

STATE OF VERMONT  
PUBLIC UTILITY COMMISSION

CASE NO. 23-1364-INV

2023 INVESTIGATION INTO EV RATES

October 2, 2023  
9:30 a.m.

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Via videoconference

Workshop held before the Vermont Public  
Utility Commission, via GoToMeeting, on October 2, 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  
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P R E S E N T

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Philip Picotte, DPS  
Freddie Hall, BED  
Amber Widmayer, BED  
Tiana Smith, GMP  
Melinda Humphrey, GMP  
Josh Castonguay, GMP  
Mike Hall, Hyde Park Electric  
Lisa Morris, VEC  
Andrea Cohen, VEC  
Dan Potter, VEC  
Sarah Braese, VPPSA  
Steve Farman, VPPSA  
Andrew Clayson, VPPSA  
April McCoy, VPPSA  
Bill Powell, WEC  
Jackie Pratt, Stowe Electric  
Abbey Miller, Village of Enosburg

1 MR. HOWE: Good morning. This is our  
2 second workshop in Case No. 23-1364-INV, which is an  
3 investigation into rates related to electric vehicles  
4 opened by the Vermont Public Utility Commission  
5 pursuant to Act 55 of 2021.

6 My name is Micah Howe, and I'm a staff  
7 attorney at the commission. Also attending the  
8 workshop today from the commission are Commission  
9 Chair, Roisman; Commissioner Cheney and Commissioner  
10 Allen; along with Andrea Poppiti; and Jacob Davis who  
11 are both Utilities Analysts at the commission.

12 This workshop is being conducted  
13 remotely. We are using the web-based platform  
14 GoToMeeting. Before we start, I'll run through the  
15 standard list of procedures. I think everyone is  
16 probably familiar with them, but I will hit some of  
17 the highlights.

18 Please keep your cameras on when you  
19 are speaking. Each time you begin talking, please  
20 identify yourself by name for the court reporter.  
21 And if you plan to only listen, please turn your  
22 camera off. We will not mute anyone's microphone,  
23 whether a participant or a member of the public, so  
24 please keep yourself on mute unless you are speaking.

25 When you do want to speak, please turn

1 your camera on and unmute your microphone or raise  
2 your hand. I will check in periodically with folks  
3 on the phone, if anyone wishes to speak, but I do not  
4 see any phone participants at this point.

5 If your internet connection cuts out,  
6 please try to rejoin the GoToMeeting or call into the  
7 workshop using the GoToMeeting telephone number that  
8 was provided in the workshop notice. If the audio or  
9 video from the workshop cuts out, please let me know  
10 if you're able to rejoin, and I can summarize what  
11 happened. If you are unable to call in or rejoin  
12 please notify the Clerk's office immediately by email  
13 or phone and we will pause the workshop to try and  
14 resolve the issue.

15 If anyone needs to present materials,  
16 we can make you the presenter so that you can share  
17 your slides on the screen by clicking the share  
18 screen icon. With that covered, we will begin the  
19 substantive portion of the workshop. And I will  
20 start by taking attendance of participants. If a  
21 party or participant intends to record the hearing by  
22 a video or audio, please indicate that when you  
23 provide your name for the court reporter.

24 So I will run down the list of people  
25 who filed comments and participants. And please just

1 state your name, and we are here so we are sure that  
2 we have an accurate record.

3 We will start with the Department of  
4 Public Service.

5 MR. PICOTTE: Good morning. This is  
6 Philip Picotte from the Department of Public Service.

7 MR. HOWE: Great. Welcome. How about  
8 Burlington Electric?

9 (No response)

10 MR. HOWE: All right. We have no one  
11 --

12 MR. HALL: Good morning. This is  
13 Freddie Hall from BED.

14 MR. HOWE: Great. Welcome. Is anyone  
15 from GF Power here? Had a few just join. I just  
16 received a note. Let's see. We have some background  
17 noise from Mike Hall. Mike Hall, if you could mute  
18 your microphone as we get started here.

19 I didn't hear anyone from GF Power. So  
20 moving on. Green Mountain Power.

21 MS. SMITH: Tiana Smith from GMP.

22 MS. HUMPHREY: Melinda Humphrey, GMP.

23 MS. SMITH: We also have Josh  
24 Castonguay listening in.

25 MR. HOWE: Great. Welcome. Hyde Park

1 Electric.

2 MR. M. HALL: Yeah. Mike Hall here for  
3 Hyde Park Electric. I'm outside counsel with  
4 Stackpole & French.

5 MR. HOWE: Great. Welcome. Stowe  
6 Electric. Anyone from Stowe Electric?

7 (No response)

8 See no one. Let's see. Vermont  
9 Electric Co-op.

10 MS. MORRIS: Good morning. This is  
11 Lisa Morris from Vermont Electric Co-op. We also  
12 have Andrea Cohen and Dan Potter on.

13 MR. HOWE: Great. Welcome. The VPPSA  
14 utilities.

15 MS. BRAESE: Morning. Yes. This is  
16 Sarah Braese with VPPSA. And we also have Steven  
17 Farman, Andrew Clayson and April McCoy here with the  
18 organization.

19 MR. HOWE: Great. Welcome. Washington  
20 Electric.

21 MR. POWELL: Good morning. Bill Powell  
22 for Washington Co-op.

23 MR. HOWE: And the last participant  
24 that filed comments, they did not file comments in  
25 this second round, but ChargePoint. Do we have

1 anyone here from ChargePoint?

2 (No response)

3 All right. Hearing none, is there  
4 anyone that I did not call that would like to state  
5 their attendance?

6 MR. F. HALL: I just want to say Amber  
7 Widmayer is here as well. She is having some trouble  
8 connecting. She is connecting, but I'm checking with  
9 her right now.

10 MR. HOWE: I do see her on the screen.  
11 Maybe it's not coming through.

12 Anyone else? Anyone else that would  
13 like to announce their attendance here? I believe we  
14 heard from everybody, and with that, we can jump into  
15 the workshop.

16 So I thought for today we had a number  
17 of issues that were listed in the order requesting  
18 comments which we will cover in order. But first, I  
19 thought I would run through, I had some questions  
20 about the comments that were filed. So I think I  
21 will start with those and we can ask the questions  
22 and follow up. This will be utility by utility, and  
23 then once we reach the general topics for discussion,  
24 we can turn to more of an open roundtable discussion,  
25 if that makes sense for everybody.

1                   So in terms of just some preliminary  
2 issues that were in the order, basically just want to  
3 remind everyone that we had an October 16 deadline  
4 for tariff filings, extensions, and exemptions. And  
5 at least the format that we had announced in the  
6 order was that each of those items will be filed as a  
7 separate petition in a new case so that the  
8 commission can have an accurate record for compliance  
9 with the Act 55 requirements, I think everyone was  
10 aware of that.

11                   Many comments made reference to when  
12 they would file and what they would file. So thank  
13 you for that. Just as an additional reminder. I  
14 will start -- I had a handful of questions, and folks  
15 from the commission, feel free to jump in if you have  
16 specific questions for a utility that didn't tie into  
17 one of the broader topics for the roundtable  
18 discussion. This would just -- this is just for  
19 clarification of the comments that were filed.

20                   I'll start with Burlington Electric.  
21 On page 4, I believe it was of your comments, there  
22 is a reference to a table below in connection with  
23 terms from BED's EV rate for the scheduling -- for  
24 the scheduling options for the EV rate. So I just  
25 wanted to clarify it references a table, but there

1 was no table in the comments that I saw. I just  
2 wanted to clarify -- I think I know the answer, but I  
3 just wanted to clarify that the reference is to the  
4 BED's flexible real-time option. Someone from BED?

5 MR. F. HALL: I'm less familiar with  
6 this video application so it took me a bit of time to  
7 get off. But yeah, I can reference that.

8 So I think we have the three options.  
9 The fixed tier is from noon until 10 p.m. is when  
10 charging is scheduled not to occur. And then the  
11 flexible option is basically with an eight-hour  
12 notice. And it happens dynamically, so it's when we  
13 see a chance of peak happening. And then the real-  
14 time option which we currently don't have anyone on,  
15 is no advance notice but we will notify a customer  
16 when that occurs.

17 MR. HOWE: Okay. So the real-time peak  
18 scheduling option does correspond to the flexible  
19 real-time rate; is that correct?

20 MR. F. HALL: They are all tied into  
21 the same rate tariff. That's correct. They are just  
22 different tiers in which we call events differently.  
23 But it would amount to the same credit that you would  
24 accumulate based on avoiding any peak charging.

25 MR. HOWE: Okay. Great. Thank you. I

1 just had one comment. I think it may be -- Kim, I  
2 think your microphone may be picking up some  
3 background noise.

4 (A discussion was held off the record.)

5 MR. HOWE: Okay. Great. Thank you. I  
6 had a question for Stowe Electric, but I'm not sure  
7 anyone from Stowe Electric was on. Has someone from  
8 Stowe Electric joined at this point?

9 (No response)

10 MR. HOWE: Okay. I do not believe so.  
11 So we will wait and see -- yes.

12 COMMISSIONER ALLEN: Yeah. I had a  
13 question for Mr. Hall on their filing.

14 MR. HOWE: Okay. Great.

15 COMMISSIONER ALLEN: If I could  
16 interject with that. Mr. Hall, if you could, there  
17 are -- I'm struggling to understand what was being  
18 communicated in the lower chart on page 3, if you  
19 have that handy. If you could just kind of  
20 articulate what it's communicating and what its  
21 significance is.

22 MR. F. HALL: Just make sure I'm  
23 covering the correct one. That's the one titled  
24 "Successful EV Charging Credits?"

25 COMMISSIONER ALLEN: Yes.

1 MR. F. HALL: So that's basically  
2 showing the trend line in blue of the monthly success  
3 rate of people who are on the rate who are getting  
4 credit for that monthly period. And so we do see  
5 some, you know, on-peak charging. And the way that  
6 ours is, you know, perhaps different from, you know,  
7 many other folks is that we don't impose a critical  
8 peak price or a peak price, but we take back the  
9 opportunity to get a credit that's been accumulated  
10 for that monthly period.

11 And so the customer will then just pay  
12 what they would have paid absent any electric vehicle  
13 rate. This is basically showing the percentage which  
14 is, you know, roughly 8 percent of that success rate.

15 MR. HOWE: Thanks. Are there any other  
16 questions for Burlington Electric before we move on?  
17 We had a few new people join, and I'll get them to  
18 identify themselves.

19 COMMISSIONER CHENEY: I have a  
20 question. You may or may not be able to answer this,  
21 Mr. Hall. But just comparing some other utilities  
22 that have EV tariffs, the approximately one third of  
23 residential customers who are enrolled in the rate.  
24 And I saw, you know, in the chart, a very different  
25 uptake, pretty good uptake of EVs but not enrolling

1 in the rate.

2 Have you analyzed or tried to address  
3 perhaps what might be a disincentive for people to  
4 enroll?

5 MR. F. HALL: We haven't focused in on,  
6 you know, what's causing folks who purchased EVs  
7 specifically to not join the rate. I can hypothesize  
8 on it that, you know, we live in the -- Burlington is  
9 a city that has a lot of renters and college  
10 students. And so there are dynamics there. And  
11 multi-family housing that are quite different from  
12 other areas in Vermont. So that's one component to  
13 it.

14 But I do see that, you know, we are  
15 trending upwards quicker in more recent months. So,  
16 you know, I think that that speaks to, you know, more  
17 people realizing this opportunity. And I think  
18 someone like Telematics can also play a role in the  
19 future.

20 MR. HOWE: Thank you.

21 COMMISSIONER ALLEN: Could I follow on  
22 that and just ask Mr. Hall what the recent trend -- I  
23 mean I know you provided the graphics. But I just  
24 wanted to hear you articulate what kind of recent  
25 experience is telling you in terms of the uptake or

1 participation in the EV rates among electric vehicle  
2 owners.

3 MR. F. HALL: Yeah. I think the trend  
4 line in purple there, I'm sorry for other folks who  
5 can't see it, I'm not sure if I can share my screen.  
6 But it is accelerating. And so we are seeing that  
7 more people are joining the rate relative to those  
8 who are getting incentives from our Tier III EV  
9 programs.

10 And then another thing I'll add is that  
11 we did expand the offering of incentivizing charging,  
12 a charger to a wider group, including plug-in  
13 hybrids. So I think that also played a role in  
14 increasing that adoption of the EV rate by folks who  
15 are buying EVs. Does that answer your question?

16 COMMISSIONER ALLEN: It does.  
17 Unfortunately, my auxiliary screen is not working so  
18 I'm not looking at the graphic.

19 In terms of the most recent experience,  
20 is it up above 50 percent, or where would you say it  
21 is?

22 MR. F. HALL: We are currently at 40.  
23 But basically we are, you know, trending upwards  
24 which shows that as we are, you know, incentivizing  
25 more and more vehicles with our Tier III program, a

1 greater percentage over time has been adopting the EV  
2 rate.

3 COMMISSIONER ALLEN: And if I  
4 understand your earlier comments, because you have  
5 such a kind of transient population, you know,  
6 comparing Green Mountain Power to BED may  
7 theoretically limit -- might be actually lower at BED  
8 than other utilities. Am I getting that right?

9 MR. F. HALL: That's what I would  
10 hypothesize. We haven't done in-depth research on  
11 folks who have purchased an EV that haven't joined  
12 the rate, but that would be interesting.

13 COMMISSIONER ALLEN: Thank you.

14 MR. F. HALL: Thank you.

15 CHAIR ROISMAN: I had one question also  
16 for Mr. Hall. Does BED have a handle on all the  
17 people in your territory who have EVs? Or are you  
18 doing an estimate based upon how many people have  
19 made some contact with you? In other words, what  
20 subset, if any, of the EV owners are not in any way  
21 part of the BED programs?

22 MR. F. HALL: That's a good question.  
23 So kind of three numbers we have are who's joined our  
24 electric vehicle rate, who has received a Tier III  
25 incentive for a vehicle, and then we also have DMV

1 data on who has registered a car that is designated  
2 as an electric vehicle in Burlington.

3 And so this chart is showing comparison  
4 between Tier III and the DMV data. Sorry. Tier III  
5 and our EV rate data. It doesn't include the DMV  
6 data. Last I checked, the total count of EVs in  
7 Burlington was roughly 800. And then our Tier III  
8 incentives are showing 600 vehicles.

9 CHAIR ROISMAN: Thank you.

10 MR. F. HALL: Yup.

11 MR. HOWE: Any other questions for  
12 Burlington Electric before we move down the list?

13 (No response)

14 Seeing none, we had two new people  
15 join, I believe. We have someone on the phone,  
16 Caller 1. Caller 1, can you please identify  
17 yourself?

18 MS. WIDMAYER: This is Amber Widmayer  
19 from Burlington Electric Department. I apologize for  
20 my audio troubles.

21 MR. HOWE: No. No problem. You can  
22 hear us all right now though?

23 MS. WIDMAYER: Yes.

24 MR. HOWE: Okay. Great. And then I  
25 believe Abbey Miller showed up at the bottom of my

1 screen.

2 MS. MILLER: Yes. Abbey Miller with  
3 the Village of Enosburg.

4 MR. HOWE: Okay. Great. Welcome.

5 MS. MILLER: Thank you.

6 MR. HOWE: I'll check one more time.  
7 Is there anyone from Stowe Electric on the call? The  
8 meeting?

9 (No response)

10 MR. HOWE: No one from Stowe Electric.  
11 Moving down in terms of the utility I had questions  
12 for is VEC.

13 So I have questions for VEC, a quick  
14 question for VPPSA, and a question for WEC. So  
15 anyone on the commission that has questions on other  
16 comments, just let me know, and we can jump to them.

17 For VEC my question was about the  
18 filing. VEC, you stated in the comments that you  
19 planned to file a preliminary draft tariff by October  
20 16 but the testimony may take time. I was just  
21 wondering would that be an actual tariff filing, or  
22 would that be just a notice and request for an  
23 extension? And my only concern is that given the  
24 statutory timelines that kick in once the commission  
25 receives a tariff filing, whether or not delayed

1 testimony would fit in that timeline that we are  
2 allowed in terms of how to, you know, the seven-month  
3 deadline for the commission to work on a tariff  
4 filing and have an order.

5 MS. MORRIS: Yes, we are planning to  
6 file the tariff by October 16. We just anticipate  
7 that there may be some -- some of the detailed  
8 analysis that may take a bit of additional time if  
9 there are additional questions from the commission.

10 We just had some concerns because we  
11 are also working on rate filings and things of that  
12 nature which involve the same staff. But we do plan  
13 to file as complete of a tariff filing as possible by  
14 October 16 for the program.

15 MR. HOWE: Okay. Great. Thank you.  
16 Commissioner Allen, did you have a question?

17 (Shaking head)

18 MR. HOWE: No. That was my only  
19 question for VEC.

20 COMMISSIONER CHENEY: Actually I do  
21 have a question.

22 MR. HOWE: Yes. Commissioner Cheney.

23 COMMISSIONER CHENEY: Similar to the  
24 one for BED. Just noticing that, you know, you've  
25 got a pretty good goal of 75 percent. And you're at

1 46 percent now. Have you analyzed as you're going  
2 toward that 75 goal what the barriers are and what  
3 your strategy will be to -- or is it, for example,  
4 communication outreach or some other incentive? How  
5 do you strategize reaching that 75 percent goal?

6 MS. MORRIS: The main barrier to date  
7 has been that many of the chargers aren't compatible  
8 with our communications platform that we are using,  
9 so there is really just two manufacturers that are  
10 currently compatible with that platform. And so we  
11 are currently testing a new platform that  
12 communicates directly with the vehicles and it  
13 includes almost all manufacturers and models.

14 So we anticipate being able to enroll a  
15 lot more vehicles in a direct communication program  
16 once we have that fully tested and we are able to  
17 roll that out to all of our members.

18 COMMISSIONER CHENEY: Thank you.

19 CHAIR ROISMAN: And I had one question  
20 also. Has VEC, once you solve the technical problem,  
21 which is not trivial, have you looked into the  
22 possibility of making your rates opt-out rates rather  
23 than opt-in rates?

24 MS. MORRIS: Yes. We could definitely  
25 think about something like that. The problem is that

1 we don't have a way to enroll them ourselves. So it  
2 does still involve quite a bit of communication with  
3 the members and getting them actually on board with  
4 our own vehicle or charger.

5 So I'm not sure how we would implement  
6 that from a, you know, the technical side of things.  
7 But if we did have a way, that's certainly something  
8 we could look at. But I think just in terms of how  
9 the program functions, it would have to remain opt in  
10 for the moment.

11 CHAIR ROISMAN: And have you looked  
12 into -- I mean there is a lot of discussion, not so  
13 much here in Vermont, but in general around the  
14 country over the advantages or disadvantages of the  
15 opt in versus the opt out. Assuming the technical  
16 problems are not there, have you all considered  
17 whether one is a preferable way to go than the other?

18 MS. MORRIS: Well to date all of our  
19 Tier III offerings and our flexible load offerings  
20 have been opt in. I mean I think that they are  
21 attractive enough that members will want to  
22 participate in these programs. The challenge is, I  
23 think, as you know, is getting the word out that  
24 these programs are available, and then having people  
25 take that step to actually enroll themselves in these

1 programs.

2 But as the programs evolve and we  
3 overcome more technical challenges, we could look at  
4 different models.

5 CHAIR ROISMAN: What has been your  
6 participation rate, total number of vehicles eligible  
7 versus total number of owners, who have opted in to  
8 take advantage of your time-of-use rates? Do you  
9 have a number on that?

10 MS. MORRIS: For the time-of-use rate  
11 it's been low. I believe it's been around 4 percent  
12 for vehicle drivers specifically. And I think it's  
13 been 4 percent for the overall Tier III program as  
14 well, because the time-of-use rate is also available  
15 for cold climate heat pumps and pellet stoves and all  
16 of our other Tier III offerings. I believe for both  
17 it's around 4 to 5 percent have participated in the  
18 time-of-use rate. But for the flexible load program  
19 for electric vehicle drivers it's about 46 percent  
20 currently.

21 MR. HOWE: All right. Any other  
22 questions for VEC on their comments specifically?

23 COMMISSIONER ALLEN: I guess I just  
24 want to be clear. Are there -- I know you've covered  
25 this in your comments, but I'm just trying to be

1 clear whether essentially all customer classes and  
2 segments either have or will have, you know, soon a  
3 rate that is, you know, that is proposed as an  
4 electric vehicle rate.

5 MS. MORRIS: So on the residential side  
6 we are planning to file the flexible load management  
7 tariff, so that would be specifically for our  
8 residential members. And then on the commercial  
9 side, we have the time-of-use rate which does enable  
10 -- does enable them to not have demand charges once  
11 they hit that 15,000 kilowatthour mark.

12 And as I said in the comments, we don't  
13 have very many commercial members with electric  
14 vehicle charging currently. So we could see what  
15 issues arise as more of those chargers come online.  
16 But the two -- we do have two level -- two sites in  
17 our service territory right now. And they both --  
18 their usage is low enough that they are able to be on  
19 our small commercial rate which is available up to  
20 15,000 kilowatthours.

21 COMMISSIONER ALLEN: I'm sorry. I  
22 understood that overall the participation of the  
23 time-of-use rate generally is about 4 percent. What  
24 proportion of commercial customers are participating  
25 in the time-of-use rate?

1 MS. MORRIS: Proportion of members, you  
2 know, I'm sorry. I would have to get to look at  
3 those numbers specifically. I didn't break it down  
4 for commercial versus residential. It is 5 percent  
5 overall.

6 I would think it would be similar for  
7 our commercial members, but I haven't looked  
8 specifically at the subset of our commercial members  
9 that are eligible versus are currently participating.  
10 But I can certainly look at that and file that.

11 COMMISSIONER ALLEN: Thank you.

12 MS. MORRIS: Thank you.

13 MR. HOWE: Other questions for VEC?

14 (No response)

15 MR. HOWE: Seeing none, my next  
16 question was for the VPPSA utilities, and I'm not  
17 sure who to direct this to. But I did see -- there  
18 was a statement that -- at the beginning, that VPPSA  
19 does plan to file a new tariff filing by October 16.  
20 And also some discussion of some work that needs to  
21 be done.

22 I was just curious what the rate would  
23 be, and if it will be contingent on implementation of  
24 future technology, or is it something that would go  
25 into effect once approved? How -- what does VPPSA

1 plan to file on October 16?

2 MS. BRAESE: Yes. So I will also have  
3 Steve Farman available to help answer some of these  
4 questions, but we do intend to file a tariff rider  
5 that keeps the underlying rates untouched, and it  
6 does not affect those, but it is a rider that will  
7 use a technology solution that by the time we get  
8 through the regulatory process, that solution should  
9 and will be in place. And that is our intention to  
10 meet that deployment and also the June 30 deadline.

11 MR. HOWE: Great. Thank you. Yeah. I  
12 was having trouble figuring out exactly how the  
13 timing of all that would work. But you expect the  
14 technology piece to be in place by the time the June  
15 30 deadline rolls around?

16 MS. BRAESE: Yes.

17 MR. HOWE: Great. Other questions for  
18 VPPSA?

19 CHAIR ROISMAN: I had one. Yeah. I  
20 know that VPPSA's in the process of putting in an AMI  
21 system for your members. Is that system, in your  
22 judgment, able to accommodate any of the -- I don't  
23 know -- for lack of a better word bells and whistles  
24 that go with EV charging? So that it's able, to the  
25 extent that your customers want it or that you decide

1 you want to implement it, these very flexible rates  
2 that encourage people to charge their electric  
3 vehicles away from your peak.

4 MS. BRAESE: In a short answer, yes,  
5 absolutely. That is actually the foundation on how  
6 we have gone through the discovery phase looking at  
7 various solutions, knowing that AMI is not going to  
8 be fully installed by the time this -- the Act 55  
9 deadline comes up.

10 And so we diligently spent months  
11 actually working through that discovery and finding  
12 solutions that our members can afford, to be honest,  
13 while we work through the various changes of the  
14 market, emerging markets, of storage, and all of the  
15 other flexible load devices that exist on the market  
16 now and in the future.

17 And that was the foundation of our  
18 research. And ensuring customers have the choice to  
19 either enroll or not, optimize or not. And, you  
20 know, pay accordingly really based on the rates and  
21 the rate structure and design.

22 The system specifically is -- has been  
23 selected and screened to enable a device-agnostic  
24 platform really. Where the communication protocols  
25 are open enough where they can work either

1 independently, individually as a single customer, or  
2 through their OEM, their EV OEM or even aggregators.

3 The options truly are as open as we  
4 have seen it on the market. And we look forward to  
5 really launching this and seeing how it can work.  
6 And we have seen it elsewhere across the country and  
7 in the northeast as well.

8 CHAIR ROISMAN: Have you looked into  
9 whether you want to make -- once you've got your  
10 system in place, make these opt outs as opposed to  
11 opt-in rates?

12 MS. BRAESE: That, I'm not prepared to  
13 give a concrete answer on that. I mean I think the  
14 underlying values are customer choice, and so I don't  
15 -- I couldn't speak to that as far as what the  
16 members would prefer at this point. I think we want  
17 to see adoption, and we want to see optimizing load  
18 so that system costs remain, you know, as manageable  
19 as possible, of course, and keep rates affordable.  
20 So I think that's to be determined.

21 CHAIR ROISMAN: Have you done analysis  
22 as to how many EV users would need to take advantage  
23 of your time-of-use rates to gain the advantages on  
24 the price of electricity to you during peak time? In  
25 other words, moving their load into nonpeak time,

1 what the economics are as to how many have to be part  
2 of it in order for you to basically make it  
3 advantageous to all your ratepayers?

4 MS. BRAESE: So the way -- more to come  
5 obviously once we actually file. But the way the  
6 entire rider is structured is that there is not a  
7 critical mass in order for that to be -- for those  
8 benefits to be achieved.

9 And on top of that, the way the  
10 structure -- the rider structure is structured, we  
11 intend to be as flexible and agile as possible so  
12 that when that, you know, the load factor of EVs on  
13 the system, when more and more EVs are coming online,  
14 that we can adjust and adapt quickly so that there  
15 are no unforeseen negative consequences across the  
16 system and across the members and for the utility and  
17 other ratepayers.

18 CHAIR ROISMAN: Thank you.

19 COMMISSIONER ALLEN: Micah, can I  
20 interrupt now?

21 MR. HOWE: Yes. Commissioner Allen.

22 COMMISSIONER ALLEN: Yeah. So just a  
23 couple questions. Just so I'm clear. You covered in  
24 your footnote 2 of your submission who you were  
25 representing. But I just want to be clear who you're

1 not representing; that is, the municipal space. So  
2 it's Enosburg Falls, it's Hyde Park, it's Stowe and  
3 Burlington Electric. Does that sound correct?

4 MS. BRAESE: No. So we represent  
5 Enosburg. The municipal member utilities we do not  
6 represent are Hyde Park, Burlington and Stowe.

7 COMMISSIONER ALLEN: Okay. Thank you.  
8 And I know that there is movement toward AMI, and  
9 that's important. How widespread is that? Does that  
10 extend to all of the utilities that you're  
11 representing or just a subset of them?

12 MS. BRAESE: The project has been  
13 designed for all 11 municipal members in three  
14 tranches. So there is a staggered deployment based  
15 on, you know, the member agreements and the overall  
16 project timeline.

17 COMMISSIONER ALLEN: And I know that  
18 the municipal systems are, you know, are different  
19 than Green Mountain Power and other systems in many  
20 different ways. But, you know, my belief is that,  
21 you know, there are essentially different kinds of  
22 drivers for the importance, if you will, of capturing  
23 the flexibility of electric vehicle loads.

24 And one of the concerns is that, you  
25 know, uncontrolled loads will precipitate, you know,

1 uneconomic consequences, either by virtue of driving  
2 capital commitments or, you know, just the  
3 coincidence with RNS charges and other factors.

4 Have your members, you know, considered  
5 those different drivers in their analysis of moving  
6 forward with an electric vehicle rate, or is that  
7 something that's going to be done in the future?

8 MS. BRAESE: I mean I think that is --  
9 that's again, one of the foundational pillars of how  
10 we have gone through this discovery, and how we have  
11 developed this strategy to help meet the EV charging,  
12 you know, Act 55 requirements. But also, you know,  
13 long-term, I think, you know, the answer is yes.

14 There are a lot of external factors  
15 that impact affordability for our member utilities;  
16 that is, distribution utilities, and I think there is  
17 always going to be a strong element of analysis on  
18 how to maintain and manage and protect affordability  
19 while also maintaining the high degree of reliability  
20 that our members offer in electric service to their  
21 customers.

22 COMMISSIONER ALLEN: Thank you. And  
23 just kind of harkening back to Chair Roisman's  
24 questions about opt in versus opt out. You  
25 emphasized the importance of customer choice.

1 Do you see an opt-in or an opt-out  
2 framework as more consistent with customer choice?  
3 That is, is it preferable to start with a rate that  
4 benefits the customer -- that we expect might benefit  
5 the customer and allow them to opt out, or do you  
6 want to start with a rate that is more traditional  
7 and allow them to opt in? Is one more consistent  
8 with customer choice than another?

9 MS. BRAESE: I mean I think choice --  
10 individual choice in general gives you, you know, is  
11 predicated on the ability to say yes or no. Where  
12 this rider is built on top of existing rates, I think  
13 there are strong opportunities to highly promote it.

14 You know, when we process an EV rebate  
15 on behalf of our member utilities we can easily and,  
16 you know, in a lot of ways automatically point them  
17 towards this program. Right? But there are some  
18 obvious requirements. They have to enroll. They  
19 have to choose to participate and make sure that  
20 their device, their car, their platform that they are  
21 already enrolled with, can communicate and give  
22 access to that usage data to our system, to the  
23 member system that's going to help relay that actual  
24 load.

25 COMMISSIONER ALLEN: Thanks. And my

1 final question relates to the AMI meters. Does that  
2 -- I know that there is a lot of capacity and lots of  
3 options available with advanced meters. Will the AMI  
4 meters that you're contemplating bringing forward for  
5 the membership, able to essentially separately  
6 distinguish the loads for the electric vehicles from,  
7 you know, other household loads? Or are they really  
8 intended to function in a kind of a whole-house or  
9 whole-premises framework?

10 MS. BRAESE: Well I mean most AMI  
11 deployments are going to be for, you know, a single  
12 meter. And if you are hoping to implement, you know,  
13 more device or load-specific programs, that would  
14 require a secondary meter to isolate that load.

15 I think that's where some of the  
16 challenges arise, and I think some of the other  
17 utility systems that have maybe more stable access to  
18 wifi where, you know, other systems, other  
19 technologies can help differentiate that load and  
20 report back usage as many of the programs that exist  
21 in the state do, that that's not necessarily a  
22 separate submeter, but, you know, if it's not the  
23 utility's operating technology specifically, then  
24 it's going to be an IT solution or a software  
25 solution.

1                   And many of the software solutions or  
2 device-specific programs, you know, that requires a  
3 full wifi 24/7 connection in order to abide by the  
4 program protocols and requirements. And we have seen  
5 that as a challenge for many of our members'  
6 customers because wifi is not always available or  
7 even if there is wifi, well if you have to install a  
8 subpanel in order to connect that key device, well if  
9 it's not on the same, you know, the same wiring as  
10 the actual router, well then that device actually  
11 can't communicate the usage back to, you know, a  
12 cloud-based solution.

13                   So to your question, AMI in general is  
14 going to provide a whole premise usage profile. If  
15 you are separating out a specific device or specific  
16 loads that requires a separate integral measurement  
17 device, whether it's the charging unit, the vehicle,  
18 the, you know, or a separate AMI meter, submeter.  
19 And, you know, the structure that we are proposing is  
20 to essentially treat those devices specifically as a  
21 submeter, and to report back usage so that there is  
22 not a larger AMI investment beyond what has been  
23 planned and knowing that the markets are shifted and  
24 the emerging markets are using devices and vehicles  
25 as submeters. Because the Telemetrics are quite

1 advanced and sophisticated.

2 COMMISSIONER ALLEN: I'm -- just to be  
3 clear, and to put a point on it, are you suggesting  
4 that some of your members may be implementing a  
5 separable EV rate from the whole premises?

6 MS. BRAESE: Yes. That is the  
7 structure, is that it's a rider specifically for the  
8 EV load.

9 COMMISSIONER ALLEN: Okay. Thank you.

10 COMMISSIONER CHENEY: A question, and I  
11 realize you have lots of different members, but you  
12 mentioned the intersection with the rebate as a good  
13 opportunity that is used to communicate about the  
14 possibility of the EV rate.

15 Is there also -- this could be a  
16 question for -- any other utilities, too, might want  
17 to chime in -- a message there that an opportunity to  
18 point out the benefits to the customer of enrolling  
19 in an EV rate so that it's not just this is how you  
20 do it, for example, but rather this is how it will  
21 benefit you.

22 MS. BRAESE: Absolutely. And I think,  
23 you know, in our experience over the last 18 months  
24 or so working through the power shift program, a  
25 pilot that we have been engaged with Efficiency

1 Vermont on, we have found, you know, only having the  
2 one device is actually not capturing quite a few of  
3 the EVs and EV chargers and EV drivers that exist  
4 within our member service territories.

5 A lot of customers have second homes,  
6 and part of the program requirements are as  
7 residential occupied year round. So that's going to  
8 cut out half of your transient, you know, customers  
9 that exist within your system or even vacationers.  
10 And so I think there is going to be a very broad  
11 message campaign and marketing campaign in an attempt  
12 to highlight the benefits of this program, and that  
13 it's actually a shared value both to the overall  
14 utility system, to keep costs low, to avoid, you  
15 know, unnecessary upgrades where possible by  
16 controlling load. But also that, you know, there is  
17 real monetary value for the customer to optimize  
18 their charging by this dynamic rate and the rate  
19 structure overall.

20 And so we envision a pretty broad  
21 campaign to make sure folks are aware of it and to  
22 really step people through how to engage, how to  
23 enroll, and the various opportunities that exist. At  
24 least on our side. Wait for the other utilities.

25 COMMISSIONER CHENEY: Yeah. Thank you.

1 CHAIR ROISMAN: Okay. I had a couple  
2 of questions, but I need to start with a caveat  
3 because they tend to be more technical.

4 My entire training on physics was from  
5 the football coach in my high school who was much  
6 more focused on football than he was on physics, so I  
7 apologize if my questions seem naive or clearly  
8 wrong.

9 I'm a GMP customer. I have an EV  
10 charger that was provided by GMP. I do not otherwise  
11 have any time-of-use rate. But my charger seems to  
12 itself be some kind of a meter, because I separately  
13 receive on my bill a statement of how many  
14 kilowatthours I've used to charge my vehicle. And  
15 since I do it using a rate in which I charge after 9  
16 o'clock at night before noon the next day, I also  
17 then show -- they show me what the new rate is and it  
18 basically takes out the regular rate, puts in the  
19 lower rate.

20 So when you talk about the time you  
21 want to spend to educate the customers about the  
22 advantages, why is it more logical to spend your time  
23 educating them on how they can opt out of an  
24 automatic opt-in rate? If you get a charger, the  
25 charger has built into it the metering capabilities,

1 and then if you don't want to have that charger used  
2 in this way, just let us know. Click this box, and  
3 we will let you just charge it the same way you pay  
4 for drying your clothes or, you know, washing your  
5 dishes.

6 I just want to understand what the  
7 impediments are to making it much easier to be part  
8 of the system rather than making you all have to go  
9 through a selling program.

10 MS. BRAESE: I mean I think part of  
11 what makes it likely more seamless or for you as, you  
12 know, as a GMP customer is that there is a specific  
13 device manufacturer that has been chosen and provided  
14 to you. So that's where the choice of what  
15 manufacturer, what device, what, you know, what -- I  
16 don't know -- what equipment that you're choosing to  
17 install in your own home, that decision is made for  
18 you really. But you're getting a free charger out of  
19 it. Right? And so that's kind of an automatic opt  
20 in.

21 Because in order to receive the free  
22 charger, you have to agree to participate in the  
23 program. VPPSA is not envisioning our members in any  
24 other program overall -- our strategy is not  
25 envisioning making that choice for our customer. You

1 know, the power shift program that was one specific  
2 device manufacturer. That device manufacturer has  
3 some challenges that we have come across in  
4 implementing the pilot. And at the same time we find  
5 that there are several other devices already out  
6 there, charging devices and device manufacturers,  
7 that members, you know, our customers have already.

8 And if we are to implement something  
9 across the board and standardize the deployment and  
10 availability for all of our members' customers, that  
11 decision can't be made for the customer, from my  
12 perspective and everything that I've seen.

13 And I think there is great value in  
14 preserving that autonomy for a customer to choose  
15 whether they want to participate, and gain all of the  
16 benefits of having, you know, more dynamic and  
17 market-based rates for their EV charging. Or if  
18 they want to just have that load under the whole  
19 residential rate. And that's generally, you know,  
20 that's how it's worked to date. And we would  
21 envision and anticipate that folks are going to be  
22 far more interested in participating in a dynamic  
23 program where that value is shared.

24 But to enroll and to have your device  
25 communicate its usage, that is going to require some

1 authorization unless we are absolutely controlling  
2 which devices, which communication protocols, which  
3 vehicles, which manufacturers. And that's not a  
4 space that our members hold as a value.

5 CHAIR ROISMAN: Thank you.

6 MS. BRAESE: You're welcome.

7 MR. HOWE: All right. Any other  
8 questions for VPPSA while we are here? I do not see  
9 any. But I do see that someone from Stowe Electric  
10 has just joined. So I will back up and get the  
11 introduction, and then I do have a question for Stowe  
12 as well.

13 I see Jackie Pratt from Stowe Electric.

14 MS. PRATT: How are you? Sorry I'm  
15 late. We are launching our new software this morning  
16 for our enterprise system for all of our billings, so  
17 my apologies for the late entrance.

18 I'm the general manager here at Stowe  
19 Electric. Been here about a year. Interested to  
20 hear what question you might have for us.

21 MR. HOWE: Just to back up a little bit  
22 and give you the overview of where we are. Stowe  
23 just focused -- we are going utility by utility at  
24 this point. And just some follow-up questions on the  
25 comments that were filed. And I had one question

1 just about what Stowe Electric plans to file. I  
2 wasn't clear from the comments that came in.

3 It sounded like maybe an extension and  
4 an exemption was in the works, but maybe you could  
5 elaborate on what the plan was, or if there was a  
6 plan to file something at all by the October 16 date.

7 MS. PRATT: Right now we do have a  
8 time-of-use rate which we feel meets the  
9 requirements, so we feel like we are already meeting  
10 your requirements for having an EV rate that could  
11 opt into the time-of-use rate.

12 However, quarter one we anticipate  
13 reviewing all of our tariffs. And at that time if we  
14 find a separate EV stand-alone rate is appropriate,  
15 that would be filed before the deadline for actual  
16 implementation.

17 MR. HOWE: Okay. So that sounds like  
18 at least an exemption filing. Is there any plan to  
19 do an extension filing as well? And just -- this is  
20 -- my questions are mostly focusing on future work  
21 load at the commission and just kind of planning for  
22 what comes in.

23 MS. PRATT: So with the filing that we  
24 made in stating that the time-of-use rate meets the  
25 requirements, do we need an exemption based on that?

1 Specifically file for an exemption?

2 MR. HOWE: Right. Our hope, just to  
3 keep everything in order, and there are a lot of  
4 moving pieces, there will be a lot of filings coming  
5 in around the October 16 deadline. But just for  
6 purposes of keeping track of where all the utilities  
7 are, we are asking that each -- whether it's an  
8 exemption, extension, or actual tariff filing, that  
9 each one of those things or requests would be filed  
10 as its own petition so we know where everyone stands  
11 and we can evaluate each of those requests  
12 separately.

13 MS. PRATT: Okay. We will file that  
14 then. For an exemption.

15 MR. HOWE: Okay. Great. The other  
16 question that I had, the comments referenced that  
17 there are several public EVSE in Stowe Electric's  
18 territory that are not Stowe Electric owned. I was  
19 just curious which rate those are on if you happen to  
20 know.

21 MS. PRATT: They are on whatever rate  
22 the customer is on. So if they are on a commercial  
23 rate or a general service rate, that would be -- they  
24 are often providing them at no charge as a  
25 convenience. So --

1 MR. HOWE: Sure. Okay. So that makes  
2 sense. So and there is no specific EV special  
3 treatment of that? It's just part of their overall  
4 account?

5 MS. PRATT: Correct. Yeah. They are  
6 not separately metered or anything. With our Stowe  
7 Electric owned chargers, we do have a rate tariff for  
8 that.

9 MR. HOWE: Right. Great. Thank you.  
10 Were there other questions for Stowe Electric from  
11 the commission or anyone? Any participant for that  
12 matter?

13 COMMISSIONER ALLEN: I have some  
14 questions.

15 MR. HOWE: Great. Yes, Commissioner  
16 Allen.

17 COMMISSIONER ALLEN: Yeah. In your  
18 comments you refer to the public charging rate, rate  
19 35. Is that -- am I correct that that's a retail  
20 offering from Stowe Electric?

21 (Nodding head)

22 Is there also a corollary rate for  
23 competitive providers of public EV charging? Is  
24 there a rate that is available?

25 (Shaking head)

1 Do you anticipate that there will be a  
2 rate offering for that customer group?

3 (Interjection by court reporter)

4 MS. PRATT: Yeah. So I was listening  
5 to his question. Yeah. Yeah. So our rate that we  
6 have on our chargers is a retail rate. So if there  
7 is a Stowe Electric owned charger out there, the  
8 customer plugs in, and that's the tariff that you  
9 reference. For businesses that have public chargers  
10 there is no separate rate for that right now, and I'm  
11 not sure whether or not we will establish one. As  
12 previously mentioned, we are going to be doing an  
13 evaluation of all of our tariffs and rate designs  
14 after the first of the year. And at that juncture we  
15 would make a determination whether it makes sense to  
16 provide a separate commercial EV rate for chargers  
17 not owned by Stowe.

18 COMMISSIONER ALLEN: Okay. Thank you.  
19 And, you know, you mentioned the time-of-use rates  
20 and, you know, the potential reliance on an  
21 exemption, if I'm correct. One of the challenges  
22 that has been associated with time-of-use rates is  
23 they typically -- unless you're in Arizona -- don't  
24 get a significant uptake. And I think that's been  
25 demonstrated for the better part of a century.

1 Do you know offhand what the --  
2 essentially the participation level is associated  
3 with the current time-of-use rate?

4 MS. PRATT: I believe, if we have  
5 anybody on that rate, it would just be a handful of  
6 folks. However, in part of our reevaluation of the  
7 rates that we are going to be doing after the first  
8 of the year, it may be that a different rate design  
9 to incentivize behavior is what we come up with  
10 rather than the rate that you see today.

11 COMMISSIONER ALLEN: Thank you.

12 MR. HOWE: Other questions for Stowe  
13 Electric?

14 (No response).

15 Seeing none. My last question I just  
16 had Bill Powell pop up. Did you have a question?

17 MR. POWELL: No. I thought I was next  
18 on your list.

19 MR. HOWE: Gotcha. Well you were. I  
20 had one question just in terms of Washington  
21 Electric. What, if anything, do you plan to file on  
22 October 16? I know you addressed some of the  
23 substantive topics in the comments, but it wasn't  
24 clear what the plan was. I know it's contingent on  
25 implementing this RF mesh system.

1                   So is there -- do you have a plan for  
2                   filing an extension? Exemption? What should we  
3                   expect?

4                   MR. POWELL: Although it's not formally  
5                   approved yet, at the board, Washington Co-op board,  
6                   the current plan is for -- we do have a time-of-day  
7                   rate. It needs a rider to enable today's metering  
8                   and the proper notification to the member.

9                   And that is our plan, to request an  
10                  exemption for the time-of-day rate, and work on a  
11                  rider to be filed between the due date the 16th and  
12                  next June.

13                  MR. HOWE: Okay. So that would just be  
14                  an exemption, not an extension?

15                  MR. POWELL: Again, subject to this has  
16                  not gone to legal yet, so I'm not clear what my  
17                  options are exemption versus extension. We would  
18                  like to use the time-of-day rate which we have on  
19                  file, to modify it with a rider that reflects today's  
20                  costs and the marginal cost of charging off-peak  
21                  hours.

22                  We currently have such a voluntary  
23                  program through our power shift initiative with  
24                  Efficiency Vermont. So we are offering to those  
25                  members that have a charger that we provided to the

1 member. We have peak and off-peak rates that we are  
2 using right now. It's a voluntary program. And this  
3 would then be supplemented with a rider under the  
4 time-of-day tariff that we have.

5 MR. HOWE: And that rider would be EV  
6 specific? Is that correct?

7 MR. POWELL: Correct.

8 MR. HOWE: Okay. Other questions for  
9 Washington Electric?

10 COMMISSIONER CHENEY: A question. In  
11 your comments you referenced the transactive energy  
12 rate from the New Hampshire Electric Co-op. And  
13 wondering beyond evaluating it and -- if you had  
14 drawn any conclusions as to its benefits, whether  
15 that might be something that WEC would be looking at?

16 MR. POWELL: It is. I think it's a  
17 very well conceived offer. It also has the advantage  
18 of not requiring submetering. And it's also  
19 available on the same software platform that  
20 Washington Co-op and others in Vermont use already.

21 But as to whether that's going to get  
22 shoehorned into what I just described a moment ago,  
23 that's not clear, because what we really need is some  
24 support to stand this up, and I don't think we can do  
25 it on our own.

1                   But it's of interest. I commend it to  
2 the Public Utility Commission for their  
3 consideration, and yes, if it has some advantage and  
4 we can stand it up, that might be part of our filing  
5 after the 16th.

6                   COMMISSIONER CHENEY: Thank you.

7                   MR. HOWE: Other questions for  
8 Washington Electric?

9                   (No response)

10                  MR. HOWE: All right. Seeing none,  
11 those were questions that were at least comment  
12 inspired.

13                  The next section of the workshop I have  
14 down as an agenda just to work through some of the  
15 additional substantive topics. And hopefully  
16 everyone will feel free to just jump in and share  
17 ideas.

18                  Since we have -- since we have touched  
19 on time-of-use rates a fair amount, I thought I would  
20 lead off with that one, and we had a question in  
21 there about the effectiveness and design of whole  
22 premises time-of-use rates. There is certainly some  
23 of those out there. Some of you are going to seek  
24 exemptions.

25                  And just to start the ball rolling, I

1 wanted to follow up with a question for BED. BED  
2 mentioned in their comments that they had -- they do  
3 have a time-of-use rate with -- between I believe  
4 it's residential, large commercial and small  
5 commercial for a total of 61 customers.

6 I was curious whether those customers  
7 have any EV load associated with that, or if there is  
8 anything that BED's able to share about kind of the  
9 situation of those customers as to why they have  
10 tended towards or adopted the -- chosen to be on  
11 BED's time-of-use rates.

12 MR. F. HALL: I can chime in on that.  
13 I think that's a good question. I don't have all the  
14 details on why each specific customer chose that  
15 option. I can add, you know, that if -- I guess high  
16 level color to it.

17 There have been some questions on, you  
18 know, does it make sense for me to purchase a  
19 different EV charger, have that installed, versus  
20 joining the time-of-use rate. What are my economics  
21 there. And typically, you know, they say what's the  
22 payback period, and going through kind of tearing out  
23 their existing charger, putting in one that complies  
24 with our rate would be, you know, take years to  
25 recoup, that's one consideration.

1 I think plug-in hybrids are kind of  
2 another key one as well where, you know, you might  
3 want to have different charging schedules to maybe  
4 charge a bit more during the day, if this was when we  
5 are focusing more on the fixed option. But I think  
6 that's less so the case now that we have more  
7 flexibility with the dynamic approach.

8 Those are the two things that come to  
9 mind.

10 MR. HOWE: Okay. Just a follow up on  
11 that. So those current, full time-of-use or whole  
12 premises time-of-use rates customers you think are in  
13 part driven by EV loads? They have EVs? Or it's not  
14 necessarily the case.

15 MR. F. HALL: I think that's unlikely  
16 the case. I think they might have different  
17 schedules underlying why they chose that time-of-use  
18 rate. I think most people who have an EV will go  
19 towards our EV rate, and, you know, as you pointed  
20 out, it is, you know, very small adoption of our  
21 time-of-use rate.

22 So I think that kind of goes to show  
23 that most people are opting for that EV rate.

24 MR. HOWE: Okay. Great. Thank you. I  
25 just wasn't sure if there was any correlation with EV

1 usage to that. That answers my question on that.

2 Commissioner Allen, did you just pop  
3 back up? Did you have a question on that? And at  
4 this point anyone jump in with questions or  
5 discussion on time-of-use rates, and I will keep  
6 maybe some topics going here for a little bit. But  
7 this hopefully will be more of an open discussion on  
8 people's experience who have had them.

9 COMMISSIONER ALLEN: I have nothing at  
10 this time.

11 MR. HOWE: Okay. One other --

12 CHAIR ROISMAN: I have one for BED.  
13 BED has a lot of multi-family dwellings, and I would  
14 be curious to know how are you handling the charging  
15 opportunities at those dwellings? Assuming there is  
16 a charger there and you've got let's say eight  
17 different apartments in the building. How does that  
18 work? Are the rates passed through directly to the  
19 person making the charge on the charger at the  
20 residence? Or is it paid for by the apartment  
21 building? How is it done?

22 MR. F. HALL: Yeah. That's a great and  
23 complicated question. So it's, you know, depending  
24 on customer to customer, so some will have a single  
25 meter, where the entire premise might have a charger

1 on what we would call the house meter or master  
2 meter. So in that case it would be, you know, the  
3 COA, if it's condo association, or the apartment  
4 association, paying the utility bill for that  
5 charger.

6 And so in that case, we wouldn't be  
7 able to give a credit to any individual charging  
8 customer. It would be whoever is, you know, owning  
9 and paying for that utility meter. We are, you know,  
10 considering expanded -- we are working to expand on  
11 street charging in public right of way where we will  
12 have drop-down chargers. That was a recent grant  
13 that we received to expand that in five locations in  
14 Burlington that were predominantly low to moderate  
15 income with high and multi-family density.

16 And so I think that's another option,  
17 and we are considering in that application a, you  
18 know, amendment to our current public EV rate that  
19 uses time of use in this case to basically allow  
20 folks who would be public -- charging in public areas  
21 to take advantage of cheaper overnight charging. So  
22 that's another option that we are considering.

23 And then one thing that Amber and I had  
24 worked on amending our EV rate is to add small  
25 general to that mix and to basically enable them to

1 join the rate which works for those kind of master  
2 meters or the house meters which is the case for  
3 multi-family unit dwellings to take advantage of our  
4 EV rate.

5 CHAIR ROISMAN: One other question. I  
6 was recently in Burlington. I parked in a public  
7 lot. And I used the charger that was in the lot.  
8 And are those BED owned or are those city owned? And  
9 if the latter, what kind of rate is applied to them?

10 MR. F. HALL: Those are BED owned. And  
11 that's following our public EV charging tariff.

12 CHAIR ROISMAN: Well kudos on having  
13 signs to tell people where chargers are located in  
14 parking lots in Burlington. You would be stunned at  
15 how rare that is in other parts of the country.  
16 Knowing that there was a charger in the parking lot  
17 helped me decide where to park. So thank you.

18 MR. F. HALL: You're welcome. One last  
19 thing that I didn't mention on multi-family work that  
20 we have been doing is working with a company called  
21 EVmatch which offers similar to kind of the Airbnb  
22 structure where we have the ability to work with a  
23 multi-family building to turn their charger into one  
24 that can transact and receive payments for individual  
25 folks who are charging there. And so that's another

1 option that we are working to incentivize with  
2 multi-family property owners to increase the amount  
3 of charging at those locations as well.

4 CHAIR ROISMAN: So if I understand what  
5 you're saying is that a parking -- that a charger at  
6 an apartment building won't just be available to the  
7 people who live in the apartment building, assuming  
8 it's accessible to others who aren't going through a  
9 gated area or something, someone from the public  
10 could charge at a fee. Is that what you're saying?

11 MR. F. HALL: We leave that up to their  
12 discretion. So we actually do give an additional  
13 incentive if they are making it available to public  
14 because we see that as, you know, serving a greater  
15 public good. But if they do choose to restrain it  
16 only to the people who live in that premises, they  
17 have that option as well.

18 MR. HOWE: What was the name of that  
19 company again?

20 MR. F. HALL: EVmatch.

21 MR. HOWE: EVmatch. Okay. And did --  
22 through their program is -- if an owner of a multi-  
23 unit residential property installs there, how does  
24 that work? Is it software? Does it fit behind the  
25 charger, or is that something that BED manages for

1 known multi-unit chargers?

2 MR. F. HALL: It's a software platform  
3 that uses an app that connects to the charging  
4 station and uses their web services to determine, you  
5 know, if someone is charging there, what's their  
6 amount of charging that they are doing at that  
7 location. And they also have the ability to lock and  
8 unlock based on reservations. BED is not managing  
9 it. This is all between EVmatch and the property  
10 owner.

11 MR. HOWE: And the property owner.  
12 Okay. And are they able to -- let's say you have a  
13 five unit residential unit, can this program identify  
14 the various residents and allocate costs that way?  
15 I've never heard of it, so I'm curious.

16 MR. F. HALL: Sure. Yeah. It  
17 definitely can. It basically does it on whoever's  
18 account. So you have EVmatch app on your phone with  
19 your account, and you have your, you know, payment  
20 system on your account. And so you would make a  
21 reservation or show up and unlock the charger, plug  
22 in, and then that money would be deducted from your  
23 account in the amount that that property owner wants  
24 to charge for access to their charger.

25 And then if they are a federal program

1 we set a limit on -- or a ceiling on what they can  
2 charge per kilowatthour so that, you know, we don't  
3 see folks that are charging much higher than is  
4 necessary.

5 MR. HOWE: Okay. Great. That sounds  
6 like an interesting solution. Turning back to the  
7 whole premises time-of-use rates. I did have one  
8 question.

9 One -- at one point I looked at whole  
10 premises time-of-use rates and kind of ran the  
11 numbers to see if that would -- if it would make  
12 sense for my own home. But to do that I actually had  
13 to back out all my hourly usage and upload it into an  
14 Excel spreadsheet and implement or cross reference  
15 the hourly rates.

16 Does anyone use any sort of a  
17 calculator program? We talked a little bit earlier  
18 about letting customers know the benefits or the  
19 basically cost savings that they might see if they  
20 were to switch to whole premises time-of-use rates.  
21 Does anyone have any sort of a calculator program --  
22 whether it's -- I think this could also apply to a  
23 stand-alone EV charging rate, just to see what the  
24 benefits would be versus, you know, a standard flat  
25 rate or some other residential rate.

1 Does anyone use or provide a calculator  
2 that customers can use to explore the benefits?

3 MS. MORRIS: This is Lisa Morris at  
4 Vermont Electric Co-op. We do have an Excel sheet  
5 that we have built for that purpose. So if somebody  
6 is interested in our time-of-use rate, we are able to  
7 extract their AMI data and put that in the sheet so  
8 they can get an sense for how they would do on that  
9 rate in their current state. And obviously the goal  
10 would be they would shift usage to those off-peak  
11 time periods, and it would be even more beneficial to  
12 them, if they choose.

13 MR. HOWE: That's exactly my question.  
14 I'm curious in terms of loading their current usage  
15 into your spreadsheet, do you engage with them to  
16 identify what loads are where? So, for instance,  
17 when I run the oven, I see a giant spike in my  
18 electricity usage. And I know what that is. But  
19 just running my normal usage on a non time-of-use  
20 rate, I could see the outcome of that spreadsheet  
21 might be different, whereas some of those loads I  
22 could move, say for instance, wash and dishwasher and  
23 anything that draws a lot. And some of those loads  
24 like I can't move. But that depends on me knowing  
25 what's what, you know, what's driving that usage and

1 what I can move.

2 Is there any -- is there that level of  
3 engagement? Or how do you show people the benefits?

4 MS. MORRIS: We would have a discussion  
5 with them probably. I mean we'll have whatever level  
6 of discussion they want. So we can definitely take a  
7 look and try to, you know, figure out with them, you  
8 know, what specific things might be happening in  
9 their home.

10 I mean it really is quite an in-depth  
11 conversation to figure those sorts of things out.  
12 But I mean just generically we talk about major  
13 appliance; your clothes dryer, your clothes washer,  
14 your dishwasher, things like that. Trying to  
15 identify the things that are easier to shift to those  
16 off-peak hours and that would be larger users of  
17 electricity. So certainly an electric oven would  
18 fall into that category as well.

19 MR. HOWE: Do you have a lot of those  
20 conversations? Or is that an infrequent occurrence?

21 MS. MORRIS: We have them on a regular  
22 basis definitely. I mean we have in the context of  
23 time of use, and we also have it in the context of  
24 high usage complaints. So people will call us and  
25 say: Wow, my usage really spiked this month.

1                   And we will have a really in-depth  
2 conversation about what that could be. Is there  
3 something new happening in their home? Is something  
4 malfunctioning? So yes, we do have those  
5 conversations on a regular basis.

6                   MR. HOWE: Okay. Does anybody else  
7 have anything on the calculator issue? I know that  
8 was one and, of course, I wasn't sure that I was  
9 doing the calculation right. So some utility  
10 confirmation that I was actually doing that right  
11 might be useful.

12                   (No response)

13                   MR. HOWE: All right. Nobody. Okay.  
14 Does anyone else have other issues they would like to  
15 discuss on whole premises time-of-use rates before we  
16 jump on to a different subject?

17                   (No response)

18                   MR. HOWE: No. Okay. So we have been  
19 going for close to an hour and-a-half. Does everyone  
20 need a break? We have -- we really don't have a ton  
21 left. We have multi-unit residence and demand  
22 charges to discuss. I think those could take awhile.  
23 Or if no one has anything to add, they could go  
24 quickly. So why don't we take a 10-minute break,  
25 come back at 11, and we will jump into those other

1 topics for folks to share, and again, just weigh in.  
2 I especially courage everyone to weigh in.

3 We are at this point just sharing ideas  
4 on solutions people have found. And hopefully maybe  
5 something could spark a new idea here. So let's take  
6 a 10-minute break, and we will come back at 11:00.

7 (Recess was taken.)

8 MR. HOWE: Okay. So it looks like we  
9 have the commission, commissioners and staff back.  
10 Hopefully everyone else is there behind their cameras  
11 and muted microphones.

12 And just to lay out the rest of the  
13 topics, we talked a little bit about multi-unit  
14 charging. I did have some follow-up questions  
15 generally. To -- Commissioner Allen, you had raised  
16 your hand.

17 COMMISSIONER ALLEN: Well I wanted you  
18 to finish your thought so --

19 MR. HOWE: I was just going to lay out  
20 we have multi-units. We have talked a little bit  
21 about that. I have a few more questions. I was then  
22 going to shift to demand charges which is another  
23 topic that we had listed in the order.

24 And then finally just kind of an open,  
25 any other topic, that utilities or anyone else on the

1 call would like to discuss. That's sort of the  
2 remaining agenda.

3 So Commissioner Allen, if you have  
4 something to lead us off.

5 COMMISSIONER ALLEN: Yeah. This  
6 concerns the kind of reliance on whole house or whole  
7 premises, you know, general service rates or  
8 time-of-use rates as kind of the basis for an  
9 exemption under the EV rate legislation.

10 Historically in Vermont, and I think most of the  
11 U.S., whole premises rates have, you know, a kind of  
12 notoriously very low takeups. And I'm grappling with  
13 this because in my mind it seems like it's  
14 inconsistent with the -- might be inconsistent with  
15 the spirit and perhaps even the letter of the  
16 litigation.

17 So I wanted to -- someone to help me to  
18 understand why, you know, a whole-house time-of-use  
19 rate should essentially meet the criteria that might  
20 be appropriately applied in granting an extension for  
21 such a rate as an EV rate.

22 MR. HOWE: All right. Is there anyone  
23 that wants to put forth a response to that? This  
24 kind of connects to our last topic of whole premises  
25 time-of-use rates.

1                   COMMISSIONER ALLEN: Okay. Well you  
2 know, I think -- it looks like Andrea Cohen is going  
3 to speak up.

4                   MR. HOWE: Great.

5                   MS. COHEN: See if I can get my camera  
6 on. Hi. Not a lawyer, but was in the legislature  
7 when this was being anticipated and discussed, and I  
8 think that it was within the statute to allow  
9 utilities time to develop programs and learn and  
10 continue to refine programs. So whether legally it  
11 qualifies, I will not be the one to make that  
12 argument. Maybe if someone was just proposing that,  
13 I think they might have an opportunity to make that  
14 argument.

15                   I know I can speak for VEC that we  
16 continue to learn, and our programs continue to  
17 progress. So we will not be leaning on that  
18 entirely, but there was a time when we thought we  
19 might more. And whether other utilities have the  
20 legal right to do that, I have no comment on. But as  
21 you know, Commissioner, we did talk about this at  
22 length, and I think we just keep learning and  
23 evolving programs which is, you know, the real goal.  
24 So -- thank you.

25                   COMMISSIONER ALLEN: Thank you.

1 Appreciate the comment.

2 MR. HOWE: I just had one follow-up  
3 question on your statement. The way I understood  
4 VEC's residential rate, at least, was that it ties to  
5 the Tier III incentives. Am I understanding that  
6 right?

7 MS. COHEN: The time of use is an  
8 option for our Tier III participants.

9 MR. HOWE: Okay. But it's not required  
10 for them. It's an option.

11 MS. COHEN: Correct. Correct.

12 MR. HOWE: Okay. Okay. Was there  
13 anyone else that wanted to add something on that  
14 topic before we move on?

15 (No response)

16 All right. Seeing none, I will return  
17 to the topic of multi-unit dwellings. We heard from  
18 BED about the EVmatch program, which was new  
19 information for me. I also wanted to follow up with  
20 Stowe Electric on a multi-unit issue.

21 One of the statements -- before I ask,  
22 is Jackie Pratt from Stowe Electric back on?

23 MS. PRATT: I am. Yup.

24 MR. HOWE: Quick question for you. One  
25 of the statements in the comments was that the

1 current rate 35 is intended to encourage both single  
2 and multi-family housing. I was hoping that you  
3 could expand on how that expands or how that  
4 encourages multi-family housing installation of level  
5 2 charging.

6 MS. PRATT: Give me just one second  
7 here.

8 MR. HOWE: Sure.

9 MS. PRATT: Just one second to make  
10 sure I get the right rate. That's the electric  
11 vehicle charging station rate; right? So because  
12 Stowe Electric owns those chargers, it's kind of  
13 agnostic to whether you are a multi-family or  
14 single-family resident who is purchasing an EV.  
15 These chargers are available throughout town and  
16 that's the intent is anybody can use them.  
17 Single-family homeowners have much more opportunity  
18 to install chargers on their own premises, so these  
19 public charging stations are available for all.

20 MR. HOWE: So for instance, if a multi-  
21 unit property owner came to Stowe Electric with --  
22 and asked Stowe to put in a multi or a public  
23 charger, is that an option for them, or is this just  
24 purely public charging? Rate 35, I mean.

25 MS. PRATT: As of this moment, it's

1 purely public charging, but I believe almost all of  
2 our public chargers are located on private property.  
3 We have not been approached for a residential multi-  
4 unit location at this time. We used to have them up  
5 at Spruce Peak, I believe, and they have instead  
6 opted to install their own chargers.

7 A lot of our housing stock here, even  
8 multi-family housing stock, tends to be short-term  
9 rentals or vacation homes. So in the event that we  
10 were approached, we would certainly consider it.

11 MR. HOWE: Okay. Great. Thank you.  
12 Then I had one more multi-unit question for VEC.  
13 VEC's comments mentioned that there was actually one  
14 multi-unit residence with level 2 charging but that  
15 it was not separately metered. And I was just  
16 curious what rate that charger would fall under and  
17 whether or not that's part of the whole premises use  
18 or is that some sort of a separate treatment?

19 MS. MORRIS: So that's -- so that's an  
20 assisted-living facility, and they are on a medium  
21 commercial rate currently. And I'm actually not  
22 entirely clear whether the charger's currently  
23 operational. It was recently installed, but it may  
24 not be operational yet.

25 MR. HOWE: Okay. Okay. Those were --

1 that's what I had for questions.

2 Does anyone else want to share  
3 experiences they have had with encouraging or  
4 installing or anything related to multi-unit  
5 residences' experiences they have had that might help  
6 the group?

7 (No response)

8 MR. HOWE: All right. Any other follow  
9 up questions from the commission on multi-unit  
10 residents?

11 (No response)

12 No. All right. The last specific  
13 topic we had was demand charges. I don't believe  
14 ChargePoint is on, but their comments in the first  
15 round highlighted a variety of approaches that states  
16 have taken. I know Green Mountain Power has the rate  
17 6 exemption for fast chargers. Stowe Electric I  
18 believe has it -- does not have a rate but has some  
19 programs in place but has not run into an issue.

20 You know, we hear at the commission --  
21 we hear a lot about demand charges being a big  
22 problem for chargers, especially EVSE installers or  
23 owners and companies focused on that. I was curious  
24 whether that is really an issue that anyone has  
25 encountered here in Vermont. You know, certainly

1 different states have different usage profiles and  
2 loads where that may come up a lot.

3 Is that a problem here in Vermont? If  
4 anyone's run into it. Just I'm curious to know how  
5 much at this point we should be focused on the demand  
6 charge issue.

7 COMMISSIONER ALLEN: Just note -- this  
8 is Commissioner Allen. I just wanted to note that, I  
9 mean, this is a problem I think more from the  
10 standpoint of public charging service providers than  
11 it is for the utilities. And I don't believe that we  
12 have any of the public charging retail providers in  
13 the room with us. So I'm not expecting we will get a  
14 full answer from at least the utility's perspective  
15 except that they might be able to channel indirectly  
16 some of the comments that have been received from  
17 those charging providers.

18 COMMISSIONER CHENEY: I might add to  
19 that framework too, that the comment that ChargePoint  
20 made back in the early summer was addressing, you  
21 know, the potential for utilities to propose demand  
22 charge alternative rates. And so whether it's a  
23 problem is one question. Whether people are  
24 considering proactive solution for it when it becomes  
25 a problem is what I'm curious about too.

1 MR. HOWE: Let's see.

2 COMMISSIONER ALLEN: Green Mountain  
3 Power has their own framework which is quite  
4 interesting. And I am curious whether there are kind  
5 of other frameworks out there that are corollaries to  
6 Green Mountain Power's framework.

7 MR. HOWE: Sure. Philip from the  
8 Department, you had your hand up.

9 MR. PICOTTE: Thank you, Mr. Howe.  
10 Philip Picotte, Department of Public Service. I just  
11 wanted to answer Mr. Howe's original question about  
12 is this a Vermont problem. And the answer is yes.  
13 And I'm saying that representing a team of state  
14 staff who have been working for a number of years now  
15 on public charging DC fast chargers around the state  
16 and trying to fill in some of the gaps that exist  
17 geographically around the state road network.

18 So I won't, you know, name particular  
19 utilities or towns, but there have been issues, or I  
20 should say challenges faced, when you or anyone, in  
21 this case the state-selected contractor, is building  
22 DC fast chargers in smaller towns that may have less  
23 travel than say interstate corridor. And therefore,  
24 there is fewer customers, fewer charging sessions of  
25 drivers across which to share demand charges.

1                   And the result is that makes installing  
2                   in those more remote more rural locations less  
3                   economically feasible. And so it is a challenge in  
4                   Vermont. I'm not coming necessarily with the  
5                   solution. And so sort of raising that saying it's a  
6                   challenge, even though I don't have any great idea  
7                   how to solve that. So I'll invite the DUs to speak.

8                   MR. HOWE: Is that a -- it's a  
9                   reluctance of EVSE companies or people you've  
10                  contracted with to install in those areas due to  
11                  demand -- what they expect will be the demand charge  
12                  result?

13                  MR. PICOTTE: Yeah. I mean let me  
14                  speak just to -- not speculate -- but just speak to  
15                  the experience. One of the contractors, and we have  
16                  had multiple rounds and multiple awardees for state  
17                  funds for DC fast chargers. And, you know, in one  
18                  round the winning bidder returned to us and said:  
19                  Well we have done some more math, and it's going to  
20                  be really hard to install this level, you know, 50 or  
21                  150 kilowatt charger in this location and not drag  
22                  down the entire project.

23                  And I think our response was well let's  
24                  figure it out, and also that's what you bid on so  
25                  you're obligated to meet that. But this was sort of

1 there is two main complaints from the contractors  
2 that the state's working with to build out charging.  
3 One is finding good site hosts who will host the  
4 locations. And secondly, the financial challenge of  
5 demand charges.

6 Again, along interstate corridor it may  
7 not be a major issue, but, you know, to those less  
8 traveled parts of the state it is a financial  
9 barrier.

10 CHAIR ROISMAN: I had a question for  
11 the Department. In your working with the people who  
12 are going to be installing fast chargers for public  
13 use, what standards are you imposing on them  
14 regarding the maintenance of those facilities? As I  
15 mentioned earlier I have an electric vehicle. I  
16 travel on the road quite a bit. And I frequently  
17 find, at least in Vermont, that the fast chargers are  
18 often not functional, and including some by some of  
19 our more well-known utilities, at least they identify  
20 as being with those utilities.

21 Is there any attempt to impose a  
22 maintenance standard on the fast charger,  
23 particularly one that's getting some kind of subsidy?

24 MR. PICOTTE: Chairman Roisman, was  
25 that a question for the Department?

1 CHAIR ROISMAN: It was.

2 MR. PICOTTE: So the answer is yes. In  
3 our contracts of state funded chargers and also with  
4 in-process federally-funded chargers under the NEVI  
5 program, NEVI stands for -- I don't remember the N,  
6 but electric vehicle infrastructure. It's part of  
7 the infrastructure -- the bipartisan infrastructure  
8 law passed in 2021.

9 Those requirements all have up time  
10 requirements as a percentage of hours of the month  
11 above which failure, you know, failure to operate or  
12 not performing at the target level in terms of speed  
13 of charging. There's been -- intended to be  
14 basically a breach and then you have financial  
15 penalties.

16 That said, you know enforcement is sort  
17 of a second part of the contract. And I can't speak  
18 to that.

19 CHAIR ROISMAN: All right. Well a rule  
20 without enforcement is not a rule. But do you  
21 require the charger to at least put a notification on  
22 the charger that says if this charger is not working,  
23 please contact --

24 MR. PICOTTE: I don't know if that's  
25 specifically in our contract. It tends to be --

1 CHAIR ROISMAN: Who is controlling the  
2 contract language? Is that the Department or  
3 somebody else?

4 MR. PICOTTE: It's the Agency of  
5 Commerce and Community Development. And with this,  
6 you know, new federal money that would be the Agency  
7 of Transportation.

8 CHAIR ROISMAN: Okay. So the  
9 Department itself is not the contractor here. You're  
10 just kind of overseeing what's going on.

11 MR. PICOTTE: We are -- the Department  
12 of Public Service is part of the team along with  
13 Agency of Commerce and Community Development, Agency  
14 of Transportation, that is involved in guiding state  
15 spending on EV chargers.

16 CHAIR ROISMAN: Okay. Thank you.

17 MR. HOWE: All right. I have a couple  
18 of hands up. I believe Lisa Morris was first.

19 MS. MORRIS: Hi. So I was just going  
20 to speak to this for VEC. We believe that we do have  
21 a solution to the demand charge issue for fast  
22 charging with our commercial time-of-use rate because  
23 it is available up to 130,000 kilowatthours per  
24 month. Which would be, you know, more than these  
25 charging stations we believe could exceed. So -- and

1 it does not include a demand charge.

2 So these fast charging stations could  
3 move to that time-of-use rate once they reach -- once  
4 they exceed 150 -- I'm sorry -- 15,000 kilowatthours  
5 per month which is our commercial -- which is our  
6 commercial rate without a demand charge.

7 MR. HOWE: Do you have chargers in that  
8 rate that are taking advantage of it or not yet?  
9 None yet.

10 MS. MORRIS: We do not because the  
11 usage is quite low at this point for the two fast  
12 charging stations that we have in our service  
13 territory. So they are still on that commercial rate  
14 without a demand charge.

15 MR. HOWE: Okay. All right. We have  
16 Tiana Smith and Melinda Humphrey.

17 MS. SMITH: Yes. I just wanted to  
18 speak for a moment about some of the maintenance  
19 concerns with the fast chargers across the state.  
20 And just to say while it's not at this point being  
21 regulated or mandated, we are certainly committed to  
22 the fast chargers that we are putting in now, many of  
23 which are replacing some of the older infrastructure  
24 that's been in 8 to 10 years, are being installed  
25 with maintenance contracts associated with them. And

1 making sure, you know, through partnerships with  
2 companies like Qmerit that that maintenance will be  
3 part of the installation of those new fast chargers  
4 as we start to take out some of the older  
5 infrastructure and replace it with new as well as  
6 adding the new units that we do every year.

7 CHAIR ROISMAN: I have a question for  
8 you, Ms. Smith. I read -- and that's all I've seen  
9 is I've read, that Tesla is starting to open up its  
10 access to its charging to non-Tesla vehicles, but  
11 that you sort of need a special cord of some kind.  
12 If you've got a regular non-Tesla car to use the  
13 Tesla charger.

14 Do the chargers that at least GMP is  
15 looking at, do they work with the Tesla vehicles? Or  
16 essentially do they work with all cars or will there  
17 also be the need for some kind of special adapters  
18 for certain cars? How is that working?

19 MS. SMITH: So at this point our EV  
20 fast chargers are CCS. And many of them have  
21 Chademo. The way that it's working, to my  
22 understanding, with Tesla is for the couple of  
23 stations that they are piloting right now, it's  
24 actually an adapter that exists within the Tesla  
25 station that a Ford or, you know, any type of vehicle

1 could pull up, and the adapter exists within that  
2 station at this point.

3 I do know Tesla owners have an adapter  
4 to be able to use the J-1 -- the level 2 charger  
5 adapter for that but not at this point the fast  
6 charger for the CCS.

7 MR. HOWE: All right. I have a hand up  
8 from Fred Hall.

9 MR. F. HALL: I was just going to  
10 address how BED's approaching our, you know, the  
11 demand charge mitigation. But also want to comment,  
12 yesterday on a drive back charged at a Tesla Magic  
13 Dock. It's one of those that you, as Tiana Smith was  
14 mentioning, have the adapter right in the station,  
15 which was pretty cool. I think there are about ten  
16 of them out in the country right now, but more to  
17 come. So exciting side note.

18 Anyway, the approach that we are taking  
19 is that under our EV rate, our small general and  
20 large general classes can participate in the EV rate  
21 by, you know, avoiding those peak times under the  
22 three tiers which are the fixed time of use or the  
23 dynamic option which is the eight-hour advanced  
24 warning or the real-time scheduling feature. And so  
25 speaking to small general, the current way that it

1 works is if you exceed 3,000 kilowatthours in three  
2 consecutive months, then you proceed on to the large  
3 general class which would impose a demand charge.  
4 What we have changed is to say if you manage your  
5 charging under that EV rate structure, then you won't  
6 have those kilowatthours designated for that managed  
7 charging be imposed on bumping you into that demand  
8 charge class.

9 And then for the large commercial or  
10 large general class, we are netting out any  
11 non-coincident peak EV charging from your demand  
12 charge. So effectively reducing your demand charge  
13 for any EV charging that occurs.

14 MR. HOWE: Okay. So just so I  
15 understand, large commercial and small commercial  
16 would take advantage of your EV-specific rate and  
17 separately meter. Is that how your framework works?

18 MR. F. HALL: That's correct. So I can  
19 speak to, you know, one customer who is on the small  
20 general class, and they were, you know, concerned  
21 that their new charging stations would bump them into  
22 the demand class. We have been working to keep all  
23 of their charging to the off-peak period, and so any  
24 incremental kilowatthours that are served by the  
25 charger aren't counted for that 3,000 per month

1 criteria limit that would then bump them into the  
2 demand class.

3 And then at this point we don't have  
4 anyone that is on the large general service within  
5 our EV rate, but we are hoping to change that.

6 MR. HOWE: Okay. Great. Thank you.  
7 And just one other question for the Department, in  
8 terms of the problem areas that you have had. Is  
9 your multi-agency working group engaging with the  
10 utilities in those areas to come up with a solution?

11 MR. PICOTTE: I would say we have  
12 raised the issue. Philip Picotte from the  
13 Department. We have raised the issue with the  
14 utility -- utilities in those particular locations.  
15 And I'm not up to date.

16 Again, we have hired a contractor. So  
17 far for the state-funded rounds originally the first  
18 round was Blink charging. And the second is Norwich  
19 Technologies. And so they are engaging directly with  
20 the utilities as they site and then build the  
21 charging locations.

22 So I can't say that there's been an  
23 outcome. I'm probably not familiar with it or not  
24 involved at that level of detail.

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

1 Andrea Cohen from Vermont Electric Co-op.

2 MS. COHEN: Thank you. I just wanted  
3 to raise an emerging issue that we are starting to  
4 hear more about that's kind of connected. We are  
5 hearing I think there is good transparency about the  
6 rates that the person charging their vehicle when you  
7 go to a public charging station, you know, there is  
8 transparency about what you're going to be paying.  
9 But we are starting to hear concerns that that  
10 charging session is much more expensive than maybe it  
11 needs to be. And I don't believe there is any kind  
12 of regulation about what charging station hosts can  
13 charge.

14 But I know as a user myself, I have  
15 gone across the street and, you know, paid a third of  
16 what I did at the other charging station in the same  
17 town.

18 So we are starting to hear some  
19 concerns about -- from the user experience about the  
20 cost of charging at public charging stations.

21 COMMISSIONER CHENEY: So would some of  
22 that fall under the jurisdiction of the -- is it the  
23 ACCD that is dealing with some of the quality  
24 assurance for charging stations?

25 MS. COHEN: I would think the grants

1 that they issue they might have some control over  
2 that. It's like a government-funded charging  
3 station. I don't know if they do exert that or not.

4 COMMISSIONER CHENEY: I'm just thinking  
5 of how, you know, weights and measures types  
6 approaches to gas stations and, you know, traditional  
7 fueling stations have been historically. I'm  
8 wondering if that's in play potentially for electric  
9 charging stations.

10 MR. PICOTTE: I think that was directed  
11 toward me. Philip Picotte from the Department. So  
12 for those state-supported charging locations, yes,  
13 the ACCD, Commerce and Community Development contract  
14 does have influence. I don't know if it's exact, to  
15 what extent it is, but influence on the prices  
16 charged.

17 And I'm sort of drawing on memory, but  
18 the charging operators, again Blink from round one,  
19 Norwich Technologies from round 2, are responsible  
20 for their DC fast chargers for showing the economic  
21 case for whatever -- to the ACCD, to the state, for  
22 whatever they charge.

23 For those public chargers that are not  
24 supported by the state, which is the vast majority,  
25 there is really no entity that is responsible for

1 setting the price for ensuring a fair price. The  
2 weights and measures factor is -- that you bring up  
3 -- that is managed by the Agency of Agriculture, Food  
4 and Markets. And just in the past six months there's  
5 been progress nationally on developing standards, and  
6 there was two -- at least two elements to it. One is  
7 that issue of precision or accuracy in ensuring that  
8 a kilowatt's actually, you know, delivered to the  
9 vehicle. Just as the equivalent would be making sure  
10 that a gallon of gas from the gas pump is actually a  
11 true gallon. So there is that accuracy and precision  
12 aspect of the delivered energy. And then there is  
13 also the method of sale requirement which is also  
14 part of weights and measures law, and Vermont law  
15 adopts national standards by reference.

16 And that addresses making sure that the  
17 price to charge is clearly posted and that consumers  
18 know what they are paying. And that, I believe this  
19 may be a time issue, but over the next few years, the  
20 national standard will be for DC fast charging that  
21 charging does not happen on a per minute or per hour  
22 basis. So you can't say oh, it will be \$10 for an  
23 hour, but rather it will be a price per kilowatthour  
24 delivered, and that that is the mechanism in which  
25 drivers are charged to fill up.

1                   COMMISSIONER CHENEY: Well that was  
2 really helpful and fascinating. Thank you.

3                   MR. PICOTTE: Yeah. I'm glad to  
4 provide additional information. Again, the weights  
5 and measures law that's adopted by reference in the  
6 national standards have just come out are  
7 complicated, and so I may not represent everything  
8 precisely, but that's my understanding. I'm happy to  
9 provide additional information if it's of interest to  
10 this group.

11                  CHAIR ROISMAN: And I assume apropos to  
12 Ms. Cohen's experience that although perhaps not yet,  
13 in the hopefully not too distant future there will be  
14 enough electric vehicles seeking to charge publicly  
15 that it will be like gas stations. You'll see a big  
16 sign out front. It will say how many dollars or  
17 cents a kilowatthour, and probably also what the  
18 charging time is as a way to get you in.

19                  In Ms. Cohen's case I assume there had  
20 been a nice big sign sitting out in front of the one  
21 with the lower rate, they would have impacted the one  
22 with the higher rate significantly, which is what  
23 happened eventually with gasoline stations. You now  
24 know what you're going to have to pay per gallon  
25 before you ever hook your car up to the gas pump. So

1 this may be a problem that the -- I'll leave this to  
2 Commissioner Allen who is our resident economist, but  
3 I would hope this is a problem that the system will  
4 ultimately resolve for us. So people know what they  
5 are going to pay before they get hooked up.

6 COMMISSIONER ALLEN: I have my fingers  
7 crossed.

8 MR. HOWE: Okay. Is there anything  
9 else that would be helpful to discuss on demand  
10 charges before we move on to the last catchall  
11 category? And certainly jump in during the catchall  
12 if you do happen to think of anything on any of the  
13 topics or any subject that we have discussed thus  
14 far.

15 The last topic we had was just to --  
16 other experiences and lessons learned. And this  
17 could be anything from software implementation to  
18 metering to you name it. So if -- are there other  
19 topics relevant here that we should cover before we  
20 wrap up? Commissioner Allen.

21 COMMISSIONER ALLEN: I'm just -- I'm  
22 not sure it cleanly fits within the catchall language  
23 that you put out. But I am interested in the  
24 category of fleet charging. And I don't recall much  
25 comment on fleet charging in the comments received.

1 But it seemed to me like a, you know, vast  
2 opportunity for, you know, both encouraging and  
3 managing loads associated with fleet electric  
4 vehicles.

5 And my question to the group is this --  
6 is this essentially -- are we in an area of the  
7 technology adoption curve to be thinking about this,  
8 or are there actually rates that are going to be put  
9 forward or conceived of at this early stage?

10 MR. HOWE: I saw Sarah Braese from  
11 VPPSA just turn the camera on. Did you want to  
12 respond to Commissioner Allen?

13 MS. BRAESE: Yes. Thank you. So I was  
14 just going to add that that's one area that VPPSA is  
15 really excited about. I know, you know, there is  
16 various transportation entities that cover territory  
17 across a number of our member utilities. And I think  
18 that's somewhere that we are very excited to pilot  
19 this solution that we are hoping to propose and kind  
20 of see how that works with real life applications for  
21 fleet electrification, especially where they have  
22 such a huge impact on local communities.

23 So I don't think it's too soon. I  
24 think it's one of those things where we are  
25 constantly building the plane as we fly it, but also

1 trying to make sure that those investments are  
2 strategic and made with clear vision in mind.

3 COMMISSIONER ALLEN: Thank you.

4 MR. HOWE: Anybody else on fleet  
5 charging? Anybody else on any topic whatsoever  
6 related to EV rates and the upcoming filings?

7 (No response)

8 All right. Any other questions from  
9 the commission or commission staff?

10 (Shaking heads)

11 MR. HOWE: All right. Seeing nothing,  
12 I believe that's everything we had scheduled to cover  
13 in this workshop. Thank you, everyone, for attending  
14 and the information. It's been very helpful.

15 And I believe the next step is the  
16 October 16 filing. So we look forward to seeing  
17 those and seeing what everyone has come up with. So  
18 thank you for your time today. And we will adjourn  
19 at this point.

20 (Whereupon, the proceeding was  
21 adjourned at 11:39 a.m.)

C E R T I F I C A T E

1  
2  
3 I, Kim U. Sears, do hereby certify that I  
4 recorded by stenographic means the Workshop re: Case No.  
5 23-1364-INV, via videoconference, on October 2, 2023,  
6 beginning at 9:30 a.m.

7 I further certify that the foregoing  
8 testimony was taken by me stenographically and thereafter  
9 reduced to typewriting and the foregoing 81 pages are a  
10 transcript of the stenograph notes taken by me of the  
11 evidence and the proceedings to the best of my ability.

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

15 Dated at Williston, Vermont, this 3rd day of  
16 October, 2023.

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19  Kim U. Sears  
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