

BRITISH COLUMBIA UTILITIES COMMISSION
IN THE MATTER OF THE UTILITIES COMMISSION ACT
R.S.B.C. 1996, CHAPTER 473

And
An inquiry into the Regulation of
Electric Vehicle Charging Service

CASTLEGAR, B.C.
March 26, 2018

Community Input Session

BEFORE:

D. Morton,	Chair/ Panel Chair
A. Fung, Q.C.,	Commissioner
H. Harowitz,	Commissioner

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CASTLEGAR, B.C.
March 26, 2018

(PROCEEDINGS RESUMED AT 6:07 P.M.)

THE CHAIRPERSON: Good evening. Thank you very much for coming this evening. We look forward to hearing your input for our electric vehicle charging service.

My name is Dave Morton, and I am the Chair of the Panel that's conducting this inquiry. I am also the Chair of the Utilities Commission. And with me tonight is Commissioner Anna Fung, on my right, and Commissioner Howard Harowitz on my left. And I have some staff members with us also, and they'll introduce themselves as they make a presentation for you.

Following the presentation, I'm going to turn it over to you, so -- as this is the opportunity for you to present us with your thoughts and with your views.

So, on that note, I'll turn things over to Patrick, and Patrick has -- and Patrick and Leon have a presentation to make.

Go ahead, Patrick. Thanks.

(PRESENTATION GIVEN BY PATRICK WRUCK)

(PRESENTATION GIVEN BY LEON CHEUNG)

(PRESENTATION GIVEN BY PATRICK WRUCK)

THE CHAIRPERSON: Patrick, there's a question. A question.

1 QUESTIONER: Patrick, I've been following this for a
2 little while, and --

3 THE HEARING OFFICER: Could you come to the microphone?
4 Because we're broadcasting --

5 THE CHAIRPERSON: Or you could just hand him the mike.
6 Yeah.

7 **Proceeding Time 6:17 p.m. T2**

8 QUESTIONER: I was just saying, I've been following the
9 process for a while. I've been interested in it, as
10 an EV owner, and the -- it wasn't clear to me what the
11 difference was between me just showing up here as a
12 member of the public or writing a public comment,
13 versus an intervener was. I was wondering if you
14 could elaborate on that.

15 MR. WRUCK: So, what the difference is, is an intervener
16 is someone who would actively participate, and they
17 would file evidence. So there's been evidence
18 submissions. Usually an intervener represents a
19 group. That's generally speaking what an intervener
20 does, and they participate throughout the process.

21 However, any member of the public could
22 participate throughout the process as well, and you
23 can submit a letter of comment in writing; you can
24 make a submission this evening, as a member of the
25 public. That's totally fine. So it doesn't really
26 matter. But we can talk about it further if you need

1 more explanation than that.

2 So lastly -- so this evening, basically
3 making a submission orally is the same as writing a
4 letter of comment. And it doesn't require any further
5 action on your part. So when you do make a submission
6 this evening, if you could please tell us your first
7 name and then spell your last name, and let us know
8 whether or not you represent an organization.

9 So I'd like to thank you so much for coming
10 this evening, and if you have any further questions,
11 or you'd like to discuss something with staff
12 directly, you're welcome to do that. We're here after
13 the session is finished to do that with you.

14 So with that I'll turn it over to Mr. Chair
15 -- Mr. Morton.

16 **Proceeding Time 6:18 p.m. T3**

17 THE CHAIRPERSON: Thank you. Thank you, Patrick, and
18 thanks, Leon.

19 So at this point I'll turn it over to our
20 audience and, as Patrick said, we welcome your views.
21 Anything at all that you would like to bring to our
22 attention, any comments, any observations, your views
23 on the questions that the inquiry is attempting to
24 answer.

25 The only thing I would ask is that you come
26 up to the microphone, please, and state your name and

1 spell your last name. And the reason for that is this
2 is transcribed, and our transcribers need to be able
3 to write your name out, and it goes on the -- the
4 transcription of this session goes on the record.

5 So at this point, then, is anyone -- I'd
6 like to invite anyone to come up and speak.

7 COMMISSIONER FUNG: Don't be shy, we don't bite.

8 THE CHAIRPERSON: Thank you.

9 **PRESENTATION BY MS. LOVE:**

10 MS. LOVE: Hi. My name is Heather, last name L-O-V-E.

11 And I am a very new EV driver, or owner, and I commute
12 from Nelson to Trail, and my first day I had already
13 inquired with my employer -- I'm in a different
14 location every day. So for an employer to actually
15 create or use the plug-in incentive that I'm aware of,
16 may -- would have to obviously be looking ahead.
17 Because I wouldn't be using it more than probably once
18 or twice a week at any one location.

19 So I'm going to definitely be relying on
20 the public EV stations, and I have not purchased a
21 proper cord to do a fast charge yet. But my
22 experience on my very first day is that I am running
23 on gas right now, because there was one charger in
24 Trail, and it was full. So, and I've been told by my
25 fellow EV drivers here that there is a line-up of
26 other people in Trail. So my -- I'm the -- probably

1 four or five in the line-up.

2 So I guess my question is, because I'm in a
3 different location and the only place I need to charge
4 is Trail, I have enough range to get me home if I'm
5 working in Castlegar. What is the amount of chargers
6 that is planned? And maybe I've got the wrong --
7 maybe the Commission is not the right place to start.
8 It would be the Plug In Kootenays organization.

9 But I am going to mention one other point,
10 which I think is a disincentive and it may be wrong
11 information, but my -- the electrician that I -- that
12 works for Interior Health has informed me that he
13 thought that there -- that the charging stations, the
14 land in which these charging stations is being -- you
15 know, there was a lot of charging stations being put
16 in. They're being taxed to have that charging
17 station. I have no idea if that is accurate, but that
18 would definitely be a disincentive for having a
19 charging station when I'm in the process of trying to
20 encourage them to be in existence.

21 So, that is just really just an
22 experiential --

23 THE CHAIRPERSON: Yes.

24 MS. LOVE: -- point, and that's -- that ends my comments.

25 THE CHAIRPERSON: Okay. So, thank you, Ms. Love. So as
26 far as the number of charging stations and the

1 increase in the number of charging stations, you're
2 correct. That's not directly under our control.
3 Actually building any kind of electrical or gas
4 infrastructure isn't something we are directly
5 involved in. However, we do oversee utilities as they
6 develop their infrastructure.

7 So just to bring it back to this inquiry,
8 then, the question that we're trying to answer is,
9 what's the best way for that infrastructure to get
10 built out? Is it to have the utilities -- the
11 already-regulated utilities build it? Or would it be
12 better to open the market for more competitors, given
13 that there is a competitive element to the market?

14 And those are the kinds of questions that
15 we're trying to ask. So I'm sorry that we can't
16 answer that question for you, but depending on how the
17 market develops and who participates in it, the market
18 may get developed more quickly, or not.

19 As I understand it now, there is a fair
20 amount of -- well, I don't know about a fair amount,
21 but there is a certain amount of federal and possibly
22 provincial government subsidization of the market, and
23 that's probably helping what build-out there is now.
24 That's probably helping that somewhat.

25 MS. LOVE: So in terms of the question that's been
26 brought to me, is -- my employer is saying that they

1 need to create policy before they can have charging
2 stations. And I'm wondering if the Commission can
3 somehow support organizations to -- because otherwise
4 people would be reinventing the wheel.

5 THE CHAIRPERSON: Right. So, we can make recommendations
6 about policy. We generally try to stick within policy
7 areas that are within our scope, which is the economic
8 impact to the ratepayers of regulated utilities. So
9 those would be the kind of policy recommendations that
10 we would look at.

11 But the inquiry is fairly broad, and, you
12 know, we are interested when you make comments about
13 there being a tax on electric vehicle -- on the land.
14 I'm not sure that that's something that we're aware
15 of, and so --

16 MS. LOVE: This came from an electrician, and I don't
17 know where he got his source of information.

18 THE CHAIRPERSON: Yes. Yes. Yes.

19 MS. LOVE: I'd be curious to learn a little bit more
20 about what you see as the economic impact of the
21 station. It seems to me that there should be some
22 kind of oversight, or we could end up having -- being
23 forced to have --

24 THE CHAIRPERSON: Yes.

25 MS. LOVE: -- go to a certain place and charge outrageous
26 costs.

1 THE CHAIRPERSON: I understand. And we don't have those
2 answers now, but stay tuned.

3 If you don't mind, if I could ask you a
4 couple of questions, please.

5 MS. LOVE: Of course.

6 THE CHAIRPERSON: You mentioned a plug-in incentive
7 earlier. What were you referring to there?

8 MS. LOVE: So, PluginBC.ca --

9 THE CHAIRPERSON: Right.

10 MS. LOVE: -- has a \$4,000 incentive -- up to \$4,000 to
11 put in a Level 2 charger.

12 THE CHAIRPERSON: Right.

13 MS. LOVE: At your workplace. So it's specifically for a
14 workplace.

15 THE CHAIRPERSON: Okay.

16 MS. LOVE: Or a Level 1, up to \$2,000.

17 THE CHAIRPERSON: And is that what the charger in Trail
18 is a result of? Is that --

19 MS. LOVE: No, Sun Country is the -- it's just down at
20 the pool, the complex.

21 THE CHAIRPERSON: Right, okay.

22 MS. LOVE: No, I was inquiring with my employer if they
23 would consider -- even though I'm only there --

24 THE CHAIRPERSON: Right.

25 MS. LOVE: -- basically, like, I'm in different
26 locations.

1 THE CHAIRPERSON: Right.

2 MS. LOVE: Because of the incentive.

3 THE CHAIRPERSON: Yes, okay. Thank you.

4 MS. LOVE: Yeah.

5 COMMISSIONER HAROWITZ: Can I ask you -- just following
6 up on that. So, I think you mentioned your employer
7 is Coastal -- Interior Health? So, and the question
8 that we're -- the conversation you've had with them is
9 something along the lines of, you know, might they put
10 it one or more, depending on, you know, at the
11 hospital or at a regional health centre or something,
12 and that that's sort of the conversation you've
13 started with them.

14 MS. LOVE: Correct.

15 COMMISSIONER HAROWITZ: Yeah, okay. Thank you.

16 MS. LOVE: Yeah.

17 COMMISSIONER FUNG: Ms. Low --

18 MS. LOVE: It's Love.

19 COMMISSIONER FUNG: Oh, sorry, my apologies. You
20 mentioned the charger in Trail. And is it owned by
21 Sun Country? Or -- and is that a Level 1 or Level 2
22 charger? Do you know?

23 MR. CHEWTER: I can answer that when I come up.

24 COMMISSIONER FUNG: Okay, that's fine. And do you have
25 to pay for it?

26 MS. LOVE: My understanding is for the first two years

1 that -- I don't know when the first two years started,
2 but that while we're in this sort of transitional
3 period that they're at no charge. But that they all
4 have their, you know -- they've got payment methods
5 already built into their systems, they just haven't
6 activated them.

7 COMMISSIONER FUNG: Okay, great. Thank you.

8 THE CHAIRPERSON: Thank you very much, Ms. Love. Thank
9 you.

10 **PRESENTATION BY MR. CHEWTER:**

11 MR. CHEWTER: Hello. So my name is Andrew, last name
12 Chewter, C-H-E-W-T-E-R. And presumably I could still
13 make a written submission?

14 THE CHAIRPERSON: Absolutely.

15 MR. CHEWTER: Yeah, I wanted to come out and see what
16 this venue is like. I haven't been to one before, and
17 I was interested to see --

18 THE CHAIRPERSON: Yes.

19 MR. CHEWTER: -- if it was a bit of a discussion, which
20 it appears to be, or --

21 THE CHAIRPERSON: Yes.

22 MR. CHEWTER: Or what. But --

23 THE CHAIRPERSON: Well, you could make -- as Patrick was
24 saying, you could make a written letter of comment.

25 MR. CHEWTER: Okay.

26 THE CHAIRPERSON: And submit it, and we would consider

1 that when we write the report.

2 If you wanted to become more active in the
3 proceeding, and if you wanted to, let's say, look at
4 some of the evidence that's filed by interveners, and
5 ask them questions about it, and if you wanted to file
6 evidence yourself that other people may ask you
7 questions about, you could register as an intervener.

8 MR. CHEWTER: Okay.

9 THE CHAIRPERSON: So I'll leave that with you. But you
10 can certainly file something, yes.

11 MR. CHEWTER: Yeah, okay. So, for context, I've owned an
12 electric car now for just shy of four years in the
13 Kootenays here, and I've driven 150,000 kilometres,
14 largely all of that in the Kootenays. I have made a
15 few trips out to the West Coast, out to Vancouver, and
16 Sechelt, and on to the island.

17 THE CHAIRPERSON: Mm-hmm.

18 MR. CHEWTER: So I have -- I've been driving them for a
19 while, and I think I've got a pretty decent
20 understanding of some of the limitations and charging
21 networks and maybe rate structure, to some extent.

22 THE CHAIRPERSON: Yes.

23 MR. CHEWTER: Going back to your question, Anna, just
24 briefly, the charger in Trail was actually paid for by
25 Tesla.

26 COMMISSIONER FUNG: Oh.

1 MR. CHEWTER: And they installed the Sun Country Highway
2 unit as well. It's part of their destination charging
3 system. And it's owned by the actual City of Trail.
4 And they did have to get it -- I helped them get it
5 warrantied when the first Sun Country Highway unit
6 broke. So it is owned by the City of Trail.

7 There is no fee to use it. It's just the
8 cost of paying for parking in the station. The two-
9 year program Heather was regarding is to do with the
10 Accelerated Kootenays project, which will be -- that
11 was -- that's kind of their catchline for the Level 2
12 and Level 3 chargers they're installing throughout the
13 Kootenays.

14 But to my surprise, as it turned out with
15 the Castlegar charger when they turned on the fast
16 charger here, it wasn't free for the first two years.
17 So that's kind of what sparked my interest in this
18 Commission in the first place, was Fortis's
19 application being approved to be able to charge for
20 usage right off the bat, because our understanding was
21 that it was going to be free for the first two years.
22 But -- that's kind of a different topic, perhaps.
23 Sorry.

24 COMMISSIONER FUNG: Sorry to interrupt, but --

25 MR. CHEWTER: Mm-hmm.

26 COMMISSIONER FUNG: -- the Sun Country charger, is that

1 Level 2 or Level 3?

2 MR. CHEWTER: It's a Level 2 charger.

3 COMMISSIONER FUNG: It's Level 2. Okay, thanks.

4 MR. CHEWTER: Yeah.

5 THE CHAIRPERSON: And you say it was Tesla-installed? So

6 is it a Tesla charger? Obviously it's not for Teslas

7 only?

8 MR. CHEWTER: That's -- yeah, Tesla has two programs.

9 THE CHAIRPERSON: Yes.

10 MR. CHEWTER: They have the supercharger program where

11 they've installed some in B.C., in Hope, Golden,

12 Kamloops, and so on.

13 THE CHAIRPERSON: Yes.

14 MR. CHEWTER: They also do destination chargers. So,

15 local municipalities, hotels, those types of people,

16 can actually just, with an application process to

17 Tesla and Tesla will provide a Tesla dedicated unit.

18 And usually if you ask for a public-style Level 2

19 charger as well.

20 THE CHAIRPERSON: Right.

21 MR. CHEWTER: And so that's where that one came from.

22 THE CHAIRPERSON: Right, thank you.

23 COMMISSIONER FUNG: So you don't have to own a Tesla in

24 order to use it. Okay.

25 MR. CHEWTER: No. Yeah.

26 COMMISSIONER FUNG: Thank you.

1 MR. CHEWTER: I'll probably come up here a few times as I
2 think of things throughout the evening.

3 THE CHAIRPERSON: That's okay.

4 MR. CHEWTER: But I wanted to start with the kind of the
5 question of regulation or not.

6 I guess for me, after reading some of the
7 material I've read on line and then seeing the brief
8 presentation tonight, I'm still not entirely sure of
9 what the scope of regulation would entail. Just based
10 on what you were speaking earlier, Patrick, it's
11 broader than I thought it was. I thought it was
12 perhaps only to do with, say, if we were going to
13 charge for electricity and it would be regulated in
14 terms of the rate structure. But it sounds like it's
15 beyond that to even perhaps safety of installations,
16 where they have to be UL listed or something to that
17 effect.

18 So I'd only really thought about it so far
19 in terms of rate structure. But I guess I'm coming at
20 it from a different angle of how to -- how can we as a
21 society bring electric vehicles into the mainstream.
22 And so what I'm thinking of is really through that
23 lens for every kind of thing I look at.

24 And the regulation thing, to some extent, I
25 think makes a lot of sense in that it is kind of a
26 captive audience at the moment. Particularly for the

1 Level 3 charging situation, there is, as you noted
2 earlier, approximately 30 units in B.C. So far
3 there's only been one provider; now we're up to two
4 providers, I guess, with Fortis getting into the mix.

5 And with the capital costs involved in the
6 station installation of approximately 100,000 per
7 unit, and the kind of paucity of actual EVs in B.C.,
8 of sufficient density to support a viable network for
9 an independent company, I think for -- maybe there's
10 going to need to be some sort of hybrid transition
11 period over the next decade, where it starts as some
12 sort of a regulated entity with some view in the
13 longer range to divesting it to independent companies
14 that are competitive with each other.

15 There are some other jurisdictions in the
16 world that seem to have some more of an open model.
17 In the Netherlands, there's a company named Fastned,
18 F-A-S-T-N-E-D, that's been installing a private
19 network across the Netherlands. And I believe they're
20 actually going into other countries right now as well.

21 Whereas, you know, some places have stuck
22 with solely utility-owned fast charging, and which is
23 I believe where we are at the moment.

24 I guess coming into the whole rate
25 structure question and going back to the fact that
26 there is such a limited amount of electric vehicles in

1 B.C. right now, Fortis in their application put in
2 what seeming -- you know, I haven't read it in as much
3 detail as I would like, but seemingly plausible
4 numbers in terms of operation and maintenance costs
5 for the units. But that's predicated on the basis of
6 pretty limited usage, and only having one charging
7 station at a location.

8 **Proceeding Time 6:34 p.m. T04**

9 So in Castlegar, for example, there's only
10 one outlet; Salmo, there's only one outlet. If you
11 look at other jurisdictions where are EVs have been
12 adopted more widely and you're say maybe five percent
13 adoption rate or higher, like in Norway, it's pretty
14 common that all of the charging stations are installed
15 in groups, like in multiples. You don't see ever one
16 unit installed in one location.

17 So Fortis might be saying that they need to
18 charge I think I was -- it's \$18 a hour it worked out
19 to in the end to be able to kind of break even with
20 their operating and maintenance costs, but I think
21 that's looking at things through the lens of just this
22 one real slice in time. And when we get to the point
23 three or five years down the road where there's, you
24 know, multiple digit adoption, percentage adoption of
25 EVs in B.C. and we've got four or six charging points
26 at each station, that calculation they used is going

1 to be probably way overblown. And we'll get more to
2 that kind of longer term rate that BC Hydro calculated
3 a few years ago of around 35 cents per kilowatt hours,
4 perhaps even less than that.

5 So I don't know if this is within the
6 BCUC's purview or not, but what I would like to see is
7 support from the government to basically make it
8 feasible for the -- whether it be Fortis or BC Hydro,
9 or some other utility type company that wants to
10 install these units, to have some sort of subsidy to
11 make it viable for the installation of these units and
12 operating these units while we're kind of in this
13 chicken and egg situation for the next three to five,
14 maybe ten years.

15 I think it's changing fast, but sometimes
16 it feels like not fast enough for me, having owned one
17 for four years, I'd like to see the charging network
18 being deployed faster. But nonetheless, until we get
19 out of that chicken and egg situation I think in order
20 for there to be support from users at the stations I
21 don't think \$18 an hour is going to be a feasible
22 number for most people. It's really going to scare
23 people away.

24 And when you look at the cost of filling up
25 my Nissan Leaf compared to a gas car we're talking --
26 it's kind of in the range of roughly driving on

1 gasoline or even more expensive depending on what kind
2 of state of charge I arrive at the charger with and
3 how long I stay plugged in. And that's not
4 necessarily a bad thing perhaps, but a lot of people
5 are adopting EVs right now on the predication that
6 they're going to be spending less on their operating
7 and maintenance costs. And when you charge at home
8 that's certainly the case, your operating cost are
9 quite low, but as soon as you start fast charging at a
10 location like this new Fortis location in Castlegar,
11 you're quickly eliminating all of the operations
12 savings. And you need to have those operation savings
13 in order to drive the adopting of electric vehicles at
14 this point in time because the capital cost of an
15 electric vehicle is still substantially higher than a
16 gasoline car.

17 So when you're looking at it from total
18 ownership cost you need to be able to have that cost
19 savings to drive people to actually purchase them.
20 And that's what drove my calculation when I purchased
21 the car four years ago. Aside from the obvious
22 environmental benefits, I also looked at it from a
23 cost perspective. And if I had to use those rates
24 every day, the cost argument would go right out the
25 window.

26 So that's kind of how I feel about the fast

1 charging rate structure side of things. There's also
2 kind of two pieces I think in that there's the fast
3 charging side of things and then there's the Level 2
4 side of things. So the Level 2, as was pointed out in
5 the slide there, there's several thousand of those
6 units in B.C. already. And I don't -- I'm not
7 entirely convinced that those should be regulated,
8 because they are -- when people stop to fill up there
9 they're only putting in maybe -- depending on how long
10 they stay at the venue, maybe five to ten kilowatt
11 hours, which at current utility rates of -- because
12 they're not incurring demand charges, of course, at
13 only -- when they only have a power supply of about
14 six kilowatts.

15 So if you look at just the retail cost of
16 electricity of say average ten cents per kilowatt
17 hour, it's really, we're only talking 50 cents to a
18 dollar of energy consumption when they charge at these
19 locations. It's just not feasible for people to be
20 operating a point of sale system when they're only
21 going to be charging perhaps a dollar or two for the
22 purchase of that electricity. Rossland ran into this
23 problem where they had -- they'd been paying five or
24 six hundred dollars a year in subscription fees just
25 to stay on the network for their ChargePoint charger
26 and they aren't -- they can't recoup any costs from it

1 right now. It's just now -- it's just kind of not
2 really worth it. There needs to be an alternative
3 method of charging for electricity.

4 Right now, if they were to be allowed to
5 charge for electricity, you have to be at of a
6 municipality or a utility, and you need to have a
7 revenue grade meter, which I think is probably
8 overkill for the situation we're talking about of only
9 five to ten kilowatt hours being dispensed. I don't
10 understand why a revenue grade meter would be needed
11 in that case. A lot of the charging EVSE, the
12 electrical vehicle supply equipment manufacturers,
13 now, like FLO for example, have a meter built into the
14 unit. It might not perhaps satisfy -- I think its
15 weight's in Canada, whatever the --

16 THE CHAIRPERSON: Measurement Canada?

17 MR. CHEWTER: Yeah, Measurement Canada, whatever their
18 criteria is for revenue grade meter. But it's more
19 than accurate enough for the purposes of me, the
20 consumer, who's purchasing 50 or -- 50 cents of
21 electricity or a dollar perhaps. I don't -- we don't
22 need to know down to the fourth decimal place kilowatt
23 hour, right? But that's a barrier right now to them
24 being able to charge for electricity, having to
25 install a revenue grade meter.

26 We've run into the same thing -- I live in

1 a strata, and the strata can't legally charge me for
2 electricity either, but we need some reasonable way of
3 me reimbursing the strata, so we've got an arrangement
4 there where we do that.

5 So I think we do need kind of two tiers.
6 We need some sort of a reasonable structure for Level
7 2 charging stations, whether they be at your
8 workplace, or in a strata, or just say the Starbucks
9 wants to offer a charger, for example. Some of them
10 will do it for free, as a kind of a lost litre kind of
11 thing, just get people in the door. Other ones might
12 want to recoup just their basic cost of providing the
13 service and I don't think we should put artificial
14 barriers in for that.

15 And then, you know, Heather was talking
16 about workplace charging. So my workplace recently
17 has decided they're going to look at installing some
18 Level 2 units as well because of this recent Plug In
19 BC offering that's come along in terms of rebates for
20 the charger installation. But one of the fundamental
21 questions they're facing as well is, well, what do we
22 do for our employees? We can't legally charge them
23 for electricity at this point in time, but we can't
24 really just give it away for free either, because
25 we've got all these other employees who you don't give
26 free gas to. So, it's a bit of a conundrum for them

1 as well. So they -- you know, it would be nice for
2 them to be able to have a relatively easy solution
3 they can work through as well.

4 I think that's kind of it for my random
5 thought stream at the moment.

6 THE CHAIRPERSON: Thank you, those are very thoughtful.
7 I do have a question.

8 MR. CHEWTER: Yes.

9 THE CHAIRPERSON: I think you said you've driven a 150 --
10 roughly 150,000 miles in the last four years and you
11 mentioned that you've driven to the coast, over the
12 island, Sunshine Coast.

13 MR. CHEWTER: Yeah.

14 THE CHAIRPERSON: And it's a Nissan Leaf, correct?

15 MR. CHEWTER: It is, yeah.

16 THE CHAIRPERSON: So I wonder if you could just tell us a
17 little bit about how you do the long-distance trips?

18 MR. CHEWTER: Yeah.

19 THE CHAIRPERSON: Yeah.

20 MR. CHEWTER: Well, it's evolved quite a bit from the
21 first time I did it. The first time I flew out to
22 Vancouver to purchase the car and on my way home the
23 Level 2 charging network only extended as far as I
24 think it was Osoyoos. So I would drive -- and I
25 couldn't make it up through Manning park either. So I
26 had to go to Hope and charge up at the Level 2

1 charger; drive up the Coquihalla rather slowly to get
2 to Merritt in one charge and charged up there
3 overnight. And then kind of dipped back down to
4 Princeton and then over to Osoyoos. And that was day
5 two. And then on day three I went to a campground in
6 Grand Forks, I think it was, and I charged up
7 overnight on Level 1, because that was all they had.
8 So it took me three days to get the car home in May of
9 2014.

10 THE CHAIRPERSON: How long was the charge in Hope?

11 MR. CHEWTER: The charge in Hope was three hours to get
12 it right to full.

13 THE CHAIRPERSON: Three hours, yeah. That basically was
14 what you'd use getting from Vancouver to Hope, then?

15 MR. CHEWTER: Yeah. Well, no, I stopped in Abbotsford as
16 well.

17 THE CHAIRPERSON: Okay, all right.

18 MR. CHEWTER: Yeah. I also stopped in Surrey because I
19 wanted to try the fast charger. I think the Surrey
20 one was number five in the province or something and I
21 wanted to just test out this fast charging, "What's
22 this about?" So I did -- the most recent trip I did
23 to Vancouver was last May. And that was before the
24 fast charging network was installed here in the
25 Kootenays, but --

26 COMMISSIONER HAROWITZ: Same vehicle?

1 MR. CHEWTER: Same vehicle, yeah.

2 COMMISSIONER HAROWITZ: Okay.

3 MR. CHEWTER: And so I took one -- I left work I think
4 one afternoon and made it as far as Rock Creek. And
5 then the next morning I got up and I drove the rest of
6 the way to Vancouver on the fast charging network, so
7 I made six or seven stops that day. And I did pay 35
8 cents a kilowatt hour at a few of the chargers and
9 that made my gas equivalent to about 80 percent of
10 driving a Prius, which for me was reasonable. I was
11 happy to pay 35 cents a kilowatt hour to drive my
12 electric car to Vancouver, even with the added
13 convenience because the cost at that point wasn't
14 astronomical compared to home charging. It was still
15 cheaper than driving even the most efficient gas car.
16 And that for me is really what it's all about, is I
17 want to drive electric as much as possible, but I
18 don't want to go broke doing it.

19 THE CHAIRPERSON: Sure. But even then there was some of
20 the fast chargers charging stations didn't charge, is
21 that correct? Or didn't --

22 MR. CHEWTER: There were some that were free.

23 THE CHAIRPERSON: -- collect any money from you I think,
24 yeah.

25 MR. CHEWTER: Yeah. And my understanding is that that's
26 the municipality is basically providing the service

1 free of charge.

2 THE CHAIRPERSON: Yeah. Okay.

3 COMMISSIONER FUNG: Could I just ask you, as a seasoned
4 electric vehicle owner, has it been your experience
5 that you've come across stations where, you know, the
6 machine doesn't work or --

7 MR. CHEWTER: Oh, yes.

8 COMMISSIONER FUNG: -- you know, there's -- somebody's
9 already occupying it --

10 MR. CHEWTER: Yeah, both.

11 COMMISSIONER FUNG: -- and you have no idea whether
12 they're going to be moving any time soon.

13 MR. CHEWTER: Yeah, if this were the purview of the BCUC,
14 I would like to see it mandated that they install a
15 minimum of two fast chargers per station and that
16 there be a Level 2 backup available as well. The
17 reason being for that, I have never been to a gas
18 station with one pump. If that -- it's a single point
19 of failure, it's a ridiculous way to install critical
20 infrastructure anywhere. And that was -- I went -- I
21 was invited by Plug In BC to a, kind of a -- I don't
22 know what to call it necessarily, an information
23 gathering session I suppose, in June of 2015 when they
24 were kind of planning out the Phase 2 deployment for
25 the fast charging network in B.C.

26 And that was my biggest point was that we

1 really should not be installing single point of
2 failure, because we then -- and I've had this
3 experience, you show up to a charger, nobody's used it
4 in three months because we're in early days, there's
5 not a lot of people going around. The charger doesn't
6 work and now I need to take my family and go find
7 something else to do for three hours. You know,
8 thankfully I've got kids who are pretty imaginative,
9 so that was better than it could've been. But I'm
10 frustrated because I had planned it out that I was
11 only going to be here 20 minutes and now all of a
12 sudden it's three hours and I had to go find a Level 2
13 charging stations somewhere else.

14 I've also showed up and there's been other
15 ppeople in a line up. Which is kind of cool because
16 that means there's more people charging, but when I
17 want to carry on my way, now I've got to wait around
18 for three cars to charge in front of me at Chilliwack.
19 So I think there should be a minimum of two per
20 location if that were something that the BCUC was able
21 to control if it were to be a regulated -- I don't know
22 what to call it -- entity, project, whatever.

23 THE CHAIRPERSON: Industry, yeah.

24 MR. CHEWTER: Industry, yeah.

25 THE CHAIRPERSON: So currently what's the state of the
26 fast charging stations that you encounter in B.C. now?

1 Are they single chargers? Or --

2 MR. CHEWTER: They're all single chargers.

3 THE CHAIRPERSON: All of them.

4 MR. CHEWTER: Every single one of them, yeah.

5 THE CHAIRPERSON: There's --

6 MR. CHEWTER: I'm not aware of one that's two, except for

7 all the Tesla ones, if you'll notice.

8 COMMISSIONER FUNG: Yes.

9 MR. CHEWTER: Always deployed in multiples. And I mean

10 to me it just makes sense. You're talking about a

11 unit that might have some sort of a glitch or needs

12 preventative maintenance to change the air filters or

13 whatever, and now the unit is offline for a minimum of

14 a day, up to a week or two weeks, or in the case of

15 Revelstoke, three months to get parts.

16 THE CHAIRPERSON: Right.

17 MR. CHEWTER: So if you have a second one, I mean the

18 odds of them both going out at the same time, some

19 statistician somewhere could tell me what are, but

20 they're pretty low compared to just having one of them

21 go out. So there should be -- I feel strongly there

22 should be a minimum of two at every location.

23 THE CHAIRPERSON: Right.

24 COMMISSIONER FUNG: Thank you.

25 COMMISSIONER HAROWITZ: Thank you, very much.

26 MR. CHEWTER: Thank you.

1 THE CHAIRPERSON: Thank you, sir.

2 Any other electric vehicle owners like to
3 share their thoughts with us?

4 **Proceeding Time 6:48 p.m. T5**

5 **PRESENTATION BY MR. DREW:**

6 MR. DREW: Okay, name is Steve Drew, D-R-E-W. It's a
7 common problem when there are people standing, looking
8 at the mike or -- to the mike and other people
9 hearing. I find usually I can't hear. So I hope
10 people talk into the mike, including you, and make
11 darn sure that the rest can hear.

12 THE CHAIRPERSON: Sure. You were having trouble hearing
13 everybody?

14 MR. DREW: Yes.

15 THE CHAIRPERSON: Sorry about that.

16 MR. DREW: This just came -- occurred when I heard you
17 starting up and it's about the word "regulation".
18 That got my ears perked up. That, sometimes, is not
19 necessary. But what came to mind -- and if you can't
20 hear me, go like this. Okay?

21 What came to mind was a gas station, a gas
22 pump, and the Measurement Branch measures the pump,
23 but nobody tells the seller how much to sell the
24 gasoline for. And it seemed to work fairly well in
25 the last 80 years or so. And so I'm just wondering
26 about regulation. How about making sure the charging

1 meters and everything have their measured sticker on
2 them, but otherwise you can charge five cents a
3 kilowatt hour, or 55 cents a kilowatt hour.

4 Another example is, there used to be lots
5 and lots of pay telephones, and there were places where
6 there were two, three, four pay telephones, probably
7 relative to the demand. And I think it would have
8 some connection to here when he says, you know, you've
9 got to have at least two, which sounds very common
10 sense. So when you pull into a gas station and there
11 was one pump and the line up is three blocks long,
12 that's not very logical, I don't think.

13 So it was just those two things. They sell
14 gas without getting involved in regulating it. They
15 just make sure the pumps work. And the telephones,
16 the pay telephone. The owner of where the electricity
17 came from got so much a month which was, let's say,
18 \$25 a month or something for the pay telephone. So
19 that's another way to think of it.

20 But it's interesting. So please, carry on.

21 THE CHAIRPERSON: Thank you, sir. Thank you.

22 Please.

23 MS. LOVE: Do I need to say my name over again?

24 THE CHAIRPERSON: No, it's fine. Thank you.

25 MS. LOVE: I didn't give the background. So I've owned
26 my EV for now, 48 hours. So I am the opposite of

1 Andrew. But it's the uncertainty that is most, you
2 know, alarming. And I realized that purchasing the
3 vehicle. But there's got to be some system, whether
4 it's the employer, which I'm probably months away from
5 having that looked at, but how do we have a system to
6 communicate with whoever is in the stall to know if
7 they're -- like there's got to be a meter or something
8 that tells us that they are at so much charge, to give
9 us a clue as to whether we should be waiting to have
10 our turn in a line, or give it up, or we'd be wasting
11 a lot of our time.

12 So to me, I don't know if that's something
13 that can be added to the network requests, but right
14 now it's just -- well, I went to Trail thinking I
15 could charge because my employer recommended it.
16 Somebody is the charging unit. There's only one.
17 Multiples would have been nice, but apparently there's
18 four or five other people that would be probably
19 waiting too. But if I knew, oh, okay, they're going
20 to be here for another ten minutes. But how do we
21 control them? Like maybe they've forgotten the time
22 and just -- then maybe they could be fined for being
23 in there for too long.

24 THE CHAIRPERSON: Yeah. We have heard that very
25 concern, and it's people that leave their cars and
26 don't come back for far longer than it takes to charge

1 their car, and we have heard that concern before. And
2 I don't know what the solution is, but it certainly --
3 it's a very good question.

4 MS. LOVE: Well, I think it could be metered.

5 THE CHAIRPERSON: Metered by time.

6 MS. LOVE: By time.

7 THE CHAIRPERSON: Yes.

8 MS. LOVE: Just like you would with a -- you know, you
9 go to park in a regular meter.

10 THE CHAIRPERSON: Yes. It would have to be much more
11 than the parking rate, though. Or else there would
12 be no --

13 MS. LOVE: No incentive.

14 THE CHAIRPERSON: Yes. I'm sorry that you're having so
15 much trouble getting charging after 48 hours.

16 MS. LOVE: Well, the irony of all this is that with such
17 a small extender engine, I'll be at the gas station
18 every day. Well, twice a week actually, because some
19 of my trips I can go within my range.

20 THE CHAIRPERSON: Yes. What is your range?

21 MS. LOVE: It's 100 to 110 kilometres on electricity, if
22 I drive with no air conditioning, and no heat and no
23 radio, and no defrost. So I flip it on and off so
24 that I can get my maximum --

25 THE CHAIRPERSON: And what does your gasoline extender,
26 what does that --

1 MS. LOVE: A hundred.

2 THE CHAIRPERSON: That gives you another hundred?

3 MS. LOVE: Mm-hmm.

4 COMMISSIONER FUNG: Do you charge at home?

5 MS. LOVE: Mm-hmm, I do.

6 COMMISSIONER FUNG: And what do you have? Level 1?

7 MS. LOVE: I have a level 1 and it takes 14 hours.

8 COMMISSIONER FUNG: Right.

9 MS. LOVE: So I will not have a full charge to go to
10 work tomorrow.

11 COMMISSIONER FUNG: And do you have a Level 2?

12 MS. LOVE: Not yet, but I will be purchasing it, yeah.

13 THE CHAIRPERSON: Did you realize this issue before you
14 purchased the car? This is --

15 MS. LOVE: Oh, yeah.

16 THE CHAIRPERSON: Or you've learned this in the last 48
17 hours?

18 MS. LOVE; No, no. Well, I'm learning about what the
19 connections are and I didn't realize Castlegar didn't
20 have a Level 2. So yeah, no, I'm learning as I go,
21 but I accept that, because I had -- the other
22 background that might be of use is that I took my job
23 in Trail on the premise that I would do it in an
24 ecological way. So for the first three years -- I've
25 been working there since 2014 -- the business plan was
26 set up that I would take transit. That transit takes

1 me over four hours round trip to go from -- and I have
2 long waits between when my shift ends and when I --

3 THE CHAIRPERSON: Yeah.

4 MS. LOVE: So after -- I just got exhausted. It was way
5 too tiring to spend that much amount of my time, the
6 whole family is starving waiting for me to come home,
7 and I just decided no, I needed an electric car,
8 because that's the only other option for me.

9 And I've gotten into this on a used
10 electric vehicle which is four years old. Same year
11 as Andrews, a different vehicle. So I came into it
12 knowing that there would be some experimenting.
13 Because there are electric vehicles out there with way
14 higher ranges, but they are not affordable for the
15 average person.

16 THE CHAIRPERSON: Does your vehicle take a fast charge?

17 MS. LOVE: I believe it does, yes.

18 THE CHAIRPERSON: Can you stop -- there's a fast charger
19 here in Castlegar, isn't there?

20 MS. LOVE: Yeah, but I just don't have the -- I need the
21 proper cord. I don't have that yet.

22 (COMMENT OFF THE MICROPHONE - INAUDIBLE)

23 THE CHAIRPERSON: Okay. Sounds like an interesting
24 challenge.

25 MS. LOVE: Thank you.

26 THE CHAIRPERSON: Thank you, Ma'am.

1 COMMISSIONER FUNG: Thank you. Good luck.

2 THE CHAIRPERSON: Yes. All right, well, I'd like to
3 thank you all for coming tonight. If anyone has
4 anything further? If not I'll wish you a safe drive
5 home. I hope you make it home. And once again,
6 thank you very much for coming.

7 Oh, wait wait. Yes.

8 MR. CHEWTER: Okay, so it's Andrew back here again. I've
9 got -- I just had one thought come up during this --
10 during the last couple of minutes.

11 So the reason I was talking about the idea
12 of having some sort of a subsidized rate for a few
13 years, or a limit on -- kind of a ceiling on how much
14 they can charge is because we're trying -- I think as
15 a province we need to be increasing adoption of EVs to
16 have any hope of meeting our greenhouse gas reduction
17 targets. And the last thing we want to do is scare
18 people away from sky-high prices to supply the network
19 for just a short period of time for it to cover the
20 operating and maintenance costs for just a small slice
21 of time. I think we need to think bigger than that
22 in B.C. and think longer term, and really encourage
23 people to adopt them. And to have to pay \$18 an hour
24 right now is not going to encourage that.

25 Some of us will -- you know, I'll pay it
26 because I want to make sure it comes along, but

1 there's a lot of people out there, there's a lot of
2 consternation on the social media right now about that
3 price structure, and I don't think it's something we
4 want to keep around, because I think it's going to
5 discourage adoption.

6 And the same thing for having the multiple
7 units at each installation. Because it's almost worse
8 to have the network wider geographically but bail on
9 you, than it is to have a reliable network when you
10 go. Because that first time you go and you run into a
11 failure, it's a big discouragement and you tell all
12 your friends. Nothing travels faster than bad news,
13 as you know.

14 COMMISSIONER HAROWITZ: So the 18, that's what you are
15 saying is the new, the temporary rate for the new
16 Fortis fast charger?

17 MR. CHEWTER: Yeah.

18 COMMISSIONER HAROWITZ: And how long will you typically
19 sit there to get a full charge on your vehicle?

20 MR. CHEWTER: So fast charging doesn't quite work the
21 same way as Level 2 charging. You don't typically
22 ever charge to full on it.

23 COMMISSIONER HAROWITZ: You want 80 percent.

24 MR. CHEWTER: 80-ish. 85. We call the people who sit
25 around, slow rollers, because the car slows right
26 down.

1 So in some sense, the charging by the
2 minutes is good because it incentivizes you to leave.
3 COMMISSIONER HAROWITZ: If you are pretty much down to
4 the lower end of what's left of your --
5 MR. CHEWTER: About half an hour.
6 COMMISSIONER HAROWITZ: Okay, and is the rate pro rated
7 then, so you pay \$9 for the sake of argument, for 30
8 minutes.
9 MR. CHEWTER: Yes. Yeah. Yeah, it charges by the
10 minute. Actually, I think it charges by the second.
11 COMMISSIONER HAROWITZ: Okay.
12 MR. CHEWTER: And to get really technical for a moment,
13 they actually charge you for the first kind of like
14 fifteen seconds for the communication protocol to plug
15 and talk to my car, which irritated me. Because at \$9
16 an hour, fifteen seconds actually is -- I don't know
17 what it worked out to. Like 30 cents or something
18 like that.
19 So they shouldn't be charging me for the
20 privilege of talking to my car to find out how much
21 charge it's going to accept.
22 COMMISSIONER HAROWITZ: Okay. So about \$9 and then
23 you're saying that that would get you about what kind
24 of mileage?
25 MR. CHEWTER: About a hundred kilometres. So if you
26 think about a gas car, that's -- I mean a Prius will

1 do a hundred kilometres with about five litres of
2 gasoline typically. Gas prices are, call it \$1.25
3 right now. So what does that work out to? \$6.25 or
4 something. So now all of a sudden my car, which on an
5 efficiency basis is two-and-a-half times more
6 efficient than a Prius in terms of actual energy
7 consumed to move it down the road, including losses
8 from charging from the wall, now all of a sudden costs
9 me one-and-a-half times as much to fill up, which is
10 not really a great paradyne.

11 COMMISSIONER HAROWITZ: But correct me, if I just do
12 some mental math, compared to say a normal gas
13 consumer --

14 THE CHAIRPERSON: An ICE car.

15 COMMISSIONER HAROWITZ: Yes. What we learned, the term
16 "ICE".

17 MR. CHEWTER: Yeah, yeah, ICE.

18 COMMISSIONER HAROWITZ: So if you said, say, ten litres
19 per hundred kilometres at \$1.50 just rough math, so
20 \$15.

21 MR. CHEWTER: Yeah.

22 COMMISSIONER HAROWITZ: So you know, you're sitting
23 below, but --

24 MR. CHEWTER: Yeah. I think my car is more comparable to
25 like a Sentra, or maybe a Focus or something, which is
26 about seven and a half litres per hundred K.

1 COMMISSIONER HAROWITZ: Okay. So --

2 MR. CHEWTER: On my blog I've actually got -- I've done
3 all the cost comparisons.

4 COMMISSIONER HAROWITZ: I was just trying to do simple
5 mental math.

6 MR. CHEWTER: No, you're right. yeah.

7 COMMISSIONER HAROWITZ: So I picked ten.

8 MR. CHEWTER: Yeah, yeah. Depending on which car you
9 pick. Yeah, it's different. Yeah.

10 COMMISSIONER HAROWITZ: So you're coming out a little
11 ahead of an ICE vehicle but not significantly so.

12 MR. CHEWTER: Yeah.

13 COMMISSIONER HAROWITZ: Thank you.

14 MR. CHEWTER: And that's assuming that I am able to plug
15 in at a low state of charge and charge it up to 80
16 percent. If I'm -- so actually it's interesting. The
17 situation I'm in now, there's not a fast charger in
18 Nelson, there's not a fast charger in Trail. The only
19 place there is one is Castlegar. For me, when I get
20 to Castlegar on my way home, I'm at 75 percent state
21 of charge. If I need to charge up to go do some
22 running around in the evening and I wanted to top up
23 here, it's going to cost me an astronomical amount.
24 Like \$2 per kilowatt hour because it charges so much
25 slower at the top end of the battery.

26 THE CHAIRPERSON: You live in Nelson and work in Trail,

1 also?

2 MR. CHEWTER: I do.

3 THE CHAIRPERSON: So the fast chargers have only been
4 around here in this area --

5 MR. CHEWTER: Two months.

6 THE CHAIRPERSON: -- in Castlegar two months. So you
7 have a car with a similar range to Ms. Love?

8 MR. CHEWTER: I do.

9 THE CHAIRPERSON: Yeah, and so you've had the problems
10 that she's been describing.

11 MR. CHEWTER: Oh, absolutely. There's been some nights I
12 didn't go home. Yeah. And that's -- you know, my
13 employer was kind enough to let me use the wall outlet
14 for a while, but after some -- batteries degrade over
15 a certain amount of usage and time, so after two or
16 three winters I wasn't able to use that and still be
17 able to get home in the evenings.

18 THE CHAIRPERSON: Right.

19 MR. CHEWTER: So I've been relying on the single point
20 in Trail now for the last year and a half, I would
21 say, solid. So it's to the point where I'm
22 considering, if my workplace won't install one, I'm
23 going to consider purchasing a different car that can
24 do the round trip. Because the deployment of chargers
25 hasn't been fast enough for the demand. We've got
26 five people now to use that charger on an almost daily

1 basis.

2 **Proceeding Time 7:03 p.m. T6**

3 So, you know, we're trying to juggle as
4 best we can. I move out of there, somebody else moves
5 in, the next person lines up, they plug it into the
6 next person.

7 THE CHAIRPERSON: Yes.

8 MR. CHEWTER: But that capacity is pretty much full --
9 filled up. So --

10 THE CHAIRPERSON: Right. Okay. Thank you.

11 MR. CHEWTER: Okay.

12 THE CHAIRPERSON: Thank you, sir.

13 MR. CHEWTER: Yes.

14 COMMISSIONER FUNG: Could I just ask a follow-up
15 question? Sir, have you prepared to pay \$9 for a full
16 charge, meaning 80 percent.

17 MR. CHEWTER: Mm-hmm.

18 COMMISSIONER FUNG: When you were determining your
19 business case for buying an electric vehicle, what was
20 your assumption about how much you would pay or how
21 much you would save, in terms of electricity costs?

22 MR. CHEWTER: Yeah. I based that on ten cents per
23 kilowatt hour.

24 COMMISSIONER FUNG: Okay.

25 MR. CHEWTER: Also including some -- assuming that I was
26 going to be able to -- I made an erroneous assumption

1 four years ago that a car with a stated range of 160
2 kilometres would actually be able to do a 150-
3 kilometer round trip. Well, that turned out to be not
4 the case, but that's pretty much the same with gas
5 mileage ratings too, so --

6 THE CHAIRPERSON: Mm-hmm.

7 MR. CHEWTER: So I based all my initial assumptions on
8 home charging, which is around 10 cents per kilowatt
9 hour.

10 COMMISSIONER FUNG: Yes.

11 MR. CHEWTER: And maintenance savings on the car, versus
12 an equivalent ICE car, which was then about 7 and a
13 half liters per 100 kilometres, with gas at \$1.35.
14 Well, it turns out I was wrong there too, gas has gone
15 down.

16 COMMISSIONER FUNG: Yes.

17 MR. CHEWTER: But on an operating costs I have broken
18 even, as of about six months ago. So -- or not
19 operating costs, sorry, total cost. Total cash outlay
20 versus, say, buying another -- a gas car versus an
21 electric car.

22 Now, if I had to add in the \$9 charge every
23 day, that would be right out the window. I wouldn't
24 break even for, like, another four or five years
25 probably.

26 THE CHAIRPERSON: Mm-hmm.

1 COMMISSIONER FUNG: Okay, thank you.

2 MR. CHEWTER: Yes.

3 THE CHAIRPERSON: Thank you, sir.

4 [inaudible]

5 THE CHAIRPERSON: Please, yes. Please.

6 **PRESENTATION BY MR. PROSSER:**

7 MR. PROSSER: My name is Larry Prosser. I live between
8 here and Nelson. I have a Leaf also.

9 THE CHAIRPERSON: Mm-hmm.

10 MR. PROSSER: And my experience has been, I rarely go to
11 a recharging station, because 95 percent of my commute
12 is Nelson/Castlegar.

13 THE CHAIRPERSON: Right.

14 MR. PROSSER: And I think when the next generation of
15 electric cars come out, which I have my eye on one,
16 most people will never use charging stations, they'll
17 always charge at home.

18 THE CHAIRPERSON: Yes.

19 MR. PROSSER: And so, because I charge at home, another
20 step I did is I put in solar panels at my house. So I
21 have 48 solar panels which more than produce more
22 power than my car could ever use.

23 COMMISSIONER HAROWITZ: So just for clarity, so you're a
24 net metering customer?

25 MR. PROSSER: I am.

26 COMMISSIONER HAROWITZ: Okay.

1 MR. PROSSER: And so far that's been working great for
2 me, because I leave home, I drive all day, come home,
3 plug in, and never have to use chargers, fast
4 chargers. But I do -- there's a Level 2 charger there
5 and I just have some time, I'll pull in and charge up
6 a bit, because why not, but -- and I'm thinking my
7 next car will take me from here -- hopefully from here
8 to Kelowna without having to make stops. So -- and I
9 think as more advanced electric cars come out,
10 chargers -- it's not like gas stations where you're
11 always pulling in, so --

12 THE CHAIRPERSON: So with a gas-powered car you can't do
13 any -- any charging at home at all. You have to
14 purchase all of your fuel.

15 MR. PROSSER: That's right. Yeah, all my charging is --

16 COMMISSIONER HAROWITZ: Unless you syphon out of your
17 neighbour's gas tank.

18 THE CHAIRPERSON: Exactly.

19 MR. PROSSER: Yeah, so --

20 COMMISSIONER FUNG: So, Mr. Prosser, what kind of car do
21 you currently drive?

22 MR. PROSSER: I have a Leaf.

23 COMMISSIONER FUNG: Okay.

24 MR. PROSSER: It's four years old, and I've got -- put on
25 40,000 clicks on it so far, and still I love it. It's
26 -- I even talked my daughter into buying a Leaf.

1 THE CHAIRPERSON: But most of your driving is local,
2 though, is it?

3 MR. PROSSER: Yeah. My round trip -- most days, at most
4 I'll do about 100 kilometres.

5 THE CHAIRPERSON: Right.

6 MR. PROSSER: And I get home, I'm down to about 30, 40
7 percent.

8 THE CHAIRPERSON: Right.

9 MR. PROSSER: Just pull in, just plug it in.

10 THE CHAIRPERSON: Yeah. So, do you ever drive, you know,
11 say to Kelowna or to Vancouver?

12 MR. PROSSER: Well, one day my plan was to take a trip to
13 Kelowna.

14 THE CHAIRPERSON: Yes.

15 MR. PROSSER: I started off in the Leaf. I was really
16 looking forward to this. I had it all planned, and
17 supplied me with a spreadsheet telling me how long I'd
18 have to stop.

19 THE CHAIRPERSON: Right.

20 MR. PROSSER: And my first stop was in Castlegar.

21 THE CHAIRPERSON: Yes.

22 MR. PROSSER: So I went, like, 20 minutes from home.

23 THE CHAIRPERSON: Yes.

24 MR. PROSSER: And I got to the charger, it wasn't
25 working.

26 THE CHAIRPERSON: Yes.

1 MR. PROSSER: So I turned around and went home and got my
2 Honda Element and did the drive in the gas car.

3 THE CHAIRPERSON: Oh, yes.

4 COMMISSIONER FUNG: Hmm.

5 MR. PROSSER: So that's why having the single charger is
6 a big problem.

7 THE CHAIRPERSON: Yes. Yes.

8 MR. PROSSER: Because electric vehicles, they talk about
9 range anxiety. But now it's becoming charger anxiety,
10 because you're worrying about --

11 THE CHAIRPERSON: Yes.

12 MR. PROSSER: If you're going to be able to charge, eh?

13 THE CHAIRPERSON: Yes, okay.

14 MR. PROSSER: So.

15 COMMISSIONER HAROWITZ: Thank you, sir.

16 COMMISSIONER FUNG: Yes, thanks for sharing.

17 THE CHAIRPERSON: Thank you very much, sir.

18 All right. Well, once again, thank you
19 very much for your comments. Very helpful for us.
20 And if there's anything you want to add to that,
21 you're welcome to provide the -- you can just send an
22 e-mail to the Commission Secretary, and we'll post any
23 further comments that you have.

24 So thanks very much for coming out, and
25 have a safe trip home. Thanks.

26 **(PROCEEDINGS ADJOURNED AT 7:09 P.M.)**

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I HEREBY CERTIFY THAT THE FORGOING
is a true and accurate transcript
of the proceedings herein, to the
best of my skill and ability.



A.B. Lanigan, Court Reporter

March 27th, 2018