8 CHAIR ROISMAN: Okay. Thank you.  
9 That's very helpful. And as you know, that's a  
10 difficult issue. I mean not just for a big  
11 manufacturer like GF Power but a mall. You know,  
12 some people come and spend their day at the mall, and  
13 some people come and do a 20-minute shop. And how  
14 they deal with that in terms of the charger use is a  
15 problem that we are looking for creative solutions  
16 to. Thank you.

17 MR. CRAM: Thanks.

18 MR. HOWE: All right. Are there any  
19 other questions for GF Power before we move on?

20 (No response)

21 MR. HOWE: All right. Thank you, GF  
22 Power. The next in order is Green Mountain Power.

23 Good morning.

24 MS. SMITH: Good morning. Zach Casey  
25 is here.

1 MR. CASEY: Hello.

2 MR. HOWE: I did have just a general  
3 question initially. Your comments mentioned the  
4 flexible load management pilot and the next phase of  
5 it which was FLM 3.0 that you call it. I wonder -- I  
6 didn't -- you give a brief description of it, but I  
7 wonder if you could tell us a little bit more about  
8 what that pilot is and its targets and any sense of  
9 how it is working for you.

10 MS. SMITH: Go ahead.

11 MR. CASEY: Yes. So this is Zach  
12 Casey. We sunset our flexible load management pilot  
13 2.0 earlier -- at the end of December of '22. We  
14 still have participants in that that we will continue  
15 to serve. What we are thinking we are now going to  
16 the next phase of FLM 3.0. So right now we are  
17 exploring what that looks like. And we are hopeful  
18 to have some sort of pilot out the door by October of  
19 '23. This year. And in that is basically a demand  
20 response program. And it's garnered towards  
21 typically the larger commercial industrial customers  
22 that are able to flex their load when we have an  
23 event for a peak demand response throughout the  
24 state.

25 We right now have a couple different

1 programs that are kind of like that, but it's more of  
2 -- those programs are more of a, you know, as you  
3 know, a curtailable load rider is a big hammer and  
4 you have to, you know, reduce by 20 percent of your  
5 load. Flexible load management is -- we are seeing a  
6 couple ideas out there. Seeing what load you can  
7 shed during these peak events. And thinking that  
8 some of the larger charging stations might be able to  
9 benefit from this -- in this rate when they have, you  
10 know, maybe some fleets that have that large load at  
11 the end of it or we are not necessarily looking at it  
12 as public facing because that would be a little  
13 challenging for the larger DCFCs across the state,  
14 but more looking at, like, fleets or large  
15 corporations to participate in that separately.

16 And, you know, we haven't really  
17 hammered out all the details yet, so we are still  
18 exploring a couple different options, but one of them  
19 is again, event based, maybe sharing a load profile  
20 with the customer at the beginning of the week and  
21 saying if you can match this load profile that we are  
22 looking at, here's what we are seeing in Vermont, in  
23 New England, and if you can match this load profile  
24 that we are asking you to, to reduce your demand by  
25 so many kilowatts, this is the compensation of the

1 rate that we have.

2 And then maybe looking at it as, you  
3 know, if you participate so many times a year during  
4 those peak events, a couple buckets. If you're going  
5 to be in once a month, heck, I'm in once a week. Or  
6 maybe it's only a couple times a year, those might  
7 vary in that compensation.

8 So we are throwing stuff at the wall  
9 for that FLM. We haven't gotten there. We are  
10 hopeful somewhere in October that we will be able to  
11 roll a pilot out.

12 COMMISSIONER ALLEN: Micah, I have a  
13 couple questions if now is the appropriate time.

14 MR. HOWE: Yes, of course.

15 COMMISSIONER ALLEN: So you said that  
16 your flexible load management 2.0 has essentially  
17 sunset. And you're grandfathering in essentially the  
18 customers that subscribe to that. Was that the EV  
19 flexible load management rate? Was that just  
20 another general rate? What rate is it that we are  
21 referring to on the tariffs?

22 MR. CASEY: On our responses to this?

23 COMMISSIONER ALLEN: Well I'm just -- I  
24 mean I'm familiar with Green Mountain Power's kind of  
25 rate schedule.

1 MR. CASEY: Time-of-use rate. Yeah.  
2 So the flexible load management in 2.0. You are  
3 correct. We took participants until about December  
4 15 of '22. We have I think close to 60 is what we  
5 have wanted in the pilot. We have 50 some odd  
6 enrolled. And we are -- in those enrollments we have  
7 probably half of those participating in flexible load  
8 management 2.0. So we are now getting folks on to  
9 the actual rate in participating. And that flexible  
10 load management 2.0 is -- part of the pilot is we  
11 will service those customers for three years once  
12 they are enrolled. And we will do that and continue  
13 that for another 18 months or so.

14 COMMISSIONER ALLEN: Customers that are  
15 eligible for that include residential, commercial  
16 industrial or just the larger?

17 MR. CASEY: Larger. Larger commercial  
18 industrial. So they have to be on a rate 63 or 65  
19 for GMP rate.

20 COMMISSIONER ALLEN: Okay.

21 MS. SMITH: I'll just add, we do have  
22 two residential EV rates, 72 and 74, for residential  
23 EV owners. And then rate 6 which does not include a  
24 demand component. That is for fast chargers. So  
25 commercial customers would be on that rate 6. So

1           those are tariffs that currently exist.

2                       COMMISSIONER ALLEN:   And the flexible  
3           load 3.0, is that a rate that applies just to  
4           electric vehicles or electric vehicles and other  
5           potentially flexible loads?

6                       MR. CASEY:   We are trying to develop  
7           it.   So it's not just for, you know, that is kind of  
8           a -- a nuance, I guess.   It's not designed  
9           specifically for electric vehicles.   It's for loads  
10          that can be flexed.   You know, we are -- that one  
11          specifically we are hoping that we can use customers  
12          building management systems specifically to automate  
13          the process.   So we send a signal and they hit their  
14          building management system, and they are either  
15          turning their heating or cooling up or down depending  
16          on what we are asking for or any other measures in  
17          technology that they can do.   And also so we see it  
18          being advantageous for the EV side of things.   So we  
19          think that we have some flexibility in the EV larger,  
20          you know, technology coming out with different  
21          chargers that can play in that program.

22                      COMMISSIONER ALLEN:   Okay.   So if I can  
23           just kind of reframe that a little bit.   Rate 63 and  
24           65, as I recall, is a time-of-use rate.

25                      MR. CASEY:   Correct.

1 COMMISSIONER ALLEN: And is a demand  
2 charge rate. And --

3 MR. CASEY: Correct.

4 COMMISSIONER ALLEN: What you're  
5 essentially offering is they essentially would have a  
6 tariff rider that would, in essence, kind of modify  
7 their charging, probably offering in exchange for a  
8 discount, some measure of essentially just load  
9 management by Green Mountain Power. And --

10 MR. CASEY: Right.

11 COMMISSIONER ALLEN: So this might  
12 apply as a rider. It might apply as a discount on  
13 the demand component or on the time-of-use component.  
14 It sounds like there just are some to-be-determined  
15 elements, but they are yielding essentially some  
16 measure of control. And presumably there would be  
17 guardrails around the flexibility that you could  
18 exercise in controlling their loads.

19 MR. CASEY: That's correct. That's one  
20 way was we looked at it as a rider to the rate 63 and  
21 65 as one way going down the path. So we are still  
22 analyzing what that looks like as far as the  
23 flexible, as far as a conversation, as far as  
24 revenue.

25 And then we also did look at it as a



1 rate on its own. So not, you know, the customer  
2 would not be on rate 63 and 65. They would be on  
3 whatever the flexible load rate is called. And so we  
4 are investigating, like, that path. How does that  
5 benefit the customer, the -- us as a utility. And  
6 how can we have a, you know, almost a flat-based rate  
7 that customers know if they participate in maybe  
8 different ways, you know, it's not unlike a  
9 time-of-use rate. And how would that work.

10 So those are kind of the two ways we  
11 are looking at that flexible load management  
12 currently. And in pulling out the analysis to see  
13 what has the greatest value, how we are capturing our  
14 revenue. And how many -- really how many  
15 participants would go on either one of those paths.

16 COMMISSIONER ALLEN: One of the things  
17 that I think the Commission, or at least I'm  
18 interested in, is essentially gaining a sense of the  
19 penetration or participation by eligible customers.  
20 There is kind of an increasing conversation across  
21 the U.S. or around kind of opt in and opt out as a  
22 mechanism of potentially kind of facilitating greater  
23 participation.

24 Do you have any expectations or what  
25 would you consider to be success if you could offer

1 this rate and, you know, and we are interested in  
2 gauging the performance of the program?

3 MR. CASEY: I think success, in my  
4 opinion, would be pretty simply we have great  
5 participation. We see the benefits for the customer.  
6 It's not a complete heavy lift for both parties, the  
7 utility and the customer alone. So there is not a  
8 lot of tracking of spreadsheets. It's a bit  
9 automated. And then we get to a point where we all  
10 feel comfortable that, yes, this adds value for  
11 everyone and it becomes a tariff. Here we are. We  
12 are calling it a pilot.

13 Our goal is to have our next version --  
14 is to get it so close to the pin that we can push it  
15 to a tariff. We don't want to have flexible load  
16 management 6.0 pilot. So that's our goal. And  
17 you're right. We saw a tremendous uptick in the  
18 enrollment just this last year for flexible load  
19 management as we kind of canvassed the state and had  
20 our customers understand how they can benefit for it.  
21 And the opt out and opt in, or understanding the  
22 events that we could play with, is a big -- I guess  
23 -- carrot for it. Like in some of our larger  
24 customers, I'm thinking the ski areas, you know, with  
25 the climate these days they want to make snow. And

1 we just can't hit them with a curtailable because it  
2 coincides with a cold snap.

3 So we are trying to design something  
4 where they could participate as much as they can and  
5 still get a little benefit, still give us benefit for  
6 reducing their load at those peak times.

7 MS. SMITH: Yeah. I would just say  
8 also, I would add pertaining specifically to the  
9 electric vehicle aspect of flexible load management,  
10 success would really be for us to be able to see  
11 customers at sort of a critical mass transitioning,  
12 you know, large parts of their fleet. Right now I  
13 think people think about -- or customers think about  
14 it in terms of providing charging for maybe employees  
15 that already have EVs or things like that. But we  
16 see this as a potential future resource in the same  
17 way that we do for our residential customers. This  
18 is a load that can be flexed, and flexed, I think,  
19 pretty successfully depending on what the fleet is  
20 actually intended for. And so we see that electric  
21 vehicle aspect of being a flexible load as a huge  
22 benefit --

23 MR. CASEY: Right.

24 MS. SMITH: -- within this rate.

25 MR. CASEY: Can I add as well, these

1 are for larger commercial industrial customers that  
2 we are kind of garnering the flexible load management  
3 to.

4 We are exploring, we don't have  
5 anything on -- in a large way, but we are exploring  
6 what those fleets' rates could look like as well.

7 MS. SMITH: Yeah, for entire fleets.

8 MR. CASEY: Yeah. For the smaller  
9 customer class, like currently that would fall into  
10 the general service rate 6 here. How can we get  
11 those customers involved so they have either a  
12 flexible rate or a time-of-use rate or something that  
13 mirrors that for flexible load management.

14 COMMISSIONER ALLEN: Thank you very  
15 much. I just have one more question, but it may be a  
16 question that I can just kind of put out as a request  
17 for information. But can you share with me the level  
18 of participation that your experience for the rate  
19 72, 74 rates that are being offered to the  
20 residential sector, do you have any way of gauging,  
21 you know, essentially the participation in what is,  
22 in essence, I believe, an opt-in framework?

23 But, you know, reference has been made  
24 by others at Green Mountain Power that suggest you're  
25 achieving levels of participation that are kind of

1 off the scale relative to opt-in frameworks. And I  
2 would like to just have that number on the record if  
3 I could.

4 MS. SMITH: Yeah. It's 2,600 is what  
5 we currently enrolled between the two rates. The  
6 split there is roughly sort of 65/35 with more people  
7 opting towards the one where we control rather than  
8 they control. And we, you know, just for a little  
9 more context in the program, we give those chargers  
10 to our customers which allows them to enroll in that  
11 demand control piece of that. That gets them signed  
12 up on the rate 72 or 74. The equivalent is around a  
13 dollar a gallon. So tremendous motivator there for  
14 customers to get signed up on those rates.

15 But yeah, I mean considering there is  
16 close to 9,000, I think, electric vehicles in the  
17 entire state, we feel, you know, close to 3,000 we  
18 are happy with that number of participants.

19 COMMISSIONER ALLEN: Since you have  
20 been offering that, do you have any way of kind of  
21 gauging what, you know, what percent of customers  
22 with electric vehicles in the service territory --  
23 it's really kind of an opt-in condition. I mean it's  
24 you have free chargers that you're offering. And  
25 essentially, if I'm understanding you, they need to

1 participate in one of these two rates essentially to  
2 receive the discounted charger.

3 MS. SMITH: That's right. I would say  
4 we offer a lot of flexibility though within that. So  
5 customers have the ability to opt out. You know,  
6 they know when those control periods are happening.  
7 They have the ability to say, no, I really need to  
8 charge my vehicle right now and pay the peak pricing  
9 during that time. I would say we have --

10 MR. CASEY: The percentage of folks --

11 MR. SMITH: Yeah.

12 MR. CASEY: -- actually participating  
13 during events is in the high 90s.

14 MS. SMITH: Yeah. Absolutely. In  
15 terms of how many of our customers that have EVs and,  
16 you know, are participating versus have EVs and are  
17 not participating, you know, we are roughly three  
18 quarters of the state. I would say we -- you could  
19 probably estimate what those numbers are based on the  
20 total number of registered EVs, but we don't have a  
21 clear sense as to how many we have that aren't  
22 participating in the rates at this point.

23 COMMISSIONER ALLEN: Okay. Thank you.  
24 That's very helpful.

25 MS. SMITH: Yup.

1 CHAIR ROISMAN: Okay. I want to start  
2 with a full disclosure. I'm a GMP customer. I have  
3 a charger that you provided. I chose the rate 74. I  
4 love it. So you've got a happy customer here.

5 So my questions are really not focused  
6 so much on the home charger approach but, again, on  
7 the commercial. And it seems to me there is sort of  
8 two kind of commercial. There is the commercial in  
9 which the commercial establishment itself is using  
10 electricity, and the flexible load management that  
11 you're talking about is geared towards that group.  
12 You, you know, manufacturer X, you can decide whether  
13 you want to use more electricity or less electricity,  
14 and we are going to give you some rate choices that  
15 may help you make that decision.

16 I want to talk about the other kind.

17 MS. SMITH: Yup.

18 CHAIR ROISMAN: The kind that has a lot  
19 of customers who are going to use electric vehicle  
20 charging but who themselves don't control how much  
21 that charging is. So we will just assume a big mall.

22 MS. SMITH: Yup.

23 CHAIR ROISMAN: And you've got lots of  
24 customers. The customers are going to come in. The  
25 chargers are there. Either the customer chargers are

1 available directly from the mall or they contract  
2 with someone like ChargePoint or Electrify America,  
3 and those chargers are put in.

4 Have you given thought to any kind of  
5 rate that you could implement where you're sort of  
6 only dealing with the middleman? You're selling  
7 electricity wholesale. And somebody else is, in  
8 turn, going to sell it retail.

9 MS. SMITH: Yeah.

10 CHAIR ROISMAN: Your rate is going to  
11 only apply to the wholesale rate. The guy that buys  
12 it from you can choose to sell it at whatever rate  
13 they want to sell it. Some companies might say we  
14 get so much benefit from having the electric  
15 vehicle's owner here at our store, our shop,  
16 whatever, that we are going to make it available to  
17 them for, you know, 6 cents a kilowatthour which is  
18 way below, you know, the commercial rate. What kind  
19 of rates are you all looking at? Or have you  
20 considered for how to deal with that kind of a  
21 situation?

22 MS. SMITH: What I would say is that  
23 our rate 6 gets at exactly what you're talking about.  
24 So that allows for a mall, a commercial customer, to  
25 be on that rate. They are paying only a kilowatthour



1 charge. They are not paying a demand charge and are  
2 able to then decide, you know, if they are the sort  
3 of owners and operators of their fast charging  
4 stations. So that's a big -- you know, that's a  
5 customer that's over 200 KW that's able to get that  
6 rate, and not be penalized for the demand.

7 CHAIR ROISMAN: Okay. So there is  
8 nothing built into that rate to encourage or  
9 discourage charging at any particular time?

10 MS. SMITH: Correct.

11 CHAIR ROISMAN: There is no time-of-use  
12 component in that at all.

13 MS. SMITH: Correct.

14 CHAIR ROISMAN: So it's just picking up  
15 your large user and that would apply -- the rate 6  
16 will apply equally to the electricity that the  
17 chargers take and the electricity that the lighting  
18 takes.

19 MS. SMITH: That's right.

20 CHAIR ROISMAN: Correct. Okay.

21 MS. SMITH: That's correct. And so to  
22 get to, you know, that other -- that controllable  
23 load that's what we are trying to do with the  
24 flexible load management with respect to EVs. So we  
25 have a rate in place currently. The EV 6 that -- or

1       sorry -- not EV 6. That's an electric vehicle. Rate  
2       6 for EVs. That allows for that currently.

3               CHAIR ROISMAN: All right. And taking  
4       it away now from the mall, okay, which is a big  
5       electric user to start with. Let's say it's the  
6       convenience store that now has six gas pumps. And  
7       they decide we are going to put in six electric  
8       vehicle pumps instead or in addition. And either  
9       they are going to own them or they are going to go to  
10      ChargePoint or somebody like that and get them  
11      installed.

12              It doesn't sound like they are going to  
13      meet your rate 6 minimum. Are you giving any thought  
14      to whether you would give a different rate for the  
15      electric vehicle component of that customer?

16              MR. CASEY: So I guess --

17              CHAIR ROISMAN: Am I wrong about how  
18      much electricity a convenience store uses?

19              MR. CASEY: One thing that we do  
20      suggest when someone goes to a public-facing location  
21      like that at a convenience store, a mall, that they  
22      put this on a separate service. So they are not  
23      coming off the main panel of the mall or the current  
24      service point of the convenience store. That they  
25      are setting up something that is dedicated to the EV

1 infrastructure there so they can be, A; the way we  
2 are doing it now is on rate 6. And, you know, as  
3 Tiana suggested, they would never see a demand  
4 charge. They get the typical KWH and the customer  
5 charges that go along with it.

6 But to answer your question, in the  
7 back of our brains, yes, we are always -- we are  
8 trying to think about what is the next step for those  
9 type of customers. You know, what is -- I think our  
10 first thing that we like more than the public facing  
11 is, I think, for us is fleets across the state. How  
12 can we flex the fleets? I think that's our next  
13 bucket that we are going to work on.

14 And then after that, what is -- what  
15 does it look like on those convenience stores? Right  
16 now we think it works well for that rate 6 for those  
17 customers who have dedicated service, have a rate 6,  
18 they won't see a demand charge. That's how we  
19 encourage the EVSE's to be placed across the state in  
20 our service territory right now.

21 But going forward I think we do need to  
22 explore what those rates look like for those specific  
23 type of customers.

24 CHAIR ROISMAN: Okay. That's very  
25 helpful. For me at least the big take away from what

1       you said was if you're going to put in a bank of  
2       chargers, meter them separately.

3               MR. CASEY: Yeah.

4               CHAIR ROISMAN: So that there is the  
5       opportunity to manipulate that rate to either  
6       encourage the electric vehicle to be used or to do  
7       better load management. Because down the line, not  
8       today, but sometime, we are going to have mostly  
9       electric vehicles.

10              MR. CASEY: Right.

11              CHAIR ROISMAN: And that's a big  
12       demand. I mean I can see it on my own personal  
13       electric bill. The total amount of my electric bill  
14       that's now dedicated to my electric vehicle which is  
15       -- I drive a lot -- is significant. And so  
16       separating that meter, that's a good point. Thank  
17       you.

18              MR. CASEY: Yeah. I'm not saying no  
19       separating. We have been coaching our customers that  
20       are putting in chargers, and their first maybe  
21       option might be to come off that main panel. We  
22       suggest, okay, you are currently on a small general  
23       service rate 6 for your small convenience store. If  
24       you start adding all this load up here, there is a  
25       possibility that you could get over that 200 KW or

1 the 7,600 KWH for four months that is in our tariff  
2 to bump you into that larger commercial class, or  
3 then you're now paying that demand charge.

4 CHAIR ROISMAN: Okay.

5 MR. CASEY: So keeping that off that  
6 panel is, you know, and we don't have a good  
7 mechanism to parse out currently what that EV is only  
8 on that load. So having them separate is a good  
9 means to let them flex it, like you said, and be sure  
10 that their other service is not going to go over to  
11 that larger rate, if it's unnecessary.

12 CHAIR ROISMAN: Thank you. Very  
13 helpful.

14 MR. CASEY: Yeah.

15 COMMISSIONER ALLEN: If I could -- just  
16 to follow up -- I just want to be clear. With  
17 respect to the rate 6, as Zach has alluded to, there  
18 is, you know, there is a test that triggers you to  
19 flip over to 63, 65. And I interpreted Zach's point  
20 to be, gee, if you kind of divide the loads between  
21 EVs and the main circuit panel, you can, you know,  
22 reduce the risk that you kind of trip over.

23 But I guess my question is what if the  
24 EV loads are sort of large on rate 6. If they have  
25 that 7,600 kilowatthour threshold or that 200 KW

1 threshold just for the EV portion, does that trigger  
2 a rate 63, 65 currently, or is that -- or do you  
3 because they are EV loads, make an exception so the  
4 demand charge does not apply?

5 MR. CASEY: That is correct. The  
6 latter. We categorize specifically it's an EV  
7 facility, EVSE facility. And therefore that service  
8 point is exempt from going over to the larger rate.  
9 And it's just for only EVSE infrastructure. They  
10 would not get -- so even if they did get, you know,  
11 the 7,600 for four months threshold or above 200  
12 kilowatts, they do not get bumped up to the larger  
13 commercial class. Currently they are exempt.

14 COMMISSIONER ALLEN: Okay. But these  
15 are not controlled loads. These are rather just kind  
16 of EV --

17 MR. CASEY: Correct.

18 COMMISSIONER ALLEN: -- loads. And I  
19 assume that you've done and are doing analysis that  
20 help ensure that essentially the, you know, the rates  
21 that are set are covering at least the incremental  
22 costs going forward.

23 MR. CASEY: That's correct.

24 MS. SMITH: Yup.

25 COMMISSIONER ALLEN: Thank you.

1 MR. CASEY: Thank you.

2 CHAIR ROISMAN: I had just one last  
3 question. I know early on Commissioner Allen -- I  
4 think when he was talking to BED, he was talking  
5 about us learning from what experiences you have in  
6 the commercial sector particularly where you have the  
7 EV charger as part of the demand. What are you  
8 seeing or are you seeing the patterns of when EVs are  
9 being charged in a commercial setting? Are you  
10 seeing them being charged during peak times which  
11 obviously would be disadvantageous, but the person  
12 who is charging their car may not say, well, I'll  
13 just charge my car when I'm not here. They are  
14 there. They want to charge it like they would gas up  
15 their car.

16 What patterns, if any, are you seeing  
17 or are you not looking at patterns at this point?

18 MS. SMITH: I would say at this point  
19 we are still seeing the majority of charging  
20 happening at home. And that's probably just a result  
21 of the fact that there hasn't, again, been a critical  
22 mass of installations at, you know, workplaces, you  
23 know, public attractions and things like that.

24 In terms of the load profile for  
25 commercial charging, it really depends on what the

1 nature of the business is. So for folks that -- for  
2 customers that have installed workplace charging, we  
3 are not seeing it hit at peak times, which is why we  
4 really want to encourage workplace charging because  
5 then those folks aren't going home and charging right  
6 when they get home and things like that. So  
7 workplace charging is not occurring during peak  
8 times. Do you have --

9 MR. CASEY: No. I would say half your  
10 point is accurate. Probably fleets, like I would  
11 imagine our own fleet here as we electrify our fleet,  
12 at 3:30 most of our vehicles are plugged in. So, you  
13 know, they are plugged in throughout the evening. I  
14 think there is technology out there that's going to  
15 -- something that we are looking at specifically as a  
16 large electric fleet how to flex that so it wouldn't  
17 be during those peak times. And then you can stagger  
18 your charge time for your vehicles along the way.

19 To Tiana's point, we haven't had that  
20 critical mass there yet to actually analyze some of  
21 that data.

22 CHAIR ROISMAN: Thank you.

23 MR. CASEY: You're welcome.

24 MR. HOWE: All right. Are there any  
25 other questions for Green Mountain Power? And I



1       should have said this earlier, but if other utilities  
2       have questions and they are trying to figure out how  
3       to do their own rates, then we can -- this is more --  
4       should be more of a discussion. So there is lots to  
5       learn here, and feel free to ask questions. Right?

6               Seeing no other questions for Green  
7       Mountain Power, thank you. And just to let everyone  
8       know, I just had an inquiry, so I plan to take a  
9       break at 11 unless folks need one sooner. But I  
10      think if we can get through to 11, we might be able  
11      to get through a few more of the utilities and then a  
12      little less time afterwards, and hopefully get  
13      through sometime around lunch. So I'll plan to take  
14      a break at 11. And just let -- speak up if you need  
15      one sooner.

16             So next up I have Hyde Park Electric.

17             MR. EVANS-MONGEON: Good morning. This  
18      is Brian Evans-Mongeon. Just a little perspective  
19      first. I'm now coming up being on the job for four  
20      months. Unfortunately, we no longer have access to  
21      our past management. So relative to what we have  
22      been able to do, been able to concentrate on my  
23      efforts of working with the other five people on our  
24      staff. You know, as you know, we are a small  
25      organization with six persons altogether. But we are

1 working on efforts to comply with the various  
2 requirements, including this, you know, the tariff  
3 needs. And we are expecting to provide tariff  
4 filings by the due date, no later than the due date.

5 At this time, Hyde Park does not have  
6 any EV or EVSE rates at this time. That being said,  
7 we have not received any complaints or expressed  
8 interest to alter our current rates or, you know,  
9 rates for use or chargers. As our resource mix has  
10 been strongly supported by our community, creating  
11 rates that deviate from the current design have not  
12 been expressly desired.

13 As I've heard from a few discussions  
14 with customers, subsidization of rates should be  
15 discouraged within our footprint. This is likely due  
16 to being mostly a bedroom community as opposed to  
17 having a lot of commercial and industrial base. That  
18 said, we have been exploring the EVSE through the  
19 recently promoted effort with GMP and other  
20 utilities. And we look forward to considering those  
21 options as we move forward.

22 In consideration of that, we do have a  
23 few things that we are going to be taking a look at.  
24 One of them is working with the town of Hyde Park who  
25 has the highway department under their structure.

1       There is an upcoming Main Street upgrade project that  
2       is slated to occur in concert with AOT over the next  
3       few years. And that we would be looking to the  
4       possibility of integrating L3 or level 3 chargers  
5       into that project along Main Street.

6               When you take a look at Hyde Park, and  
7       the level of activity that is happening on Main  
8       Street, it is likely possible that interest of having  
9       the fast-type chargers could be of value there. So  
10      that, you know, in taking a look at that, but also we  
11      are looking for level 2 placements at the primary and  
12      high schools, vocational center and possibly the  
13      county courthouse.

14             So we are taking a look at conducting  
15      some activities, but we have not finalized any plans  
16      at this time.

17             MR. HOWE: Those level 2 chargers you  
18      mentioned, would those be owned by Hyde Park  
19      Electric?

20             MR. EVANS-MONGEON: At this point  
21      probably. Because of the community nature of them,  
22      they would likely be that. We have -- we are not  
23      aware of any commercial base that has requested or  
24      expressed a desire to install level 2 at this point  
25      in time.

1 MR. HOWE: And do you have any sense,  
2 just at a general level, how many EVs are in your  
3 service territory? Do you have any visibility into  
4 that?

5 MR. EVANS-MONGEON: No. What customers  
6 have done residentially, we do not know, because we  
7 have no means of identifying or understanding what  
8 they have done. So at this point we do not.

9 MR. HOWE: Okay. And just in general  
10 in terms of options you're considering, is there --  
11 is everything on the table right now? Are you  
12 looking at time-of-use rates or some other approach  
13 is this just how -- has anything taken --

14 MR. EVANS-MONGEON: Sorry, Micah. I  
15 didn't mean to interrupt.

16 MR. HOWE: Go ahead.

17 MR. EVANS-MONGEON: No. We have not  
18 been exploring that. Part of what I wanted to hear  
19 today from this, you know, today's discussion,  
20 because, as I said, I'm still relatively new to this.  
21 You know, everything is on the table from the  
22 prospect of taking a look at rates construct. But we  
23 have not made any decisions yet in that capacity.

24 MR. HOWE: Okay. Great. Are there --  
25 Commissioner Allen?

1 COMMISSIONER ALLEN: Yeah. If I could  
2 just ask a couple questions.

3 Hi, Brian. I wonder is there, and I  
4 know you're new on the job, and so the questions may  
5 not be -- sound fair, but I'm going to ask them  
6 anyways and you can --

7 MR. EVANS-MONGEON: I'll do my best.

8 COMMISSIONER ALLEN: Yeah. The first  
9 is kind of a technology foundation. I mean we have  
10 been talking about kind of platforms and, you know,  
11 what infrastructure is potentially needed to even  
12 offer an EV rate or a different EV rate. And are  
13 there -- and part of my concern in looking at Act 55  
14 is whether essentially our utilities really even have  
15 the metering technology or the billing foundation, or  
16 whether they have to rely on essentially back end  
17 process changes in order to accommodate a  
18 differential EV rate.

19 Can you just kind of characterize, you  
20 know, as best you can, the platform elements that  
21 might be needed for you to actually offer an EV rate  
22 that complies with the Act 55?

23 MR. EVANS-MONGEON: Well at this point  
24 what I can tell you is that we have not instituted an  
25 AMI system at this point in time. Our structure is

1 still one where in the span of three days our line  
2 crew will go out and read meters by walking around.  
3 So it's an aspect of where we have not yet had the  
4 resources to be able to implement an AMI program. So  
5 -- and that's one of the things that we are taking a  
6 look at, to see if in order to bring this about we  
7 need to alter our metering program, then that's  
8 something that we are going to put on the table as  
9 well.

10 COMMISSIONER ALLEN: Have you  
11 considered kind of work arounds on AMI? I mean Green  
12 Mountain Power hasn't necessarily kind of relied on  
13 its -- I mean I'm characterizing my understanding of  
14 the Green Mountain situation. But they have had work  
15 arounds. They do have AMI, but they, you know, they  
16 also have essentially the functionality embedded in  
17 the metering function that allows them to kind of  
18 remotely read and -- have you considered kind of the  
19 work arounds that may not necessarily require AMI to  
20 implement the rate?

21 MR. EVANS-MONGEON: Part of what I'm  
22 doing right now is I'm trying to conduct the research  
23 to understand what is the capabilities of our  
24 metering equipment that we have today. And we have  
25 not completed that effort yet.

1 COMMISSIONER ALLEN: Okay. And when  
2 you said that you plan to file by the new date, do  
3 you anticipate the new date to be essentially having  
4 rates in effect by essentially the Act 55 threshold  
5 that I believe it's June of 2024?

6 MR. EVANS-MONGEON: That is my  
7 understanding of reading the Act, that we would have  
8 to put -- have some structure in place. So yes. But  
9 I don't know what that design will be at this point  
10 in time.

11 COMMISSIONER ALLEN: Sure. And you  
12 reference, you know, you characterize the Hyde Park  
13 customers, and could you just help me understand does  
14 it mean that you spoke to the City Council or, you  
15 know, do you have active conversations with  
16 essentially customers on a regular basis to get their  
17 views on these things? Is there a systematic way of  
18 doing that or is it really just kind of informal and  
19 ad hoc?

20 MR. EVANS-MONGEON: Right now it's  
21 informal and ad hoc, but we are looking to implement  
22 a more structured approach on, you know, call on like  
23 many town meetings that we would provide for the  
24 opportunity for people to be available to address  
25 questions or, you know, bring thoughts to the table

1 that we could, you know, that we could then talk  
2 about. But we haven't formalized that yet. But  
3 that's something that's on the table. Right now it's  
4 just been informal on-the-street type of  
5 conversations with folks.

6 COMMISSIONER ALLEN: In reference to  
7 subsidized rates, I just want to be clear on what you  
8 mean by subsidized rates. Offering -- is offering a  
9 discount in exchange for some measure of cost  
10 reduction that would be associated as you might  
11 achieve either through a time-of-use or a load  
12 management arrangement, is that a subsidy, or do you  
13 mean something different?

14 MR. EVANS-MONGEON: That is what I've  
15 taken the conversations from these customers to be.  
16 Is that if there is a different rate at a lower  
17 price, that is something that people have not been,  
18 you know, endorsing because of the fact that they  
19 believe that that gives a certain class of people an  
20 elemental advantage that is not necessarily available  
21 to everybody.

22 COMMISSIONER ALLEN: Even if --

23 MR. EVANS-MONGEON: Because not  
24 everybody, based upon the income levels that we have  
25 in Hyde Park, are able to afford the purchase of



1 electric vehicles.

2 COMMISSIONER ALLEN: I'm going to just  
3 press at that a little bit further. I mean if the  
4 discount is an exchange for a reduction in the cost  
5 of system -- providing service to the system, it  
6 might benefit those other customers. Would they  
7 regard that as a subsidy?

8 MR. EVANS-MONGEON: Well we would have  
9 to explore that and, you know, run that approach out  
10 to see as to how that would -- how the people would  
11 take that as being part of the plan. Right now they  
12 just see it as being, you know, an advantage for the  
13 economically, you know, people that have a higher  
14 income.

15 COMMISSIONER ALLEN: Thank you.

16 CHAIR ROISMAN: I had just one  
17 question. You had indicated that at least your  
18 current thinking is that chargers would be owned by  
19 Hyde Park Electric. Are you considering leasing them  
20 or going to some private company and just offering  
21 them a spot and say you put your chargers there? Or  
22 are you actually considering that you would be the  
23 direct owner -- having bought the chargers and be the  
24 direct owner. And regardless of your answer, what  
25 are the factors that enter into that choice?

1 MR. EVANS-MONGEON: Right now at this  
2 time we have not made a determination one way or the  
3 other. All of that is on the table and up for  
4 discussion.

5 CHAIR ROISMAN: Thank you.

6 MR. HOWE: All right. I've exhausted  
7 my questions. Are there any other questions for Hyde  
8 Park Electric?

9 (No response)

10 MR. HOWE: All right.

11 MR. EVANS-MONGEON: We thank you for  
12 the opportunity to be a part of today. Appreciate  
13 it.

14 MR. HOWE: You bet. Thank you. Thank  
15 you. Why don't we go ahead and take our break now.  
16 Otherwise, I think we will probably run past 11 on  
17 Stowe Electric, who is next.

18 So why don't we take say a 10-minute  
19 break. Come back at 11:01. Or do folks want longer?  
20 10 minutes be enough?

21 All right. Let's go with 10, and we  
22 can keep moving through the utilities. So back at  
23 just after 11. Let's call it 11:05.

24 (Recess was taken.)

25 MR. HOWE: Next up we have Stowe

1 Electric. Is Stowe Electric back? I see the green.

2 MR. LAZORCHAK: I'm back.

3 MR. HOWE: Great. Welcome. I had a  
4 couple questions about your comments. It sounds like  
5 at this point you have a residential rate 3 which is  
6 a time-of-use rate. Well maybe it's easiest if you  
7 just describe for us, if possible, your plan.

8 It says -- I think your comments said  
9 that the rate design will consider a time-of-use rate  
10 across all rate classes. And I assume that means  
11 residential as well as commercial. You mentioned  
12 multi-family. Maybe you could just tell us a little  
13 more about what your plan is. It sounds like you're  
14 pretty early in the process as well.

15 MR. LAZORCHAK: Sure. Yeah. I can  
16 step back and tell you what we have, and then what we  
17 intend to do. So right now we have public charging  
18 stations that are owned and operated by Stowe  
19 Electric Department. And we have updated that tariff  
20 for a kilowatthour charge. Beyond that, we do have a  
21 time-of-use rate for residential customers, however,  
22 there is no one taking advantage of that time-of-use  
23 rate. And frankly, it's probably because it's a bit  
24 outdated and not very beneficial.

25 So what we have done this year is we

1 have made the decision to move towards NESC, which is  
2 a comprehensive enterprise system, which will bring  
3 all our elements under one, you know, one platform.  
4 So that's OMS, GIS, ordering, financials, billing, et  
5 cetera.

6 And through that, that should make us  
7 more apt to do the types of things that BED and GMP  
8 are doing as related to residential and small  
9 commercial charging. In Q1 of '24 we intend to go  
10 through a comprehensive and complete rate redesign,  
11 and that's in response to just knowing here at the  
12 utility that we need to update and modernize, and  
13 then discussions, of course, with DPS about some of  
14 our specific tariffs.

15 In the meantime, what we have been  
16 doing with the residential and multi-family customers  
17 is if they are interested in entering into a pilot-  
18 type program, and no one's taken us up on it, quite  
19 frankly, because the cost of installing level 2  
20 networked chargers and the associated upgrades is  
21 cost prohibitive.

22 So what we have been doing in response  
23 to that is just trying to educate our customer base  
24 to what they will likely see in 2024 which  
25 essentially is just a customer behavior outreach

1 effort so people aren't shocked when they see the  
2 changes.

3 And I've also been trying to do a lot  
4 of work with our hospitality sector, so the  
5 restaurants, hotels, resorts, to feel out what their  
6 interests are as related to public charging and how  
7 we can work together to at least be prepared for the  
8 system changes and upgrades that could come in the  
9 next say one to three years. And that's where we are  
10 at currently with EV charging. Like GMP and BED,  
11 most of our charging occurs level 1 at the  
12 residential scale.

13 MR. HOWE: Okay. Just to follow up on  
14 that. Do you have any visibility as to whether there  
15 are any residential level 2 chargers in your service  
16 territory?

17 MR. LAZORCHAK: So what I -- I run the  
18 Tier III program here at Stowe as well. So any time  
19 I get an EV rebate request in, I will reach out to  
20 that individual and try to figure out what their  
21 charging plan is. We do have AMI. I'm told that I  
22 can somehow magically disaggregate that billing data  
23 to discern where the EVs are. I haven't got very far  
24 with that, or I don't even know if it's true. And I  
25 know that there is a lot of confusion in speaking

1 with customers about what, you know, they think might  
2 be level 2 charging is just in fact level 1 charging.

3 So we have spent a lot of staff time  
4 trying to figure it out. The short answer is no, I  
5 don't have very much visibility. I do know the  
6 customers have asked to participate in a GMP-type  
7 home charging program. We have not got very far just  
8 because the cost to both the utility and the customer  
9 hasn't forced me to determine what that next step is.  
10 Can I actually manage and control that type of  
11 charging program here at the utility with essentially  
12 myself and an IT manager to help manage that type of  
13 program.

14 COMMISSIONER ALLEN: Micah, is it okay  
15 if I jump in?

16 MR. HOWE: Yes. Of course. Go ahead.

17 COMMISSIONER ALLEN: Thank you,  
18 Michael. I just wanted to ask the same question that  
19 I had asked previously of Brian Evans-Mongeon. And  
20 it sounds like you're essentially in maybe a  
21 different place. But do you have the -- essentially  
22 the technology foundation needed to offer EV rates  
23 whether it's kind of offered a -- specifically to the  
24 EV component or as part of a, you know, more of a  
25 dynamic rate platform that could apply?

1 MR. LAZORCHAK: We don't at the moment,  
2 but we will when NESC is fully on boarded in October.  
3 With that software platform comes the opportunity to  
4 be more dynamic. Right now if we were to implement  
5 an EV residential rate, or let's say an EV rate that  
6 isn't on a specific meter, it would require us to  
7 back out and do a bunch of manual billing, which  
8 quite frankly, we don't have the staff time to do.

9 COMMISSIONER ALLEN: And Michael, will  
10 that platform enable you to essentially automate some  
11 features of what might, you know, would be needed to  
12 cost effectively implement an EV rate given the  
13 limits of, you know, the person power that is  
14 required to do back-end kind of activities that might  
15 be labor intensive?

16 MR. LAZORCHAK: I'm told it will. I  
17 don't know for a fact that it can. But yes, I'm told  
18 it will be fairly straightforward for the utility.  
19 And what we are hoping is that it will be easier than  
20 our current billing system for net metering. And if  
21 it is, then I expect us to roll out a pretty  
22 aggressive program.

23 COMMISSIONER ALLEN: And as you are  
24 kind of thinking about what you would be rolling out,  
25 are you looking elsewhere at neighboring utilities in

1 Vermont or beyond our borders, as you think about  
2 what, you know, might --

3 (Interruption by court reporter)

4 COMMISSIONER ALLEN: It's really I'm  
5 just asking where you're getting essentially good  
6 ideas that you might apply in trying to establish  
7 rates going forward for EVs.

8 MR. LAZORCHAK: Yeah. I speak  
9 regularly to BED, VEC, and WEC. GMP is helpful. I  
10 just haven't had the time really to reach out to  
11 them, although I go to the internet and read what  
12 they are filing.

13 And at Stowe Electric we have a  
14 technical assistance project right now with one of  
15 the national labs to look at residential EV charging,  
16 most focused on income-eligible and multi-family  
17 housing, what would that look like. Here in Stowe we  
18 have a number of condominium associations, and not  
19 all those folks are at the higher end of the, you  
20 know, pay scale.

21 So we are trying to focus on a couple  
22 key buildings here in Stowe, and if we can design a  
23 rate and a plan that's appropriate for those  
24 buildings, then I think we will have an easier time  
25 of rolling out a more general EV charging program.



1 COMMISSIONER ALLEN: I know you've  
2 responded to the question in your filing. But I just  
3 want to have it top of mind.

4 Do you expect to essentially comply  
5 with the requirements of Act 55 --

6 MR. LAZORCHAK: I do. Yeah.

7 COMMISSIONER ALLEN: -- by 2024. Okay.  
8 Good.

9 CHAIR ROISMAN: I had a question or  
10 two. Michael, I don't know whether or not the Stowe  
11 Mountain Resort is covered by Stowe Electric. Is it?

12 MR. LAZORCHAK: Yes. They are.

13 CHAIR ROISMAN: Okay. So we recently  
14 had a big conference there, and I went to charge my  
15 vehicle. And Stowe Mountain Resort offers what is --  
16 best as I can tell -- is free charging to people who  
17 are at the hotel and are using their valet parking.  
18 But it happened it wasn't available at that time  
19 because they said they get their electric charging  
20 through Tesla.

21 MR. LAZORCHAK: Right.

22 CHAIR ROISMAN: And I wondered can you  
23 explain to me what that arrangement is and whether  
24 that is something that's common in your territory or  
25 not.

1 MR. LAZORCHAK: I can give you a high  
2 level answer. The Tesla charging program that's up  
3 there at Spruce Peak is under -- I don't remember the  
4 nomenclature -- but it's something to do with like a  
5 key resort area. So they do offer this preferred  
6 charging which is behind, in essence, a pay wall,  
7 because you have to access the parking garage. To my  
8 knowledge it's only -- in Stowe's territory it's only  
9 at Spruce Peak. And for the other side of the  
10 mountain, the Vail resort side, they are -- they have  
11 been trying to roll out for the last two years a  
12 customer EV charging plan, which would be free for  
13 their customers who are using the mountain, and that,  
14 to my understanding, would be most likely a  
15 ChargePoint product. So would not be the Tesla style  
16 arrangement.

17 CHAIR ROISMAN: All right. And is it  
18 your understanding then that the Stowe Electric  
19 customer is Tesla? They are buying electricity from  
20 you at a wholesale rate, and then to the extent they  
21 want to charge anybody for it, they charge it. And  
22 it's completely independent of Stowe Electric.  
23 Correct?

24 MR. LAZORCHAK: I have nothing to do  
25 with the billing for Tesla up there. That's correct.

1 It's behind -- that's all occurring behind Spruce  
2 Peak's meter.

3 CHAIR ROISMAN: And Tesla is just  
4 paying whatever rate class they happen to fit into.  
5 I assume you have some commercial rate class that  
6 they fit into that's not unique to electric vehicles.  
7 Correct?

8 MR. LAZORCHAK: Correct. Yeah. My --  
9 I don't know that the Tesla arrangement -- I'm more  
10 familiar with the ChargePoint arrangement because  
11 that's what we use. I'm guessing Tesla is charging  
12 something, and then they are passing a certain  
13 percentage on to maybe Spruce Peak. I don't know  
14 that arrangement. But that would appear -- the  
15 kilowatts would appear behind Spruce Peak's meters.

16 CHAIR ROISMAN: Okay. And just so I'm  
17 clear, at this moment, whether it's the ChargePoint  
18 or the Tesla one, the only connection that Stowe  
19 Electric has with it is they buy their electricity  
20 from you, and they buy it without anything unique in  
21 the rate that they pay because they are buying it to  
22 sell for electric vehicles. Correct?

23 MR. LAZORCHAK: That's correct for  
24 Tesla. I don't know if ChargePoint has other  
25 chargers in Stowe's territory that aren't owned and

1           operated by Stowe Electric.

2                   CHAIR ROISMAN:   Okay.   Thank you.

3                   MR. HOWE:   One more question for you.

4           So the rate 35 for your Stowe Electric owned  
5           chargers, that is only for Stowe Electric owned  
6           chargers; right?  So these other chargers we were  
7           just discussing would be on some more general  
8           commercial rate?

9                   MR. LAZORCHAK:   That's correct.  They  
10          are going to show up on the meter owner -- that  
11          customer's likely in demand.

12                  MR. HOWE:   Okay.  Has there been any  
13          consideration of making the rate 35 open to public  
14          charging?

15                  MR. LAZORCHAK:   So in a way, it is.  If  
16          you are willing to enter into essentially what's an  
17          agreement with Stowe Electric.  So if you were to  
18          install a fully networked ChargePoint charger that  
19          could be owned and operated, or at least Stowe  
20          Electric could help manage that charger, then --  
21          which we don't have any of these -- but the thought  
22          would then be that you would slide in under that same  
23          rate.

24                  And we have gone through with -- we  
25          have done a lot of site work with, I guess I should

1 say setup work, with commercial customers, primarily  
2 the larger hotels, who have expressed interest in  
3 that.

4 But when it comes down to the cost of  
5 it, they have stepped away. We have also had a fair  
6 number of ownership turnover in our hospitality  
7 sector here in Stowe in the past three years which  
8 creates, as we all know, it creates difficulty.  
9 You're going down the road with a certain owner, and  
10 then that hotel's sold, and it's a changeover.

11 So I think we will see some growth in  
12 the next three years, but as everyone has identified,  
13 you know, the difficulty is the make-ready work, the  
14 interconnection work, and then the ongoing operations  
15 and maintenance. So for us, if you were to enroll in  
16 our public charging rate, we need some assurances  
17 that you're going to actually manage, maintain and  
18 operate those chargers.

19 And right now we haven't got to a level  
20 where we are comfortable that a third party or Stowe  
21 Electric customer could do that in a manner that  
22 Stowe Electric can provide.

23 MR. HOWE: So -- Chair Roisman?

24 CHAIR ROISMAN: I was just going to ask  
25 in regard to that maintenance question, which I think

1 is a very important one, is Stowe Electric thinking  
2 that you would offer a rate that would only be  
3 available if you had some confidence that the company  
4 that was going to pay that rate would be maintaining  
5 its chargers in an appropriate manner for use by  
6 third-party customers? Is that what you're saying?

7 MR. LAZORCHAK: That's correct. We see  
8 it as we are offering not only a service to our  
9 customer base, but then folks coming into Stowe. And  
10 the reality is that if anything goes wrong within the  
11 municipal utility's territory, I'm the first one that  
12 gets called. And it's just not a compelling answer  
13 when I tell someone, hey, I have nothing to do with  
14 that specific charger. We want to be responsive to  
15 folks who call us and provide them with solutions.

16 CHAIR ROISMAN: And what are you  
17 thinking about as the mechanism by which you will  
18 assure yourself -- I mean it just happens that the  
19 experience that I had with the Stowe Mountain Resort  
20 was that there was some problem with the Tesla  
21 system. The chargers that were physically located at  
22 the resort weren't usable. They ended up plugging me  
23 into a wall outlet which, because I was there for  
24 three days worked, but obviously wouldn't have been  
25 very good if I had showed up in the morning to ski

1 and wanted to go home at 2 o'clock in the afternoon.

2 MR. LAZORCHAK: Yeah. No, this is an  
3 ongoing concern that I have had. You know, that  
4 happens with our chargers as well. You know, we had  
5 the outages, of course, in December, but there is  
6 also times of the year when folks are up here,  
7 whether they are from out of state or just from  
8 Burlington down for the day, and the connectivity  
9 here is difficult, and the charger cannot initiate a  
10 session. And therefore, kilowatts are not dispensed  
11 into the vehicle.

12 So it is difficult. And the benefit of  
13 at least using the Stowe Electric charger is you can  
14 get ahold of me, and I'll either go check it out or  
15 we will dispatch a lineman to help. But that's the  
16 problem that we have here. With the tourist  
17 community and folks who are coming in for the day or  
18 even two days, if you have a vehicle -- if you have a  
19 Tesla and you need to get back to Boston, you need  
20 more -- you know, the level 1 is not going to cut it.

21 CHAIR ROISMAN: Okay. So --

22 MR. LAZORCHAK: All I can say is I'm  
23 thinking through the issues, but I don't have a clear  
24 plan that I know I can roll out with certainty.

25 CHAIR ROISMAN: All right. When you

1 find the answer, publish it widely. Okay? Because I  
2 think many of the utilities will have exactly the  
3 same problem. And it will be good if you guys who  
4 are very creative can offer some options for how to  
5 deal with that problem.

6 MR. LAZORCHAK: Yeah.

7 COMMISSIONER ALLEN: Micah, I have one  
8 more question for Michael.

9 MR. HOWE: Go ahead.

10 COMMISSIONER ALLEN: Michael, one of  
11 the concerns with especially the kind of fast  
12 charging -- commercial fast charging arrangements is  
13 that, you know, the fast charging could essentially  
14 trigger, you know, movement from a general service  
15 rate that is just energy based into maybe a higher  
16 threshold rate that has a demand charge or maybe even  
17 demand charge and time-bearing rates. But it's the  
18 demand charge that is kind of called out by  
19 commercial developers as kind of a particular  
20 challenge. And it's not necessarily a cost based,  
21 because the load profiles might be, you know,  
22 different than, you know, an industrial customer or  
23 the like.

24 Have you given any thought to that, or  
25 is that not a problem in Stowe's territory?



1 MR. LAZORCHAK: I've given thought to  
2 it. You know, it's not a problem right now just  
3 because the two fast chargers that we have are owned  
4 and operated by Stowe Electric. So, you know, it's  
5 ours to manage. But no, it's a concern. I mean I  
6 don't know how I will be able to create a favorable  
7 rate for public charging when we know when folks are  
8 coming back from the mountain, or they are coming  
9 back from dinner and they are in a hotel and they  
10 want to charge their vehicle, it doesn't really  
11 matter, in my mind, what time of day it is. They are  
12 going to charge their vehicle because they want to go  
13 home the next day or they want to go see another  
14 place in Vermont.

15 All I can say is I'm thinking through  
16 it. I'm trying to come up with a solution that makes  
17 sense for the utility and makes sense for the folks  
18 either living in Stowe or visiting Stowe. And I  
19 think for us, and that's why I mentioned it in some  
20 of my filings, I mean for me the real concern is the  
21 hospitality sector. If we are constantly keeping the  
22 hotel in demand because of the use of their  
23 customers, I just don't, you know, right now I'm not  
24 clever enough to come up with a solution that makes  
25 sense for everyone.

1 COMMISSIONER ALLEN: Thank you.

2 MR. HOWE: Are there more questions for  
3 Stowe Electric?

4 (No response)

5 MR. HOWE: All right. Not seeing any.  
6 Thank you, Mr. Lazorchak.

7 MR. LAZORCHAK: Thank you.

8 MR. HOWE: I will warn everyone I'm  
9 also getting some skipping in my GoToMeeting, so if I  
10 freeze or anything, it usually lasts for just a  
11 couple seconds. I think Commissioner Allen and I are  
12 probably competing for internet here in the office.  
13 It should only last a moment, and I should be back.

14 So next up we have Vermont Electric  
15 Co-op. Lisa Morris.

16 MS. MORRIS: Hello.

17 MR. HOWE: Hello. All right. So I  
18 will start off with just a general question. I was  
19 hoping -- I think I was aware of some of your rates  
20 from past years in the same investigation. But I  
21 wasn't aware of all of them, I don't think. So maybe  
22 just a general overview of your different rates.

23 It looks like you've got residential,  
24 small commercial, and large commercial. So maybe  
25 just a general overview of what those rates consist

1 of for the benefit --

2 MS. MORRIS: Sure. These are three  
3 different times. These are all whole service  
4 time-of-use rates. There is the residential rate.  
5 So there is three different buckets. There would be  
6 on peak, mid peak and off peak. So three different  
7 time periods.

8 And then basically that same structure,  
9 but we have one more small commercial which would be  
10 up to 15,000 kilowatthours per billing cycle. And  
11 then we have one that goes all the way up to 130,000  
12 kilowatthours for that cycle, for that larger  
13 commercial bucket. And they all have the  
14 differentiation for those three different time  
15 periods.

16 MR. HOWE: Okay. So these are rates  
17 that would be -- that were available for any purpose,  
18 and you could just put EV and EVSE into those; is  
19 that right?

20 MS. MORRIS: So they are specific to  
21 our Tier III programs of which electric vehicles are  
22 one of those. Also they would be available for heat  
23 pumps. Any sort of incentive that we offer under our  
24 Tier III program. Anyone who takes part in that  
25 would be able to opt into these rates.

1 MR. HOWE: Okay. Great. Then you also  
2 have the flexible load incentives. And that -- I  
3 can't remember. I am sure I've read it before, but  
4 you monitor whether or not a customer charges during  
5 the peak events using some sort of an internet  
6 connection. Is that how that works?

7 MS. MORRIS: Yes. We use a platform  
8 called Virtual Peaker to communicate with chargers.  
9 And there are certain models of charger that are  
10 compatible, so there is certain level 3 chargers that  
11 we can communicate with. And then there is others we  
12 can't communicate with.

13 So prior to this year we offered an  
14 incentive, it was a \$300 incentive, if you have a  
15 ChargePoint or a FLO charger. Those are the two  
16 types that we can communicate with. And then if they  
17 enrolled in that platform so we could actively manage  
18 their charging, so when we call these events when we  
19 are expecting peak demands there are typically two to  
20 four hours that the event lasts. And we would send a  
21 signal to the charger and request that it not charge  
22 during that time period.

23 And as long as the participant doesn't  
24 opt out of events for the month, they receive a bill  
25 credit. So it's currently an \$8 per month bill

1 credit if they participate in those events. That way  
2 we can actively manage the charging and not rely on a  
3 fixed schedule.

4 MR. HOWE: The flexible load incentives  
5 is only residential; right?

6 MS. MORRIS: Well theoretically it  
7 could be for businesses as well. I don't think that  
8 we have seen any businesses take advantage of that.  
9 I think that that just has to do with the fact that  
10 we are largely residential, our service territory.  
11 But I think theoretically it would be available to  
12 businesses as well.

13 MR. HOWE: Okay. Great. Commissioner  
14 Allen?

15 MS. MORRIS: I would add, starting this  
16 year we began offering free chargers. So somebody  
17 can apply for a free ChargePoint or FLO charger, so  
18 we supply the charger. And they are required to  
19 enroll that charger in the flexible load program  
20 after that so they will be participating in these  
21 events. And they also get that \$8 per month bill  
22 credit for participation.

23 COMMISSIONER ALLEN: So I appreciate  
24 that. And I guess I haven't been following your  
25 tariffs as closely as -- this is not a pilot. This

1 is a tariff product that you were just describing,  
2 Lisa?

3 MS. MORRIS: The flexible load program  
4 is not currently in tariff. We have filed it as part  
5 of our Tier III plan. Since we are not offering a  
6 rate, and it's also not a charge, we had considered  
7 that to be under more of the Tier III structure where  
8 we can give bill credits without being in a tariff.

9 COMMISSIONER ALLEN: Okay. So and just  
10 remind me what kind of regulatory kind of review or  
11 oversight applies in the Tier III program filings  
12 relative to a tariff.

13 MS. MORRIS: I can't answer that  
14 question. So we have always -- for part of our -- as  
15 part of our Tier III plan, we offer incentives, you  
16 know, all sorts of incentives through that. And we  
17 had included this flexible load management program of  
18 home EV charging as part of our Tier III plan. And  
19 we are offering the bill credit as part of that.

20 So we viewed that as being similar to  
21 our Tier III incentives we have been offering.

22 COMMISSIONER ALLEN: Would you be  
23 offering this as essentially a framework that would  
24 be -- help you to comply with Act 55?

25 MS. MORRIS: That's what we were

1 envisioning.

2 COMMISSIONER ALLEN: Okay. And I'll  
3 just ask the other question that I have been asking  
4 of others which is: Do you feel that you have  
5 essentially the technology platform in place to  
6 essentially provide this -- the current framework  
7 rates and essentially any other rates that might  
8 apply to fleet vehicles or public-facing EVSE or  
9 other categories of EV rates?

10 MS. MORRIS: So from our perspective,  
11 the combination of the time-of-use rates which is  
12 available for pretty much all service classes other  
13 than industrial, I'll just mention that for the fast  
14 chargers that we have seen come online, they have set  
15 up a new account so they are kind of segmented off  
16 from the rest of the usage that is happening in those  
17 locations. So this would be something that would be  
18 available to those fast charging locations that  
19 you've seen come online, this time-of-use rate. So  
20 the combination of the time-of-use rate and the  
21 flexible load management programs we feel like it  
22 does satisfy the requirements under Act 55.

23 COMMISSIONER ALLEN: And when you say  
24 the time-of-use program, do you mean the whole house  
25 time-of-use rate?

1 MS. MORRIS: Correct.

2 COMMISSIONER ALLEN: And just if you  
3 could, my memory is fading, but my recollection was  
4 that the whole house time-of-use rate in VEC's  
5 territories had fairly limited uptake.

6 Can you correct me or set me straight  
7 on that?

8 MS. MORRIS: No. That's correct.  
9 That's correct. The overall -- I believe it's around  
10 5 percent of people who have taken advantage of our  
11 electric vehicle incentive have opted for the  
12 time-of-use rate. But we have much larger  
13 participation in the direct management flexible load  
14 program. We have about 60 chargers that we are  
15 directly communicating with currently. And then we  
16 have a batch of probably around 40 more that have  
17 already gone out to our members and have not yet  
18 enrolled in the program because they haven't been  
19 installed yet.

20 COMMISSIONER ALLEN: Okay. And it  
21 sounds like you envision the time-of-use rates that  
22 apply broadly, across either a residence or a  
23 business, to essentially be the, you know, the  
24 critical tariffed services that will allow you to  
25 meet Act 55. Is that right?



1 MS. MORRIS: I mean we could definitely  
2 discuss the possibility of filing a tariff for this  
3 flexible load program. It has been more on a pilot  
4 basis to date, but as the program expands, that may  
5 be appropriate.

6 COMMISSIONER ALLEN: Okay. Thank you.

7 CHAIR ROISMAN: I'm going to make sure  
8 I understand. You've got the time-of-use rates, the  
9 three different ones. And then you've got the  
10 flexible load manager, and with the \$8 a month  
11 refund. And if I understood you, the \$8 a month  
12 refund flexible load is an opt-out program. It's  
13 automatically available unless you choose to opt out.  
14 Did I understand that correctly?

15 MS. MORRIS: So you do have to opt in  
16 at the beginning by enrolling in the program. And  
17 that is a requirement of the free charger that we are  
18 offering. So they do have to take a step to enroll  
19 their charger. But then when it comes to the events,  
20 so there could be several events per month, they get  
21 a notification every time that we are calling an  
22 event, and they could opt out of an individual event.  
23 So they would not be able to opt out of the larger  
24 program, but they can opt out of individual events.

25 CHAIR ROISMAN: Okay. And let's say

1       there are three events in the month, and I opt out of  
2       one. And I don't opt out of the others. Do I get a  
3       reduced \$8 credit or one opt-out cost me the 8 bucks?

4               MS. MORRIS: The way that we have been  
5       treating that to date is that -- so what we are  
6       trying to do is we are trying to hit the New England  
7       peak, of course, and then we are also trying to hit  
8       the Vermont peaks. And the way that we have been  
9       treating that to date is if the event that you opted  
10      out of actually turned out to be the peak for the  
11      month, we would take the bill credit away for the  
12      following month. But if it is not the peak, then you  
13      would still get your \$8 per month bill credit.

14             CHAIR ROISMAN: I see. All right. And  
15      what thought have you given -- basically it is an  
16      opt-out rather than an opt-in program in that you  
17      offer, just as GMP does, you offer people a free  
18      charger. And you say if you take a free charger, you  
19      have to get into the flexible load management. So  
20      you're giving them a not inconsiderable inducement to  
21      stick with it.

22             Have you thought about using that same  
23      approach and making your other time-of-use rates opt  
24      out as opposed to opt in?

25             MS. MORRIS: That's -- we have

1 discussed that. Yes. We weren't sure about, you  
2 know, the implications how people would react to  
3 something like that, you know, automatically being  
4 enrolled. Because what we would not want to do is  
5 have that be a disincentive for participating in the  
6 Tier III energy transformation program and taking,  
7 you know, those incentives. But I think we would  
8 have to do a larger review of how that would affect  
9 our system. And it's been a little while. We have  
10 been offering the time-of-use rate since -- I believe  
11 it was 2017. So it's probably time for us to take  
12 another look at that and see whether that would --  
13 some changes would make sense.

14 CHAIR ROISMAN: And have you thought  
15 about -- I don't know if you have the technology in  
16 place, but if you have the technology in place to  
17 tell whether it's an EV charging or just, you know,  
18 your hair dryer charging, is it -- are you able to  
19 distinguish that and say make the EV charging an opt  
20 out and the rest of it could be an opt in on those  
21 time-of-use rates?

22 MS. MORRIS: We do not have the ability  
23 to see, you know, to see. I mean if we were to look  
24 account by account, EV charging is pretty obvious.  
25 So we can certainly do it, you know, on a

1 case-by-case basis, but when it comes to systemwide  
2 being able to identify what is EV charging versus  
3 what is other types of usage, we do not have the  
4 ability to do that currently.

5 CHAIR ROISMAN: And are you looking to  
6 get that technology in place? Or is that just too  
7 big a lift, you know, in terms of capital investment  
8 to put in that kind of AMI?

9 MS. MORRIS: So we do -- I mean we do  
10 currently have AMI. But our meters and our platform  
11 does not have the ability to distinguish load. I  
12 mean we can see 15-minute data using our AMI system.  
13 But we can't tell what that actual load is. So I  
14 mean we are always working with our service provider  
15 to see what new tools they have available, so if that  
16 is something that becomes available, we would be very  
17 interested in something like that.

18 CHAIR ROISMAN: Okay. All right.  
19 Thank you.

20 COMMISSIONER ALLEN: Micah, I just have  
21 a couple more questions. First I'm interested in  
22 knowing do you have any way of gauging the level of  
23 participation that you're getting in that kind of  
24 flexible load Tier III program? Do you know, you  
25 know, how many EV customers you have and what

1 proportion of them are participating?

2 Any way of gauging the success and, you  
3 know, marketing this program?

4 MS. MORRIS: Yes. So we have given out  
5 523 electric vehicle incentives to date since we  
6 started the program in 2017. We are currently  
7 managing about 60 level 2 chargers. We have another  
8 -- it's about a hundred that have set a schedule. So  
9 that's another option that we offer. If you have a  
10 level 2 charger that's not compatible with our  
11 communications platform, is you can set a schedule to  
12 avoid 5 to 9 p.m. Monday through Friday.

13 So we have another 100 of those that  
14 are avoiding charging during that peak time period.  
15 And so that gets us to about 160. And then I believe  
16 there is about another 40 chargers that we have sent  
17 out that have not yet been installed and enrolled in  
18 the flexible load program but they will be. They are  
19 committed to doing that as a requirement for  
20 receiving the charger. That gets to -- we are about  
21 30 percent right now, I believe, that we are actively  
22 managing, and I think we will be getting close to 40  
23 percent. And that's as far as the level 2 charger.

24 So there is also a segment of our  
25 membership that is just using a level 1 charger, and

1 we don't have -- currently have a way of managing  
2 that charging. But one thing that we are looking at  
3 piloting and we will be starting in the next couple  
4 months is using EV telematics so you can communicate  
5 directly with the vehicle. And that would be similar  
6 to the flexible load program except it bypasses the  
7 charger and goes directly to the vehicle. And that  
8 way it doesn't matter whether it's level 1 charging,  
9 level 2 charging, what the model of that level 2  
10 charger is, we would be able to communicate with  
11 those vehicles in our service territory.

12 COMMISSIONER ALLEN: And so there is an  
13 incentive built in that I think is an \$8 credit for  
14 participating in that program. Can you tell me does  
15 the \$8, in your view, kind of provide, you know, a  
16 credit to that customer that's more than the value to  
17 the system or less than the value to the system? I'm  
18 just trying to figure out -- I mean are non  
19 participating customers essentially also benefiting  
20 from, you know, the election on the part of any  
21 customer to participate in that program?

22 MS. MORRIS: Yes. So the way that we  
23 structure that incentive my recollection is that we  
24 are giving, I believe it's 60 percent of the value,  
25 in that \$8 per month credit. And then we are

1 retaining 40 percent for the larger membership. And  
2 that would not -- that wouldn't be the margin on  
3 those kilowatthours that we are selling. That's  
4 actually the value of reducing the peak during those  
5 time periods. So there is kind of two different  
6 value streams there. There's the kilowatthours  
7 themselves that we are selling which we kind of look  
8 at that as money that we can use towards the electric  
9 vehicle incentives. And then also providing the free  
10 charger.

11 And then the other value stream is the  
12 value of reducing the peak which is what we are  
13 giving a portion of as that \$8 per month credit.

14 COMMISSIONER ALLEN: So just to put a  
15 point or a pin in it, do essentially non  
16 participating customers better or worse off by your  
17 having this program?

18 MS. MORRIS: Oh, we would definitely  
19 say better.

20 COMMISSIONER ALLEN: Thank you.

21 MR. HOWE: Are there any other  
22 questions for Vermont Electric Co-op?

23 (No response)

24 MR. HOWE: All right. I think we have  
25 everything we need. Thank you, Ms. Morris.

1 MS. MORRIS: Thank you.

2 MR. HOWE: All right. So next up I  
3 have the VPPSA utilities.

4 MS. BRAESE: Morning.

5 MR. HOWE: Good morning. So it sounds  
6 from your comments like there are many -- well you  
7 have many utilities, many member utilities, and there  
8 are many moving parts. So maybe just to -- before we  
9 get into questions, you could give us an overview of  
10 where you're at.

11 I read from this several pilots, things  
12 you were working through. So maybe just a general  
13 overview, and then we could have some more specific  
14 questions from the commission.

15 MS. BRAESE: Absolutely. So as you  
16 know from the filing, VPPSA has been pursuing for  
17 several years to install AMI. And it is on the verge  
18 of deploying that project for implementation. The  
19 approach so far has been a very clear, although  
20 patient path, to getting AMI in place and then  
21 establishing some of these more integrated  
22 technologies in order to achieve better visibility,  
23 management measurement, and billing of customers'  
24 usage, specifically during electrification.

25 At this point, honestly, we are getting



1 close to this deadline, and so VPPSA is actively  
2 exploring other opportunities that can help achieve  
3 Act 55's requirements in the absence of AMI at this  
4 time. Some of the concerns we have and, you know, we  
5 are running a pilot with Efficiency Vermont, the  
6 Power Shift pilot which is specifically for  
7 residential EV chargers. We have seen a number of  
8 issues that result in ineligibility to participate.  
9 Most of those are either they already own a charger,  
10 or they don't have wifi, or the cost for make-ready  
11 work is so great because of the housing stock and the  
12 size of existing panels or the size of existing  
13 service can be prohibitive.

14 To that regard, we have actually  
15 expanded our eligible funds with VLITE. We have a  
16 grant through VLITE, and have included anything from  
17 the in home to full pop to help alleviate those costs  
18 and actually encourage EV adoption and charging at  
19 home.

20 That being said, there are still a  
21 number of challenges. If you look at Drive  
22 Electric's report on EV adoption, it's just not that  
23 high in our member service territories. We have --  
24 since offering EV rates, we have issued about -- or  
25 EV incentives we have issued about 180 or so, 185 EV

1 rebates. We currently only have a handful of  
2 participants in our Power Shift pilot program  
3 although that pipeline is growing, and we are  
4 consistently trying to market and promote that  
5 availability.

6 But again, there are a number of issues  
7 that stand in the way, primarily if you're using, you  
8 know, load control, active or passive, through  
9 behavior, it requires wifi and connectivity in order  
10 to actually schedule and monitor that charging.

11 Much like VEC, we are looking into a  
12 number of alternatives including with OEMs and  
13 telematics as a potential option. And also looking  
14 at ways other manufacturers are utilizing different  
15 communications networks, including using cellular  
16 devices or cellular connectivity, in order to monitor  
17 and connect that device.

18 MR. HOWE: All right. Great. Thank  
19 you. I wanted to follow up on one item raised in  
20 your comments. You had mentioned transportation  
21 insecurity, and I wasn't quite sure what that term  
22 meant. Maybe you could let me know, explain what  
23 that is.

24 MS. BRAESE: So the transportation  
25 insecurity is a term coined by Department of

1 Transportation, the federal Department, DOT. And it  
2 is defining much like energy burden, it means that  
3 term quite widely here in the state, but energy -- or  
4 transportation insecurity is meant to illustrate the  
5 sensitivities to change, either, you know, the cost  
6 of fuel, the distance traveled, the availability of  
7 public transportation, including and/or even the  
8 general infrastructure in the area.

9 As you know, there are a lot of dirt  
10 back roads in the more rural parts of the state so  
11 sometimes the higher priced vehicles are not the best  
12 for that area.

13 MR. HOWE: Thank you for that. The  
14 only other -- I just had some more questions about  
15 the Power Shift pilot program.

16 Can you talk a little bit more about  
17 how that works?

18 MS. BRAESE: Sure. So as part of the  
19 program, which again we have developed in partnership  
20 with Efficiency Vermont, a customer will receive a  
21 free level 2 level charger. And in order to receive  
22 the charger they have to meet certain eligibility  
23 requirements one of which is 24/7 wifi connectivity.  
24 It has to be a residential home that's occupied year  
25 round, and they have to be willing to perform those

1 upgrades, service upgrades, or transformer upgrades  
2 required to adequately serve that additional load.

3 Once they have met all those  
4 requirements, they sign a participant agreement, they  
5 schedule their charging off-peak, and they, you know,  
6 verify that, and receive a \$500 rebate in addition to  
7 a free charger for the installation. We receive --  
8 okay.

9 MR. HOWE: Thank you. That's it.  
10 Okay. Great. Thank you. Any other questions for  
11 the VPPSA utilities? Commissioner Allen.

12 COMMISSIONER ALLEN: Yeah. I'll just  
13 ask the question I've been asking others. I  
14 understand that AMI has been kind of in view for  
15 sometime, and you're making good progress. But I  
16 wonder if -- I mean, you know, I think it was Stowe  
17 had mentioned, in essence, kind of what seemed like a  
18 full suite of software capabilities that needed to  
19 kind of accompany that hardware foundation. And I  
20 have a question about where, you know, VPPSA is in  
21 relation to, you know, not just the AMI but also the  
22 other software elements that might be needed to offer  
23 a program that can be automated.

24 MS. BRAESE: It's a great question. I  
25 think, you know, VPPSA is in a unique position in the

1 fact that we continuously strive to offer and create  
2 an economies of scale for our members, and that  
3 generally happens through some degree of centralized  
4 services. However, that does not override our  
5 members' ability and desire for autonomy and ability  
6 to see and manage their own systems and control their  
7 systems.

8 So, you know, one utility can go out  
9 and find the correct technology stacking that works  
10 for them. It is often much more challenging to find  
11 a technology that will allow broad visibility for  
12 VPPSA and also individual visibility for the unique  
13 utilities. It's becoming more common. However, it's  
14 not necessarily prevalent, and when it is available,  
15 it tends to be quite a bit more costly.

16 So VPPSA is exploring a number of  
17 opportunities or, you know, potential solutions that  
18 can achieve these goals and value, you know, this  
19 technology stacking to support these rates, future  
20 rates, more dynamic rates, but it does take time, and  
21 the technology is ever advancing and changing quite  
22 rapidly. So we try to monitor that and seek the  
23 solutions that will meet our members' needs.

24 COMMISSIONER ALLEN: And I understand  
25 that you, you know, in the VPPSA territories there

1 actually hasn't been a bunch of uptake in electric  
2 vehicle adoption, but, you know, for what you have,  
3 can you just -- do you have any sense of, you know,  
4 impact or proportion of customers that are getting  
5 EVs or, you know, participating in the Power Shift  
6 program?

7 MS. BRAESE: Well I mean we only have,  
8 like I said, a handful of participants right now. We  
9 have in all -- I had pulled some data back in April,  
10 and we had maybe 65 or so participants that had  
11 expressed interest in this specific program. Some of  
12 them already had a level 2 charger or a charger at  
13 home that did not, you know, wouldn't work with this  
14 pilot because this is for the FLO charger  
15 specifically. But, you know, 21 were either declined  
16 or were ineligible to participate. So that's almost  
17 a third.

18 And we have, as I said, several EV  
19 rebates, but that's not always the best metric or  
20 data source to determine actual EV adoption. I guess  
21 the long and the short is, no, not really. We don't  
22 have that exact data. But we are trying to infer  
23 that from what data we do have available.

24 COMMISSIONER ALLEN: Thank you.

25 MS. BRAESE: You're welcome.

1 MR. HOWE: Were there any other  
2 questions from the commissioners?

3 (No response)

4 MR. HOWE: Seeing none, I see a  
5 question from the Department of Public Service. Mr.  
6 Picotte.

7 MR. PICOTTE: Thank you. Hi, Ms.  
8 Braese. I have a question for you, and I'm hoping I  
9 can call on your expertise since you live across  
10 multiple utilities, multiple systems. And it relates  
11 to demand charges for public -- really for public  
12 serving EVSE, DC fast chargers, in particular.  
13 Although I realize it could apply to large fleets,  
14 let's say, that have medium and heavy duty vehicles  
15 requiring pretty substantial loads. And it's based  
16 in the Department but the -- both the Department of  
17 Public Service but also other agencies' work related  
18 to spending state dollars to build new public  
19 charging infrastructure across the state. And I'm  
20 hoping you can sort of correct, you know, either  
21 confirm or dispel my premise, but also help identify  
22 a solution. Which the premise is that DC fast  
23 charger with a load of 150 kilowatts or larger where  
24 charging at maximum capacity is happening in that  
25 peak hour will have a tremendous cost to the

1 relatively small system, let's say it's a small muni.  
2 Is that true? And what do you see as a solution to  
3 addressing the fact that there is sort of this  
4 mismatch between the relative load of a DC fast  
5 charger that happens to be used by the public, a  
6 member of the public, at just the wrong time of the  
7 month or of the year, what's the solution sort of  
8 addressing that? I don't have one in mind, so I  
9 welcome your expertise.

10 MS. BRAESE: I appreciate the question.  
11 I think -- all the utilities are trying to work  
12 through that where for VPPSA's members it may have a  
13 greater impact just due to scale and size of overall  
14 load. I do think, you know, with fast chargers they  
15 are of such a size that they would be separately  
16 metered. And I think that when you have a separate  
17 meter or an installation such as that, you can --  
18 you're better able, I would say from my perspective,  
19 to implement a rate that's going to ensure cost  
20 recovery while not cost shifting. Right?

21 And I think there are a number of ways  
22 to do that, but I also believe that's why it's very  
23 important for these companies, commercial or even  
24 public chargers, to be in very close communication  
25 with the utility. Because ultimately the utility is



1 responsible for ensuring the load is met. Right?  
2 And I believe you could tie technologies. I don't  
3 think this is always the answer, but, you know, if  
4 you had a battery system also tied to that charger  
5 where you could offset some of that peak load to be  
6 able to shift slightly here and there, those are some  
7 solutions that could work.

8 Of course, you know, put that out in  
9 the field, but those are options. I agree and  
10 appreciate the Department's concern and other  
11 agencies' concern about the impact that that could  
12 have on the small utilities' overall load though.

13 MR. PICOTTE: Thank you.

14 MR. HOWE: Great. Any other questions  
15 for VPPSA before we move to the final utility?

16 (No response)

17 MR. HOWE: Seeing none, next up is  
18 Washington Electric. Welcome.

19 MR. POWELL: Good afternoon. Thank  
20 you.

21 MR. HOWE: I lost my place here. All  
22 right. So I will start with just the same, if you  
23 don't mind, providing a general overview of what you  
24 anticipate being your tariff filing when it comes  
25 time to file. You've mentioned one tariff peak, off

1 peak, block rate design. Maybe you could tell us a  
2 little bit more about that to start.

3 MR. POWELL: Thank you. Sure. So  
4 although Act 55, I believe, calls for a due date of  
5 next July, '24, I also recall that the PUC has  
6 requested some form by I think mid October. And that  
7 is our current plan. Something intentional. It may  
8 not be an EV-specific rate, because what we see is  
9 perhaps a time-of-use rate. But I would rather -- so  
10 I answered your question about when.

11 I would also like to give the  
12 commission a little bit of a back cast, because there  
13 are -- and others here today have cited parts of what  
14 I'm going to address, some limits and barriers. One  
15 of the issues that we face, WEC is about a 17.2  
16 megawatt project, plant, if you will, about 12,000  
17 households, about 96 percent residential. Our  
18 largest single account on demand is a 300 KW high  
19 school; Harwood.

20 In the last decade WEC was awarded a  
21 VLITE grant. We provided that location and four  
22 others with a double to port charge point level 2  
23 charging through, as I said, a VLITE grant. So we  
24 have had that experience, but that's a real limit in  
25 our market. We do not have a lot of public exposure.

1 We don't have a position in downtowns. We are out in  
2 the sticks.

3 One of the issues that we are dealing  
4 with, and I've mentioned this in other dockets, much  
5 of our transformer population is 5KVA. So we have  
6 kind of the double kind of handicap of relatively  
7 older housing stock with some 60 or 100-amp service  
8 entrances and relatively small transformer  
9 capacities.

10 WEC was an early adopter of AMI. We  
11 use a Power Line Carrier product. We are now in our  
12 second decade on that, and we are seeing some limits.  
13 Let me bring some of the barriers that are caused by  
14 Power Line -- not caused by Power Line Carrier, but  
15 have impacted Power Line Carrier metering with some  
16 of the devices that we are talking about. So what we  
17 see with net metering, for example, is when you put  
18 an inverter behind a meter we often lose the  
19 communication path. The inverter creates capacitance  
20 in the line and the signal is killed to read the  
21 meter.

22 So we have to revert back to manual  
23 reading for many of our 900-plus net metering  
24 locations. That's a relevant burden. One of the  
25 solutions we are intending to do in -- and we will

1 speak to this in our soon-to-be-filed IRP and our  
2 construction work plan -- is we are going to migrate  
3 to an RF mesh system. So we are going to have a  
4 hybrid system where we need connectivity and where we  
5 have the CUDs putting fiber up, so we can ensure a  
6 good back haul. We are going to put RF mesh metering  
7 where there is net meter now where we have lost  
8 signal, and we are doing manual reads once a month.

9 WEC has -- we actually pioneered the  
10 Power Shift program that others are now using.  
11 Again, I want to give full credit to Efficiency  
12 Vermont who was and is our partner in that. We are  
13 now in kind of our third phase of Power Shift which  
14 is a voluntary EVSE program where we provide the  
15 member with a ChargePoint unit at their cost to  
16 install. But one of the requirements in our  
17 participation agreement is that they are on the hook  
18 to pay for any service upgrades.

19 And again, I mentioned a minute ago we  
20 are seeing that where there is net metering because  
21 there is a high probability that a net meter member  
22 will then also want an EV, and EVSE is going to  
23 follow, and heat pumps and heat pump water heaters.  
24 So there is a convergence of beneficial  
25 electrification on this same metering issue that I

1 described where we are back to manual reads.

2 Further, once you configure the type of  
3 metering we use for net metering so you can read  
4 power flow in both directions, that's the limit. I  
5 can't then later on, a time-of-use rate, to segment  
6 time-based buckets. Our Power Shift program, again  
7 voluntary program, if you meet the obligation which  
8 is make sure your service entrance is 200 amps and  
9 the transformer is right size, that involves, similar  
10 to others that have spoken today, two peak periods, a  
11 17 hours of off peak and 7 hours from 3 p.m. to 10  
12 p.m. of don't use it.

13 And as others have indicated, I can --  
14 I know one of my Efficiency Vermont teammates is on  
15 this call, we have probably three dozen installed  
16 units with some varying amounts of communication.  
17 Because often or occasionally, members' routers go  
18 off and we lose visibility until we realize they are  
19 not being read and seen. And so we have ongoing kind  
20 of hand shaking and, you know, reiteration of how to  
21 set your router back up so you can be seen on the  
22 ChargePoint dashboard.

23 So we have, you know, the data, and we  
24 have a high confidence that members under this  
25 program have been staying outside of the peak hours.

1 The information's actually baked into the  
2 ChargePoint, but you can override it if you know the  
3 secret handshake. So it's kind of satisfying. And I  
4 think it's a good model that we will be using.

5 We have a time-of-use rate that  
6 predates my tenure at WEC that no members are  
7 currently on. So we will be probably using that as  
8 the vehicle to file an updated time-of-use rate  
9 contingent on the RF metering being in place.  
10 Because there is no way that we can offer that rate  
11 under the current platform of Power Line Carrier.

12 And while I have the floor, I would  
13 just like to throw in both Lisa and Sarah mentioned  
14 telematics and vehicle to grid, not specifically, I  
15 will, because to me this is, you know, an element of  
16 the market that the commission probably is looking  
17 at. And I would just advocate it's going to be  
18 bigger than what we are doing behind the meter with  
19 wifi-enabled dashboards. I think that's the big  
20 target that all the OEM and manufacturers and the  
21 third-party aggregators are looking at.

22 So I'll leave it at that. I welcome  
23 your questions. Thank you.

24 MR. HOWE: Sure. Thank you for that.  
25 I will let others go ahead with questions at this

1 point.

2 Commissioner Allen, do you have  
3 questions?

4 COMMISSIONER ALLEN: I just want to  
5 follow up on that last point. I just want to be  
6 clear. Do the telematics, which I understand to be  
7 the, you know, interaction directly with the vehicle  
8 rather than with the charging, is that through the  
9 wifi system or is it outside of the wifi system in  
10 the household?

11 MR. POWELL: I think the answer is  
12 could be either or both. I mean I don't consider  
13 myself a subject matter expert. I'm simply seeing  
14 that the software element of EVs is, you know, taking  
15 over the whole -- the whole experience. That's what  
16 Mr. Musk wants you to do is buy his software that has  
17 four tires on it. And, you know, everybody else is  
18 going to be modeling that mechanism, including to the  
19 extent vehicle-to-grid backup is something that we  
20 all in this audience are anxious to see happen.

21 I think that that's going to be a  
22 threshold different -- you know, change maker, deal  
23 breaker, different paradigm once that becomes more  
24 prevalent. So I just think we are going to be in a  
25 position, and I'll layer on another layer here.

1 VELCO has deployed a statewide fiber network that is  
2 beneficial to the distribution utilities at the  
3 substation level and potentially beyond. I think --  
4 and I don't want to speak for any other utilities,  
5 but there may be resistance to some distribution  
6 utilities having VELCO see all the way into an end  
7 point, but at the same time, that's what they and ISO  
8 are going to be needing if we are going to harmonize  
9 the whole picture, you know, one meter at a time, if  
10 you will.

11 So I just think there is another layer  
12 here. VELCO and the choreography of load control,  
13 flexible load management, where we are doing this one  
14 meter at a time, one member at a time, and relying on  
15 wifi, there are other options. And I think those  
16 will prevail over time.

17 COMMISSIONER ALLEN: Thanks. And you  
18 mentioned AMI and the fact that, you know, the  
19 technology -- that technology and the platform that  
20 is relied on with that technology is now, you know,  
21 getting relatively advanced in years. Maybe I'm  
22 overstating what you had characterized.

23 But are you looking ahead at the next  
24 generation of AMI and whether that might help to  
25 reduce some of the, you know, the aging pains that



1 are associated with the current platform?

2 MR. POWELL: Well, Commissioner Allen,  
3 I hope I understand your question correctly. I use  
4 AMI as kind of a generic term, and the Power Line  
5 Carrier is a specific reference to a type, you know.  
6 It's great for one day -- one per day reading of  
7 energy. Or if I want to pull the meter for a peak  
8 demand, I can do that.

9 But again, with the issue that I cited  
10 where we are losing communication to a significant  
11 number -- an increasing number of member locations.  
12 Because not only is this problem that I described  
13 very visible and almost one to one with new net  
14 metering whether the inverter behind the meter, any  
15 device that has a variable frequency drive -- so  
16 think of every heat pump in Vermont and every heat  
17 pump water heater in Vermont has the same negative  
18 consequence on signal strength if you're using Power  
19 Line Carrier.

20 So in our market, that's a big deal.  
21 We went in not knowing that the fruits of our  
22 beneficial electrification would then kind of disrupt  
23 this new platform that we were so enthralled with  
24 getting out of monthly drive the truck around and  
25 read the meter. Now we are kind of back there. And

1 we don't want to be back there. We absolutely want  
2 to be able to layer on to a net metering member an  
3 option of having a time-of-use rate for not just  
4 EVSE, but for load control and for sending the member  
5 a signal if we are having an event that, you know, we  
6 then, subject to a tariff, of course, that we have  
7 some mechanism to reward the member for  
8 participation.

9 We are not there yet. And I don't  
10 think we are going to solve it overnight. I think  
11 what you'll see, as I said earlier, is a modified  
12 time-of-use rate where the RF metering is available.  
13 And then, you know, some sort of a commitment on both  
14 parties. We will give you a different deal if you  
15 participate in this way. Credit on the bill,  
16 perhaps, or some other financial kind of  
17 compensation.

18 COMMISSIONER ALLEN: Is the plan to  
19 essentially meet the Act 55 requirements going to be  
20 some form of a whole house either time-of-use or time  
21 varying rate?

22 MR. POWELL: I think it is. I'm not a  
23 betting man, Mr. Allen. I would say we are in the  
24 early phases of an IRP with financial forecast, and  
25 we need to work that consideration. You know,

1       whatever we need to do for Act 55 needs to be part of  
2       our thinking and our planning and our financial  
3       commitment and our construction work plan. So it's  
4       all got to tie together, and I don't want to get too  
5       far ahead -- over my skis here, but yes.

6               And again, with what we have already  
7       indicated to the Department, we will be working, you  
8       know, in the next six months on a mutually kind of  
9       visible method to solve what we need to do as far as  
10      the official filing in '24.

11             COMMISSIONER ALLEN: Did I hear you  
12      correctly that you have a time-of-use rate that you  
13      offer your customers, but there are currently no  
14      customers participating in that rate?

15             MR. POWELL: That's correct. You heard  
16      the same thing from Mr. Morris at VEC. That the  
17      mechanism that we have brought forward but no one  
18      participates in is not a financially beneficial rate.  
19      It's punitive almost. And it really relies on -- I  
20      mean I don't remember if you were at the Department  
21      then. But back in the day, when we had  
22      electromechanical disk meters, what the member would  
23      have to have then done would be to install a second  
24      meter and a path for a second meter, and then  
25      mechanically switch at a certain clock setting

1 between one meter to the other. And, you know, that  
2 mechanism is long gone. We are in digital metering  
3 now. And I already, you know, described the issue  
4 with the current PLC platform.

5 So I don't know if it's all going to  
6 kind of fit the same way it would have fit 30 and 40  
7 years ago. But the mechanism that I would be  
8 advocating is based on what I'm seeing in our Power  
9 Shift model which is 7 peak hours, 17 off-peak hours.  
10 And make it open to the whole house, and keep the  
11 wifi out of it. And have no other piece of equipment  
12 other than what the member may have on her phone or  
13 her own, you know, information.

14 COMMISSIONER ALLEN: But that would be  
15 in the form of a whole house time-of-use rate  
16 offering?

17 MR. POWELL: Again, I'm not, you know,  
18 I'm not in a position to make a formal commitment,  
19 but yes, that's what I envision part of our solution  
20 to respond to Act 55 will look like. Yes.

21 COMMISSIONER ALLEN: Okay. Well I mean  
22 if -- you have been here through the call. You  
23 might have heard me kind of asking a question about  
24 customer participation. And as you know, it's not to  
25 pick on any individual utility, because I think it's

1 true across the United States that these, you know,  
2 these time-of-use programs and just about everywhere  
3 I've seen outside of Arizona, you don't typically get  
4 appreciable participation in these programs.

5 Do you believe that you will be able to  
6 overcome the challenge that is traditionally  
7 associated with these whole-house time-of-use  
8 frameworks to get higher participation?

9 MR. POWELL: I can't -- I can't speak  
10 to the Arizona example, but I infer that the way you  
11 get participation is you make your peak rate punitive  
12 and then you offer very attractive off-peak rate. So  
13 I think it's really what's the number and, you know,  
14 some sort of a method to show the member that if you  
15 do it this way, and you opt out or rather participate  
16 according to these guidelines, you'll be better off  
17 than on our current two-tiered rate which is  
18 approaching -- with the recent price increase it's  
19 over 26 cents per kilowatthour.

20 So yes, I do think there is some rate  
21 relief that could be possible, but I would be out of  
22 bounds to tell you what kind of participation we  
23 expect. I can't answer that question.

24 COMMISSIONER ALLEN: Okay. Thank you.

25 MR. POWELL: Thank you.

1 MR. HOWE: I do have one more question  
2 for you, Mr. Powell. Unless somebody else has one.  
3 I'll open it up to others before I ask mine. It was  
4 just sort of about -- I don't see any green  
5 microphones, so I'll just go ahead and ask it.

6 In terms of the Power Line Carrier  
7 problems and the interference, is there a way that  
8 those customers would be able to participate in that  
9 time-of-use rate? What would that look like?

10 MR. POWELL: I think the answer is for  
11 those locations where we know we have lost  
12 communication, they are going to be the first group  
13 that are going to get the RF mesh meter. So that  
14 deployment -- so it's not strategic, it's  
15 scattershot. It's wherever we lost the comm, that's  
16 where we deploy the RF. That would be contingent on  
17 good fiber back haul, which is contingent on the CUDs  
18 getting out there. So there is a little bit of  
19 phasing in and timing that I can't predict.

20 We are really fortunate to have a very  
21 active CUD covering 20 of our 41 towns. And the  
22 other CUD in our southern area is very well  
23 positioned already. There's fiber to 2,200 members  
24 in that area. So there is some relief that will come  
25 through this RF mesh migration, but it's not going to

1 be overnight.

2 You know, when we first deployed PLC in  
3 2012 with the ARPA money, the original federal  
4 program that VELCO promoted, we didn't have the kind  
5 of net metering distribution as we do now. And, you  
6 know, as we deployed, and we deployed it with our own  
7 forces. We took linemen and over about six months we  
8 installed 11,000 meters. And what we are going to  
9 need to do in this new vision of RF mesh is probably  
10 perhaps use our own forces or just hire it out to a  
11 third party that will come in and just get us up and  
12 get us running. Because we have a lot of other  
13 activity at the Co-op these days.

14 So did I answer your question?

15 MR. HOWE: You did. Thank you. Are  
16 there any other questions for Mr. Powell before we  
17 move away from the utilities? That's our last  
18 utility. And thank you, everyone, for your comments.  
19 This has been very informative.

20 It's 12:20 right now. I think what we  
21 have left to cover in terms of what I had on my  
22 agenda is to hear from the Department of Public  
23 Service if they have anything they would like to add,  
24 or if there are any questions for them on their  
25 comments.

1 From ChargePoint as well who filed  
2 comments in the investigation. And then just sort of  
3 housekeeping next steps in the proceeding and maybe  
4 setting a stage for some of the additional topics  
5 raised by -- in the comments that were filed.

6 I could see that taking up until  
7 probably 1 o'clock or so. So I don't know if folks  
8 want to break for lunch and come back and do that, or  
9 take a short break and come back and finish up. Does  
10 anyone have a preference?

11 THE COURT REPORTER: This is the  
12 reporter. I don't need lunch. We can keep going.  
13 That's fine with me.

14 COMMISSIONER CHENEY: I see in the chat  
15 -- this is Margaret Cheney -- that someone would like  
16 a break.

17 MR. HOWE: Yes. We will certainly take  
18 a break. It's just whether it's for lunch or for  
19 just a shorter rest period, and then we can finish up  
20 with everything.

21 It sounds like a short break will do it  
22 for everybody. That is great for me as well.  
23 Commissioner Allen?

24 COMMISSIONER ALLEN: Yeah. I would  
25 make it, you know, a little bit longer than that



1 other break. But yeah. I think that would be fine.

2 MR. HOWE: Okay. So maybe 15 minutes,  
3 and then we come back and run through just the rest  
4 of the agenda. And ideally, we would get out of here  
5 around 1 o'clock or maybe a little bit after.

6 That's great with everyone. Let's go  
7 ahead and take a 15-minute break. So come back at  
8 say a little bit after 1:40. Does that work for  
9 everybody? Or 12:40. I'm sorry. Perfect. Let's  
10 come back at 1 -- 1:40. Okay great. Perfect.

11 CHAIR ROISMAN: 12:40.

12 MR. HOWE: I'm sorry. My times are  
13 off. Okay. 12:40 we will see everyone back here.

14 (Recess was taken.)

15 MR. HOWE: Okay. Let's try and go  
16 ahead and resume here. Hopefully everyone's back  
17 behind their screens.

18 CHAIR ROISMAN: 17 people.

19 MR. HOWE: All right. Let's go ahead  
20 and start then. So next up we had comments filed by  
21 the Vermont Department of Public Service. And also  
22 by ChargePoint. I just wanted to open the floor to  
23 them to see if there are questions for them or  
24 anything to add.

25 I'll start with the Department of

1 Public Service. Your comments were very helpful.  
2 Some key issues and also some topics for further  
3 discussion which I will address next steps last, but  
4 just based on what you've heard today, is there  
5 anything the Department would like to add to their  
6 comments at this point?

7 MR. PICOTTE: I have nothing to add.  
8 I've -- I asked one question, and I think that's been  
9 covered very well. Thank you. I guess the one topic  
10 that maybe hasn't come up and maybe is in the realm  
11 of is it a rate question or not addresses  
12 multi-family residents, and the best ways to serve  
13 them either on their property where they live, or not  
14 on their property where they live, at say a public  
15 charger of some kind. I think that's probably a  
16 larger, broader discussion than EV rates  
17 specifically.

18 MR. HOWE: Sure. And I think a lot of  
19 the -- well several of the suggestions fell into that  
20 category. My goal for today was just sort of get a  
21 sense for the commission of utility preparedness for  
22 next year's deadline and kind of the structure of  
23 what they are working on so we have a sense of that.  
24 I think that will inform some of the subsequent work  
25 that we do in this investigation and for the report

1           that we file in January.

2                       Did anyone have any additional comments  
3           for the Department?

4                       COMMISSIONER CHENEY: I have a  
5           question. I was just struck by the fact that demand  
6           charges, which we really haven't talked much about  
7           today, were an issue for both the Department and  
8           ChargePoint. And I'm wondering at what point we will  
9           be discussing that. Because it does seem to be a  
10          really practical and potentially problematic issue.

11                      MR. HOWE: Yes. So that's number one  
12          on my list for a follow up. I think that's probably  
13          a more in-depth discussion than we could have gotten  
14          in today just based on our first round of comment  
15          requests. I think some more focused requests around  
16          demand charges and maybe even an entire workshop  
17          dedicated to that topic would make sense, because I  
18          think that will take some time to work through.

19                      We heard several approaches by the  
20          utilities or that the utilities have taken so far.  
21          But I think spending some more time on that would  
22          help us quite a bit to understand the issue, or more  
23          importantly, I guess, we all understand what the  
24          issue is, to understand potential solutions to the  
25          issue that might be implemented.

1 Any additional questions -- Chair  
2 Roisman.

3 CHAIR ROISMAN: I just wanted to say on  
4 demand charges I think looking outside of what we  
5 know in Vermont and seeing how other states are  
6 dealing with that would be very, very helpful to get  
7 -- because obviously everybody has the same problem.  
8 And finding out what, you know, what they are doing  
9 may give us some clues as to what works and what  
10 could work in Vermont.

11 MR. HOWE: Yes. I completely agree.  
12 Any other -- yes. Chairman Allen or Chairman.  
13 Commissioner Allen. Sorry.

14 CHAIR ROISMAN: Not yet, Riley.

15 COMMISSIONER ALLEN: Yeah, for another  
16 day.

17 I wanted to test the comment that was  
18 made by the Department concerning the value of, I  
19 think, load management relative to grid peaks over  
20 time because they become less predictable. The point  
21 is kind of well taken on one hand, but load  
22 management, at least theoretically, could extend  
23 beyond a focus on essentially the coincidence peak in  
24 Vermont. And what you're avoiding essentially are  
25 the RNS charges or the RNS charges that occur on a

1 coincident peak basis in Vermont; is that correct?  
2 Philip?

3 MR. PICOTTE: Yes. But certainly on a  
4 monthly basis, but also the annual FCM peak.

5 COMMISSIONER ALLEN: Right. Right.  
6 But I guess, you know, imagining a day where  
7 essentially the only value stream that we are focused  
8 on is the monthly peak. And whether you've given any  
9 consideration to any other value streams that might  
10 kind of creep in over time as we think about the  
11 potential value longer term of, you know, managing EV  
12 loads.

13 MR. PICOTTE: I would guess you're  
14 referring to avoided transmission and distribution  
15 system costs?

16 COMMISSIONER ALLEN: Yeah. In  
17 particular, yeah. I mean it could be, you know, peak  
18 energy and other things too. But in particular, the  
19 upgrades that might be necessary to, you know, for  
20 the wire system to manage loads that are relatively  
21 peaking.

22 MR. PICOTTE: I myself have not given  
23 that much thought. And thinking about how some of  
24 that, when you get into T&D costs you end up talking  
25 about individual circuits and that hyper-localized

1 aspect, then how to bring in rates into that  
2 question. I'm not there yet.

3 But it is -- you know, it is an  
4 important value stream, and maybe we don't think  
5 about individual circuits but we think about systems;  
6 right? Let's say a small muni system that has one  
7 point of interconnection to the transmission system.  
8 Just to -- hypothetically. That could be a place  
9 where rates matter with clear opportunities to avoid  
10 T&D costly upgrades.

11 COMMISSIONER ALLEN: Well I mean the  
12 conversation we are having is about EV rates and, you  
13 know, the increasing penetration of the EVs. And in  
14 my mind that's a very long-term kind of challenge.  
15 And we are having a conversation about rate design  
16 now. But, you know, at least from my standpoint, I  
17 think kind of looking and thinking not only in terms  
18 of individual years but multiple years in the future,  
19 those other value streams I would be interested in  
20 knowing if there are -- if the Department thinks that  
21 there are value streams that extend beyond the  
22 monthly peak. I'll leave that for another day. I  
23 think that's the only thing that I had. Thanks.

24 CHAIR ROISMAN: I had something I would  
25 be interested in the Department's thinking on. I

1 mean traditionally rates, of course, have to be just  
2 and reasonable, and we all agree with that. And they  
3 should not go shifting -- subsidizing one kind of  
4 user versus another kind of user. But I thought it  
5 was interesting to hear from Stowe today about what  
6 they are doing to try to make sure that the customer  
7 to whom they are selling wholesale electricity, to  
8 ultimately be used to sell retail to EV users, are  
9 concerned about that wholesale purchaser having  
10 equipment that is working properly so that when the  
11 EV customer shows up, they get it.

12           There are other things that are equally  
13 relevant, and as you know, part of Act 55 is rates  
14 should encourage the use of EVs. So, for example,  
15 at least in my experience, there is no signage that  
16 tells you where the EV chargers are located. You can  
17 go to a website and get generally there is some at  
18 this mall, or there is some at that convenience  
19 store, or there is some at that auto dealership, but  
20 there is no sign when you get there that says turn  
21 left here, it's on the second level, it's in the back  
22 corner. Whatever. No signage at all.

23           The -- similarly, and Stowe has  
24 indicated there are problems with the chargers not  
25 being adequately maintained. You've got a charger.

1 It doesn't work. That's like having no charger -- no  
2 charger at all. And third, the chargers are often  
3 difficult to use. You know, you go up to a gas  
4 station to buy gas, you put your car next to the  
5 pump. You take the pump, you put your card in, you  
6 take the handle out. You stick it in the car. You  
7 fill it up with gas. Couldn't be easier.

8 Not that way with the chargers.

9 Although there are programs that some of the charger  
10 operators have that if you use their apps. it solves  
11 all of those problems, one of which is here today,  
12 ChargePoint. So I'm wondering what the Department's  
13 thought is about encouraging the utilities who are  
14 selling their electricity wholesale to do what Stowe  
15 is doing across the board.

16 In other words, say we will give you  
17 rate A if you do these things, and if you don't do  
18 these things, you're going to get rate B. And A is  
19 the more favorable rate. And I'm talking now not  
20 about homeowners. I'm talking about these commercial  
21 places where the chargers are.

22 Any thoughts about whether that's part  
23 of what should be in the rate design for the utility  
24 selling essentially wholesale electricity to  
25 chargers?



1 MR. PICOTTE: So it sounds like you're  
2 describing, perhaps to come up with terminology, but  
3 a performance standard for public charging quality,  
4 call it something else, but I think your point's  
5 about finding it, about making it -- the experience  
6 customer friendly and somewhat the same, and probably  
7 most importantly, about up time requirements and  
8 making sure that when a customer who is counting on  
9 it to be in a location reaches the -- especially the  
10 DC fast charger, and it works, because they may have  
11 no other option to continue their journey, that it's  
12 working.

13 I think those are all very important  
14 and so far unanswered questions in this space. I  
15 have not thought about how to and further --

16 (Interruption by the Court Reporter)

17 MR. HOWE: I just noticed -- I don't  
18 know if it's caller 1 or caller 2. But the folks  
19 that have dialed in, could you mute your phones?  
20 Thank you.

21 MR. PICOTTE: So I have not given any  
22 thought to a preferable rate tied to the performance  
23 of the equipment. I think I would have to consult  
24 with Ms. Brennan from the Department and others on  
25 how that could work and justifying it. But yeah.

1 Based on the idea.

2 CHAIR ROISMAN: I think you heard the  
3 Stowe representative today say they too have not yet  
4 worked out how they would verify that. It's all well  
5 and good to say your charger has to work for you to  
6 get this special rate. But it's not like they are  
7 going to have an inspector running around or not  
8 likely to have an inspector running around to make  
9 sure. I mean you might have, you know, a mechanism  
10 that when the charger fails there is some reference,  
11 some data, and at the end of the month if it shows  
12 that -- the data showed that you failed more than X,  
13 then you don't get that rate. You have to get the  
14 higher, you know, whatever. But okay.

15 Well I'm glad to hear that you feel  
16 that it's something that would be worthwhile doing.  
17 How to do it is obviously the hard part.

18 MR. PICOTTE: Just for context, the  
19 place where the state, you know, the different  
20 agencies have encountered this is through the state-  
21 supported DC fast charging and other public charging  
22 programs where we write in our contract terms and  
23 enough time requirement of 99 percent or something --  
24 some number like that.

25 And I believe it's then self reported

1 by the operator to say, well, it was available, you  
2 know, this many hours in the month. It was available  
3 X hours. So it's self reported. Perhaps not  
4 perfect. But it's a start at least.

5 CHAIR ROISMAN: Thank you.

6 MR. HOWE: Are there any additional  
7 questions for the Department? And I'm still getting  
8 a little bit of feedback occasionally. I think it  
9 may be caller 2, although the callers probably don't  
10 know who they are. But if you are on the phone  
11 connected to the workshop, can you please mute.

12 All right. So with that, thank you,  
13 Department. I don't see any other questions for you.  
14 We will now call on ChargePoint who also submitted  
15 comments in this proceeding. Is there someone from  
16 ChargePoint here?

17 MS. KENNEDY: Isla Kennedy with  
18 ChargePoint.

19 MR. HOWE: Welcome. Thank you. So  
20 your comments were very helpful. I think you  
21 probably have a unique view of sort of nationwide  
22 solutions to some of the issues that we will be  
23 talking about in more depth such as demand charges.  
24 Those were very helpful.

25 I guess I'll -- are you ready for

1 questions from anyone?

2 MS. KENNEDY: Sure. Happy to.

3 MR. HOWE: All right. Caller 2. Can  
4 you please mute your phone before we do that.

5 All right. Sounds good for the moment.  
6 Does anyone have any questions for ChargePoint or  
7 comments -- Chair Roisman.

8 CHAIR ROISMAN: Yes. It's not even so  
9 much on your comments. Without violating some  
10 corporate confidentiality, I sort of want to  
11 understand the business model.

12 ChargePoint has chargers at various  
13 public locations. Are those owned by ChargePoint?

14 MS. KENNEDY: Sure. So ChargePoint is  
15 a little bit different from other large EVSE  
16 companies. In its case the overwhelming majority of  
17 the stations we do not actually own. The owners of  
18 the site of say, whether it's a Target or a  
19 convenience store, what have you. That isn't  
20 typically the case much like other others like EVgo  
21 per se to my understanding.

22 CHAIR ROISMAN: Okay. But they are  
23 buying your charger. They are not buying somebody  
24 else's charger. They buy it from you.

25 MS. KENNEDY: Right. So ChargePoint

1 has both the hardware and software side, but they buy  
2 it, the site host, through ChargePoint, and then the  
3 site host operate it themselves.

4 CHAIR ROISMAN: Okay. So my second  
5 question is when billing is done by the utility  
6 that's selling at wholesale the electricity, does  
7 that bill come to ChargePoint? Or does that bill go  
8 to the owner of the charger?

9 MS. KENNEDY: That's a good question.  
10 It does just depend on the circumstance. I know to  
11 the question earlier, say for Stowe with the hotel, I  
12 would assume in that point the bill would actually go  
13 to the hotel. I, of course, don't know for sure.  
14 But generally the site host in ChargePoint's case  
15 specifically, since they own it, they take the  
16 responsibility there, and they can set the pricing  
17 themselves. Whether they are providing it for free  
18 or if subsidized, seeking just cost recovery, or  
19 making a bit of a profit, they can press that  
20 themselves through there.

21 CHAIR ROISMAN: Okay. And ChargePoint  
22 doesn't impose any conditions on them. If they  
23 bought the charger from you, and they want to double  
24 the price or halve the price, or you know, put the  
25 charger at this space or that space, none of that

1 ChargePoint gets involved in; correct?

2 MS. KENNEDY: That's right. We  
3 encourage them to price it competitively, but at the  
4 end of the day it is up to them.

5 CHAIR ROISMAN: Okay. Now what about  
6 the customer service piece of it? I've used the  
7 ChargePoint chargers a lot for my car. And when I  
8 run into problems with getting plugged in there is a  
9 phone number that I call and identify the number on  
10 the charger. And somebody talks to me. And when I  
11 still can't make it work, they take over the charger  
12 for me. They turn it on. They see that I have an  
13 account. They turn it on. And my account seems to  
14 have a balance, which I've always thought I was  
15 paying to ChargePoint. And the charges that I have  
16 when I use the charger go against my account. And I  
17 keep putting -- I replenish it from time to time.

18 Am I talking to a ChargePoint service  
19 provider who is part of a service that ChargePoint  
20 charges to the owner of the charging station?

21 MS. KENNEDY: You know, I'm not  
22 entirely sure on all the specifics. But I know if  
23 that were the case, I would think it would be  
24 remedied through the site host and there would be  
25 some sort of communication between the two, just to

1 get that squared away in terms of billing.

2 CHAIR ROISMAN: And if the charger  
3 isn't working, does ChargePoint have a service  
4 program? And customer pays for it, but that they  
5 will come out and repair the charger?

6 MS. KENNEDY: Yes. There is a service  
7 that's called Assure. And just like you said, it's  
8 where that maintenance is included for the site host  
9 to choose to have that service.

10 CHAIR ROISMAN: So just like the  
11 typical appliance, I get a refrigerator, I pay  
12 Maytag. And they will have it serviced for the next  
13 year or two or extended. Correct? That's how it  
14 works.

15 MS. KENNEDY: That's right.

16 CHAIR ROISMAN: Okay. All right. I  
17 think that's all the questions I had. I just wanted  
18 to understand sort of the model. And you say you  
19 think that the ChargePoint model may be different  
20 than lots of other, you know, Electrify America or  
21 EVgo or any of these other --

22 MS. KENNEDY: Yeah. That's right.  
23 It's not the same across the board. The ones that  
24 come to mind as far as larger ones, EVgo and  
25 Electrify America are two examples that I believe

1 they either own them entirely or at least the  
2 majority, unlike ChargePoint.

3 CHAIR ROISMAN: Okay. Thank you.  
4 Thanks very much, Ms. Kennedy.

5 MR. HOWE: I see Commissioner Allen.  
6 You have some questions for Ms. Kennedy?

7 COMMISSIONER ALLEN: I just have a  
8 couple questions. First of all, I'll just start with  
9 a comment which is you've heard others say it, and  
10 you say it, that demand charges are an issue. And  
11 from my standpoint, demand charges are there for a  
12 reason. Which is, you know, recovery of costs for  
13 low load factor entities.

14 So I'm just interested in essentially  
15 the work arounds. And I know Green Mountain Power  
16 has one work around. I think that's fully justified  
17 by the lift profiles that happened to exist for the  
18 public charging stations that they apply that rate  
19 to. But I would be interested in just kind of  
20 learning of other experiences.

21 So to the extent that ChargePoint of  
22 all groups participating in this is probably most  
23 likely you would be familiar with kind of the  
24 innovative rate models out there, and hopefully you  
25 can enlighten us as this proceeding unfolds.



1           The other relates to a comment, maybe  
2           I'm not reading it correctly, but it's been  
3           characterized as expanding existing industrial rates  
4           for low load factor industries. And I'm not positive  
5           I understand what is being communicated there. Is  
6           that -- is the Green Mountain Power commercial rate 6  
7           an example of what it is that you're talking about?  
8           So a rate that is free of demand charge?

9           MS. KENNEDY: So I know Green Mountain  
10          Power did provide a response when we had initially --  
11          ChargePoint had initially submitted the comments. I  
12          know it was the concern in viewing rates 8 and 63, 65  
13          which was addressed in our comments. Under the  
14          assumption that for C&I customers including those  
15          with EV load that they would be incurring significant  
16          demand charges of 16 dollars and 19 per kilowatt  
17          respectively.

18          Based on the reply comments, as well as  
19          the discussion to date, it appears that that might  
20          not be the case, given rate 6, and assuming that all  
21          EV customers could be on that rate, we would view  
22          that in general as a positive outcome. However, it's  
23          fairly clear to me, although not entirely, but after  
24          this discussion it seems that Green Mountain Power  
25          had provided some clarification there with the

1 exception for the unique load of EVs, to be able to  
2 have mitigation around them.

3 COMMISSIONER ALLEN: Thanks. I think  
4 I'll save my follow up for a follow-up question in  
5 writing.

6 MR. HOWE: All right. Are there any  
7 other questions for ChargePoint?

8 All right. So I think that covers  
9 everyone who filed comments in this proceeding or in  
10 this investigation in response to our first request.

11 Before I go on to next steps, I'll ask  
12 if anybody has any general additions based on  
13 anything that they have heard here that they would  
14 like to add.

15 (No response)

16 MR. HOWE: All right. I don't see any  
17 green microphones. So in terms of next steps, we had  
18 a number of recommended topics, some of them larger  
19 than others; some of them smaller.

20 The most notable being, as several have  
21 observed, demand charges. So I think I'm seeing at  
22 least two additional workshops potentially here. I  
23 think demand charges could maybe be paired with a  
24 smaller topic. But just in terms of going forward, I  
25 can see at least two additional workshops and two

1 additional requests for comments from the  
2 participants to cover everything that was raised.

3 Some of these may be more amenable to a  
4 multi-topic workshop, but I think demand charges and  
5 possibly multi-unit housing could be sort of anchors  
6 to those workshops.

7 So at least my recommendation going  
8 forward to the commission, and certainly we will talk  
9 about it after this and come up with a plan, would be  
10 to, you know, reserve two empty slots for workshops  
11 going forward with rounds of comments to cover some  
12 of these additional topics. And we will precede  
13 those workshops with requests for comments from the  
14 parties, and that will probably take us into fall.  
15 At which point we will have to start preparing our  
16 report to the legislature.

17 So sort of -- it could increase the  
18 number of -- certainly there are enough topics here  
19 where we could increase the number of workshops, but  
20 just given the time constraints, I see at least two,  
21 possibly three in my view. But we will discuss that  
22 internally.

23 And just so -- I just wanted to  
24 alleviate any concerns that topics that were raised  
25 that require further discussion are not being omitted

1 from discussion. They just -- we haven't reached  
2 them yet. So this will be an ongoing investigation  
3 in contrast to past years where we just more or less  
4 a request for comments and then prepared the report  
5 on that.

6 And that is everything I wanted to  
7 cover. I would expect that we would turn around the  
8 next workshop in probably towards mid to late summer.  
9 I guess it is mid summer. Commissioner Allen?

10 COMMISSIONER ALLEN: Yeah. From my  
11 perspective, it would be helpful to provide some  
12 follow up to the process with a couple of the  
13 utilities that I think have been, you know,  
14 essentially trailblazers in this space. So I would  
15 like to follow up, just example, with Green Mountain  
16 Power and BED, perhaps Stowe and VEC, on some of the  
17 efforts that they have had underway so there is a  
18 good flow of different ideas that are shared amongst  
19 everyone participating.

20 MR. HOWE: Okay. And would you  
21 envision that being through comments, or would that  
22 be an additional workshop topic?

23 COMMISSIONER ALLEN: I'm just  
24 envisioning kind of setting up something through  
25 specific questions that actually come from us. But

1       you know, I have additional questions that I have for  
2       a number of the parties, maybe all the parties. But  
3       I think I would like to tease out in a better  
4       document, essentially, you know, the successes and  
5       the struggles that are out there that have -- that  
6       we have scratched the surface of in this workshop.

7               MS. BRAESE: If I could, I was going to  
8       ask respectfully that it would be something open and  
9       all parties engaged in any additional questions. We  
10      have done a lot of work researching and finding those  
11      learned lessons, and we would hope to be engaged in  
12      that as well.

13             COMMISSIONER ALLEN: Appreciate it.

14             CHAIR ROISMAN: And Micah, I would like  
15      to see us focus on the non-home EV charging rates  
16      question, both the large commercial customer who is  
17      using this -- is using the electricity charge their  
18      own vehicles, you know, the fleet vehicles and so  
19      forth, but then the others, the commercial  
20      establishments that are charging other people's  
21      vehicles. What's the best way to set the rate? And  
22      what conditions on those rates, different variant  
23      rates, based upon the functionality and usefulness of  
24      the EV chargers. You know, including questions like  
25      one of the -- and I now can't remember which utility,

1 oh, I know, it was GF Power, who indicated they were  
2 going to make sure that they put in the  
3 infrastructure that would allow easy expansion of the  
4 number of charging stations that they would have, as  
5 the demand grew, rather than just put in  
6 infrastructure that was adequate for the current  
7 demand.

8 The questions like that that fit within  
9 the Act 55 goal of encouraging EV use and looking at  
10 all the different things that we might do for that  
11 aspect of EVs.

12 MR. HOWE: Okay.

13 CHAIR ROISMAN: And I don't know that  
14 that requires a whole session of workshop. But it  
15 certainly is a topic that I think would be very  
16 helpful to hear what the utilities like Stowe and GF  
17 Power are doing and what's being done in other  
18 jurisdictions.

19 MR. HOWE: Certainly. Great. Yeah. I  
20 think we have a number of topics, some of which could  
21 fall within a multi-topic workshop, and then some  
22 which may be just either one or two topic workshop.  
23 But I will sit down and see how I can break apart the  
24 recommendations and maybe put them into coherent  
25 groups. And then we can discuss -- we will discuss

1           how to go forward.

2                       I'll prepare a recommendation for you,  
3           and we will look at that for awhile. With that, is  
4           there anything anyone else would like to add on what  
5           we covered today?

6                       (No response)

7                       MR. HOWE: All right. I think that is  
8           all we have to cover for today. And just keep an eye  
9           out for our next request for comments.

10                      And with that, maybe we can try and  
11           include sort of a more laid out schedule for the rest  
12           of the investigation with the topics so everyone can  
13           know what's upcoming. With that, I thank you,  
14           everyone, for your participation. This has been very  
15           informative for me, and I hope it was for everybody  
16           else. And we will be in touch soon. Thank you.

17                      (Whereupon, the proceeding was  
18           adjourned at 1:14 p.m.)

C E R T I F I C A T E

I, Kim U. Sears, do hereby certify that I recorded by stenographic means the Workshop re: Case No. 23-1364-INV, via videoconference, on June 23, 2023, beginning at 9:30 a.m.

I further certify that the foregoing testimony was taken by me stenographically and thereafter reduced to typewriting and the foregoing 135 pages are a transcript of the stenograph notes taken by me of the evidence and the proceedings to the best of my ability.

I further certify that I am not related to any of the parties thereto or their counsel, and I am in no way interested in the outcome of said cause.

Dated at Williston, Vermont, this 25th day of June, 2023.

A rectangular box containing a handwritten signature in cursive script that reads "Kim U. Sears".



<p><b>\$</b></p> <p><b>\$21.53</b> - 18:5  <b>\$300</b> - 76:14  <b>\$500</b> - 92:6  <b>\$8 [10]</b> 76:25, 77:21, 81:10, 81:11, 82:3, 82:13, 86:13, 86:15, 86:25, 87:13</p> <p><b>0</b></p> <p><b>05402-0329</b> - 1:23</p> <p><b>1</b></p> <p><b>1 [10]</b> 15:2, 61:11, 62:2, 71:20, 85:25, 86:8, 112:7, 113:5, 113:10, 121:18  <b>10 [4]</b> 13:12, 58:20, 58:21, 101:11  <b>10-minute</b> - 58:18  <b>100</b> - 85:13  <b>100-amp</b> - 99:7  <b>11 [5]</b> 49:9, 49:10, 49:14, 58:16, 58:23  <b>11,000</b> - 111:8  <b>11:01</b> - 58:19  <b>11:05</b> - 58:23  <b>12</b> - 13:12  <b>12,000</b> - 98:16  <b>12-hour</b> - 24:22  <b>12:20</b> - 111:20  <b>12:40 [3]</b> 113:9, 113:11, 113:13  <b>130,000</b> - 75:11  <b>135</b> - 136:9  <b>15 [3]</b> 20:6, 30:4, 113:2  <b>15,000</b> - 75:10  <b>15-minute [2]</b> 84:12, 113:7  <b>150</b> - 95:23  <b>16</b> - 129:16  <b>160</b> - 85:15  <b>17 [3]</b> 101:11, 108:9, 113:18  <b>17.2</b> - 98:15  <b>18 [2]</b> 16:21, 30:13  <b>180</b> - 89:25  <b>185</b> - 89:25  <b>19 [2]</b> 16:22, 129:16  <b>1:14</b> - 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