

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

And
British Columbia Hydro and Power Authority
Public Electric Vehicle Fast Charging Service Rates
Application

VANCOUVER, B.C.
September 23, 2021

ORAL FINAL ARGUMENT

BEFORE:

D.M. Morton,	Chair/ Panel Chair
A.K. Fung, Q.C.,	Commissioner
E.B. Lockhart,	Commissioner

VOLUME 4

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Gary GUTHRIE	Self
Fredrik AMBROSSON	Residential Consumer Intervener Association (RCIA)

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VANCOUVER, B.C.
September 23rd, 2021

(PROCEEDINGS RESUMED AT 1:30 P.M.)

THE CHAIRPERSON:

I will open this afternoon's session, which is BC Hydro's final argument in the public electric vehicle fast charging rate application. My name is Dave Morton, I'm the chair of this panel, the chair of the Commission also. And with me are my fellow panel members, Blair Lockhart, and Anna Fung. We also have members of BCUC's staff team with us, Yolanda Domingo, Tanya Lai, Leon Cheung, Betty Wong, and Jessica O'Brien. And my apologies if I've missed anyone on the staff team. We have Mr. Jim Coady, who is our counsel.

I'll be very brief in my remarks. We are here to hear Mr. Christian's argument on behalf of BC Hydro and any questions the panel may have. I note that there are a number of other parties present, in particular interveners. However, they are here in a listen only capacity and they will have an opportunity to present their final argument in due course.

The Commission did send out a letter, Exhibit A-24, which laid out a few question that in particular we wanted Mr. Christian to examine. I can read out those questions if you wish, Mr. Christian,

1 but I'm sure you've already got them in your mind and
2 in front of you. So, perhaps I'll just dispense with
3 that.

4 So, given that Mr. Christian is the only
5 person that we anticipate will be presenting before
6 the panel, we will dispense with any other
7 appearances, even though there may be interveners
8 present, and I'll go directly to Mr. Christian.

9 And I would just remind us all that this
10 session is being transcribed and it's being broadcast
11 on the internet. I don't expect any confidential
12 information or any confidentiality issues. But should
13 any arise then we'll deal with that and move into an
14 in camera session following the public session.

15 So, unless there's anything else, Mr.
16 Christian, I'll hand it over to you.

17 **ARGUMENT BY MR. CHRISTIAN:**

18 MR. CHRISTIAN: Excellent, thank you, Mr. Chair.
19 Welcome panel members. BC Hydro's grateful for the
20 opportunity to present its argument orally. Also very
21 grateful to get those five questions from the
22 Commission panel in advance. It's always beneficial
23 to understand the Commission's thinking on matters
24 that are in issue in a proceeding. I will be
25 addressing those questions and I'll be actually
26 reading your questions out loud for the purposes of

1 the transcript so that it's clear what the questions
2 are when I respond to them.

3 I trust everybody can hear me okay? All
4 the Commission panel can hear me?

5 THE CHAIRPERSON: Yes, thank you.

6 MR. CHRISTIAN: Good. So, my submissions today are
7 going to be organized into eight primary parts. I
8 have a few introductory comments. I'll be speaking to
9 the reasons that BC Hydro has entered into the
10 electric vehicle charging market. I'll be identifying
11 some key rate design considerations that BC Hydro
12 submits the Commission should have in mind when its
13 assessing the application and determining electric
14 vehicle charging rates, and I'll be summarizing
15 briefly how those rate considerations inform the
16 requested relief that BC Hydro has sought from the
17 Commission. I'll be then diving into a little bit of
18 the evidence. I'm going to summarize some of the
19 evidence that I think is particularly germane to this
20 proceeding that came out both in IR responses and at
21 the streamlined review process.

22 **Proceeding Time 1:33 p.m. T2**

23 Then I'm going to take a deeper dive into
24 the electric vehicle rate design considerations. The
25 three considerations that we'll be bringing to the
26 Commission's attention are the revenue maximization

1 consideration, which was the subject in part of
2 Exhibit B-11 and was also the subject in part of the
3 SRP. We're going to talk a little bit about the
4 consideration of avoiding an unlevel playing field,
5 and then lastly we're going to talk about the
6 provincial policy objective advancing the adoption of
7 electric vehicle use in British Columbia.

8 Now, I'll be summarizing all that to
9 explain in basic terms why the BCUC should set
10 electric vehicle charging rates as proposed by BC
11 Hydro.

12 That will take about I expect one third of
13 my presentation today. The rest of my presentation
14 deals with in the first instance a number of specific
15 issues that arose in the course of the streamlined
16 review process that warrant response I think in final
17 argument. And those are, in order that I'll be
18 presenting them, the question of whether or not the
19 demand charge basis of BC Hydro's proposed prices is
20 appropriate. That is whether the proposed pricing
21 should be based on meeting general services as BC
22 Hydro has proposed, or a large general service as it
23 seems at least some intervenors suggest should be the
24 basis of the prices.

25 I'll be addressing Suncor's minimum and
26 maximum rate proposal. I'll be speaking to the

1 establishment potentially of a depreciation rate for
2 BC Hydro's electric vehicle charges in this
3 proceeding. I believe that's still a live issue. I
4 made submissions about that on the opening day of the
5 SRP but I don't think we have a ruling on that, so I
6 will just be adding a few comments to my earlier
7 submissions underscoring those submissions from
8 evidence and facts that have developed since the SRP
9 in July.

10 A couple of the interveners, I think it was
11 the CEC and the BCOAPO, suggested that there may be
12 insufficient evidence on the record for the Commission
13 to establish electric vehicle rates for BC Hydro at
14 this time. The issue was framed in terms of whether
15 or not BC Hydro has met its burden of proof, so I'll
16 be speaking to that issue.

17 Another issue that arose through the course
18 of information requests and questioning of the SRP is
19 whether or not those exempt service providers who buy
20 electricity from BC Hydro should have demand charge,
21 or connection fee relief, and I'll be speaking to that
22 briefly as well.

23 And there is a number of staff questions
24 that were issued prior to the SRPs, legal questions
25 that we submitted or suggested we would address in
26 argument, which I'll be dealing with. And then Mr.

1 Flintoff also similarly had a number of legal
2 questions that he raised in his pre-SRP questions
3 which we'll be dealing with.

4 And then last but not least, I'll be
5 addressing the BCUC panel questions that are set out
6 on Exhibit A-24, and there are five questions. They
7 relate to the establishment of EV charging surplus as
8 a separate class of service, the use of EV charging
9 rate or an EV charging rate rider to recover previous
10 years under recoveries. Whether or not there is a BC
11 Hydro obligation to serve that might be breached at
12 single use or single station EV charging sites.

13 The fourth question that BCUC panel asked
14 was whether or not the -- whether the BCUC could or
15 should approve a range of rates to determine the
16 revenue maximizing rate? That's very similar to the
17 Suncor min/max proposal as I've called it. Then
18 lastly, the BCUC panel asked three questions regarding
19 asset management, which I'll deal with at the very end
20 of my submissions.

21 Now, final argument is meant to be
22 comprehensive, it's meant to address all issues that
23 reasonably are anticipated to raised by interveners in
24 their arguments. It's easier to be comprehensive and
25 to be detailed in writing, of course, and my argument
26 today is of course is orally.

Proceeding Time 1:37 p.m. T3

1
2 It will be the case, potentially that in my
3 replies, submissions, my written reply submissions
4 that we will have to dive a little bit deeper into
5 some topics that we might otherwise have had to,
6 depending on what interveners say. So, just a heads
7 up on kind of where we -- how we've managed the kind
8 of oral part of this accommodating the written
9 arguments that we're going to see from interveners and
10 that we will be filing in reply.

11 At the outset of the SRP I noted that I
12 will be using some terminology and I wanted to define
13 that terminology. I'll be using that same terminology
14 today. I talk about EV charging service, EV charging
15 rates, EV charging costs and EV charging revenues.
16 And in each case those terms refer to the BC Hydro
17 public fast charging service rates, costs and revenues
18 respectively, that are the subject of BC Hydro's
19 application that is Exhibit B-1 in this proceeding.

20 Mr. Chairman, you referenced your view that
21 you didn't think there would be a need for an in
22 camera sessions. That's correct in terms of my
23 submissions today. I will not be referring to any
24 testimony that's on a confidential transcript or on
25 the confidential record. And, accordingly, there's no
26 need for an in camera session for the purpose of

1 delivering my final argument today. However, we do
2 reserve the right to refer to confidential information
3 in our reply submissions and may file confidential
4 reply argument as required.

5 The last preliminary point to make is that
6 I got a fair bit of technology spread across my desk
7 here. One of things I have is a computer next to my
8 platform here, my screen that I'm using to engage in
9 this argument. I've got the record of the proceeding
10 on that screen. I'm also keeping in communication
11 with BC Hydro through email. So if you see me
12 glancing away from the screen from time to time, I am
13 checking my email but it will only be to see what BC
14 Hydro is telling me in the event that I'm tacking off
15 course and need to correct, or otherwise need to be
16 instructed.

17 So, the first issue, the first main topic
18 then, is why has BC Hydro entered into the electric
19 vehicle charging market. And my first observations,
20 and this may be obvious to many but maybe not all of
21 the participants in this proceeding. BC Hydro is not
22 entering into the electric vehicle charging market
23 with a view to increasing shareholder value or earning
24 incremental revenues or profits, or otherwise for
25 commercial reasons. Instead, BC Hydro's entry into
26 the EV charging market is to advance provincial policy

1 objectives. And I say "objectives" plural, as there
2 are a series of objectives that underpin BC Hydro's
3 entry into the market. Those objectives are nested
4 and they kind of relate to each other, almost like
5 Russian dolls, one inside the other. The overarching
6 policy objective is to curb the effects of human
7 caused climate change through a reduction of
8 greenhouse gas emissions.

9 The provincial government has decided that
10 the displacement of carbon fuel motor vehicles with
11 electric fueled motor vehicles will advance that GHG
12 reduction objective. That is, the provincial
13 government policy is to encourage the widespread
14 adoption of electric vehicles. And that will be my
15 touchstone public policy objective. If I refer to
16 public policy objecting in the abstract, that will be
17 the touchstone one right there, the encouragement of
18 the adoption of electric vehicles in British Columbia.

19 The widespread adoption of EVs depends in
20 part on the development of an extensive network of
21 public electric vehicle fast charging stations. And
22 in turn the development of a network of fast charging
23 stations will be facilitated, we say, and we think the
24 *Greenhouse Gas Regulation* and the *Clean Energy Act*
25 section 18 support this, will be facilitated by the
26 initial entry into that market by public utilities.

1 provided that the charging service, charging stations
2 with which the service is provided, is brought into
3 service by December 31, 2025.

4 *Clean Energy Act* section 18(3) is a further
5 elimination of a regulatory hurdle. It directs the
6 Commission -- or prevents the Commission from
7 exercising its usual public and utility jurisdiction
8 by preventing it from directly or indirectly
9 preventing public utilities from the prescribed
10 undertaking. In this case, entering into the electric
11 vehicle charging market.

12 So, substantively identical submissions
13 were made by BC Hydro to what I've just said in its
14 Fiscal 2022 Revenue Requirement Application. And I'm
15 going to just quote briefly from those submissions.

16 The remedial purpose of section 5 of the
17 GGRR is to ensure that public utilities will recover
18 their investment from eligible charging stations. The
19 object of section 5 of the GGRR and section 18 of the
20 *Clean Energy Act* is to encourage non-exempt public
21 utilities to invest in eligible charging stations in
22 order to reduce GHG emissions in B.C. And those
23 submissions are applicable, of course, to the reason
24 we have already -- BC Hydro is in this proceeding and
25 why it filed its rate application.

26 I'm also going to quote from FortisBC's

1 final submission with respect to its electric vehicle
2 rate application. These final submissions were filed
3 on March 16th, 2021, and at paragraph 12, Fortis says,
4 "The purpose and object of the section 5 of
5 the GRR and section 18 of the CEA is to
6 reduce GHG emissions in B.C. by encouraging
7 public utilities to operate eligible
8 charging stations by allowing companies to
9 list the recovery of costs incurred in such
10 stations."

11 And BC Hydro agrees with that submission,
12 and accepts its applicability for the purpose of this
13 proceeding.

14 In summary, BC Hydro is in and has entered
15 into the EV charging market, encouraged the widespread
16 adoption of electric vehicles in British Columbia,
17 further to the public policy objectives of the
18 province as set out in *Clean Energy Act* section 18,
19 and GRR, that is the Greenhouse Gas Reduction
20 Regulation in section 5.

21 BC Hydro submits that there are three
22 primary rate design considerations that the Commission
23 should have in mind when it assesses Hydro's
24 application, and looks at determining and setting the
25 EV charging rate for BC Hydro. Those three
26 considerations are first, revenue maximization. That
is the BC Hydro electric vehicle pricing should

1 maximize the revenue that is earned from electric
2 vehicle customers of BC Hydro. The Commission should
3 avoid establishing rates or terms and conditions of
4 service that would affect a non-level playing field,
5 and the Commission should establish rates that support
6 the adoption of electric vehicles in the province.

7 These considerations are interrelated and
8 overlap to some extent, particularly I think as is
9 clear from the BCUC's Phase II report, the avoidance
10 of a non-level playing field and the encouragement of
11 EV adoption have a significant amount of overlap, but
12 they're not synonymous, and I'll be speaking to each
13 of those considerations separately in trying to tie
14 them back in together at the close of my remarks in
15 respect of BC Hydro's application.

16 By way of introduction, revenue
17 maximization as a consideration was identified by BC
18 Hydro in its application, and in Exhibit B-11, where
19 in both cases, BC Hydro said that the proposed rates
20 should maximize revenue collection from users of its
21 electric vehicle charging stations, and to that end
22 would reduce cross-subsidization. That is the extent
23 then. BC Hydro's electric vehicle rates maximize
24 revenue and minimize the amount of costs recovery
25 required by all other rates.

26 **Proceeding Time 1:47 p.m. T5**

1 From the application of BC Hydro on page 3,
2 PDF page 8, proposed rates allow BC Hydro to collect
3 revenue to recover as much as practical the cost of
4 providing the fast charging service from the users of
5 the service, which will reduce costs that must be
6 recovered from all ratepayers.

7 Now, this consideration arises directly
8 from BC Hydro's rate setting -- sorry, from the BCUC's
9 rate setting jurisdiction, because it minimizes cost
10 subsidies from all other BC Hydro customers. And BC
11 Hydro submits that minimizing cost subsidies between
12 customers is a default rate design goal of all public
13 utilities regulators, including the BCUC, under the
14 *Utilities Commission Act*.

15 And for this reason we submit that the
16 revenue maximization consideration should be the
17 BCUC's primary and overarching obligation with respect
18 to the proposed rates for the establishment of EV
19 charging rates. And, in particular, to the extent the
20 Commission sees a conflict between that consideration
21 and other considerations, the revenue maximization
22 consideration should prevail.

23 BC Hydro acknowledges, of course, that the
24 revenue maximization consideration is one considered
25 as a goal, it's a difficult goal to achieve directly,
26 particularly at this time. Because -- to with

1 confidence, establish a revenue maximizing price, one
2 would need to know the utilization rate of electric
3 vehicle charging stations with some degree of
4 certainty. And one would need to know, again with
5 some degree of certainty, the price elasticity of
6 demand of electric vehicle charging services. And
7 neither of those are known right now in quantitative
8 terms, although we do have qualitative evidence which
9 we'll be talking about.

10 With respect to the avoidance of a non-
11 level playing field, BC Hydro is interested in
12 avoiding a non-level playing field with exempt service
13 providers and speaks to that rate design consideration
14 in the application on page 5, PDF page 10. This goal
15 does not arise from the BCUC's rate setting
16 jurisdiction under the *Utilities Commission Act*, but
17 in large measure arises from -- at least as framed by
18 BC Hydro in the application, from the BCUC's Phase II
19 report regarding the regulation of the EV charging
20 services. I referred to that report already once, and
21 just so we're clear, that's the report that was issued
22 on June 24th, 2019.

23 For example, at page 29 of that Phase II
24 report, the Commission wrote, "We find it in the
25 public interest to ensure that the playing field
26 remains as level as possible." And so this

1 consideration is -- arises from the Commission's
2 review of the regulation of this market and the
3 participation of exempt and non-exempt public
4 utilities in it.

5 However, this consideration is not, as I
6 say, grounded in the *Utilities Commission Act*; it is a
7 public policy objective. BC Hydro submits that like
8 any public policy objective that it can be advanced
9 through rate design, even though it's not grounded in
10 the *Utilities Commission Act*, but provided that the
11 rates that are used to advance that public policy
12 objective are otherwise grounded either in a cost of
13 service basis or have some other economic
14 justification. So, in other words, setting rates for
15 BC Hydro's electric vehicle charging service in a way
16 that avoids a non-level playing field is fair game,
17 provided there's an economic rationale for it.
18 Ultimately, or not for the objective but for the rates
19 that would be used to achieve that purpose.

20 And of course we're not proposing, and I'll
21 explain why I don't think it's possible, to have full
22 cost of service rates here. So when we're thinking
23 about the minimizing level playing field issues, the
24 trick is to think about how we do that in a way that
25 sets prices that are still within the corners of the
26 *Utilities Commission Act*, that is to the extent that

1 what it actually means. What is the definition of a
2 level playing field? And there are some I think --
3 and I will be making some comments on what a level
4 playing field is, that all I think is underpinned the
5 main argument that is, level playing field is not
6 something that can be readily identified. And the
7 means to advance it are not going to be as apparent as
8 they might otherwise be.

9 Then the third rate design consideration
10 that we think is key is, as I've mentioned already,
11 encouragement of the adoption of electric vehicle use
12 in British Columbia. And I said where that comes
13 from, the *Clean Energy Act* section 18 and GRRR section
14 5 in particular, those are the reasons BC Hydro has
15 entered into this market.

16 Just to underpin that a little bit, I want
17 to quote from one of BC Hydro's responses to an
18 Information Request from the Commercial Energy
19 Consumers, that was Information Request 1.21.1, that's
20 in Exhibit B-5. In that response, BC Hydro wrote,
21 "BC Hydro supports the entry of additional
22 public electric vehicle charging operators
23 in British Columbia. We view the expansion
24 of this service as supporting electric
25 vehicle adoption, as well as supporting the
26 Government's Clean B.C. goals. BC Hydro's
 involvement in providing public fast

1 charging services is going to help the
2 maturation of the market over time."

3 Now, the support of the adoption of
4 electric vehicles in British Columbia is also another
5 public policy objective that is not squarely within
6 the BCUC's rate design jurisdiction. Just like
7 avoiding level playing field issues, advancing the
8 adoption of electric vehicles is a public policy
9 objective that can be advanced to rate design,
10 provided there were rates that are used to advance
11 that objective can be justified on a cost of service
12 basis, or some other economic basis.

13 The advanced window of electric vehicle
14 adoption in British Columbia through rate design is
15 also difficult to achieve directly in a kind of clear
16 and measurable way, in part because of the inherent
17 tension between encouraging public utility investment
18 in one hand, and private investment on the other hand.
19 That, of course is the subject, in large measure of
20 Part II of the report, the Phase II report that I
21 referred to earlier.

22 So, to recap in summary, there are three
23 considerations that BC Hydro submits should inform the
24 Commission's decision on what the proposed rates
25 should be. They should be looking for rates that
26 maximize revenue first and foremost. They should set

1 and determine rates that avoid a playing field issues,
2 and they should -- the Commission should establish
3 rates that support the adoption of electric vehicles.

4 The challenge is, because of the different
5 issues I've just identified, that it's not clear
6 exactly what that rate is that meets those
7 considerations. In particular the lack of
8 quantitative information with respect to utilization
9 rates and the price elasticity of demand.

10 So, how to come up with a reasonable proxy,
11 that's the question that's raised by on one hand the
12 considerations and the challenges in identifying means
13 by which those considerations can be advanced.

14 BC Hydro submits on one hand that the price
15 can't be zero. BC Hydro had a zero price for some
16 time, until it filed its application regarding
17 approval of the pricing that is now the subject of
18 this proceeding. But in the short term it's clear
19 while zero pricing would encourage the adoption of
20 electric vehicles, that's a good thing, it may not be
21 consistent with a level playing field, in the short
22 term, maybe. And it certainly would not advance the
23 net-revenue maximization consideration, that is
24 setting BC Hydro's pricing at zero, wouldn't maximize
25 revenue, because there would be no revenue.

26 BC Hydro also says that on the other end of

1 the spectrum, establishing electric vehicle pricing
2 for BC Hydro can't be on the basis of cost of service.
3 The evidence shows that there is price elasticity,
4 even though we don't know what it is quantitatively.

5 **Proceeding Time 1:56 p.m. T7**

6 And we know from examples seen in Exhibit B-14, where
7 a number of different full cost of service prices were
8 developed, that any full cost of service rate will be
9 much higher than market rates, at least a dollar
10 minimum, if you look at Exhibit B-14, and in BC
11 Hydro's submission given the evidence about -- that
12 I'll refer to shortly, about price elasticity, we can
13 expect that a cost of service rate would result in
14 very low utilization rates. And in the short term
15 that would not encourage adoption of electric
16 vehicles, it would be counter to the objective of
17 encouraging adoption of electric vehicles. It may not
18 be consistent with a level playing field, because in
19 this case BC Hydro would be out of the market because
20 its prices would be so much higher than all the other
21 service providers, and would not maximize revenue,
22 again, because of the price elasticity issue.

23 I'm just going to note for the Commission's
24 benefit that Ms. Jubb testified at transcript Volume
25 1, page 142, line 19 to 143, line 17, about the more
26 practical challenges of establishing a cost of service

1 rate, in particular the payback periods that we
2 required to the extent the Commission wanted to have
3 those rates cover all costs, past and future costs.
4 BCUC -- sorry, BC Hydro's response to BCUC 1.14.9
5 addresses similar issues in terms of the challenges
6 with the full cost of service rate.

7 So, the question then is, how do you pick a
8 rate somewhere between those two bookends? And BC
9 Hydro's proposal is based on the idea that if the
10 rates were based on what a general service customer
11 would pay, or what electric vehicle service customers
12 collectively would pay over the course of a month, so,
13 or a known period on a general service rates, then
14 they would be effectively paying a general service
15 rate and that would get you to somewhere close. So,
16 the idea was to pick a range of reasonable utilization
17 rates and develop an electric vehicle charging rate
18 based on the applicable general service rate. And
19 that process and that methodology is described in the
20 application at pages 28 to 32. In particular, there's
21 a table on page -- it's table 3 on page 31 of the
22 application that shows the range of different rates at
23 different assumed utilization rates that would
24 establish a rate to recover the general service costs,
25 the electricity costs as BC Hydro described it in its
26 application. I can also refer, for the purposes of

1 the panel's benefit and the record, BC Hydro's IR
2 responses to BCUC 1.4.6, 1.7.1, 1.15.4 and 1.16.1.

3 And to pause now and say that the range of
4 reasonable utilization rates set out in the evidence
5 that I just described, that is the range between 3
6 percent and 5 percent, that comes from a Rocky
7 Mountain Institute study for the Colorado Energy
8 Office, which is referred to in the application at
9 page 31, and also referred to in BC Hydro's responses
10 to BCUC IRs 1.4.6, 1.7.1 and 1.16.1.

11 So, the process then is to build up the
12 rates from the general service rates, and then to
13 consider through those rates within the context of
14 rates that already being provided by other service
15 providers in that market.

16 And as you'll hear from me in a few
17 minutes, BC Hydro's submission is that the rates
18 developed in the way that it developed them falls
19 squarely within the range of rates provided by other
20 service providers at this time. And in the
21 consequence BC Hydro's proposed rates that developed
22 in the way I've just described, that fall within the
23 range or rates provided or offered by other service
24 providers, and to the extent I'll describe it a bit
25 more, satisfy those three rate design considerations
26 as best as can be satisfied given the current

1 information we have and the challenges associated with
2 those considerations.

3 And so, in consequence, BC Hydro seeks
4 final orders approving EV charging rates as set out in
5 rates schedules 1360, 1560 and 1561, those are at
6 Appendix A and Appendix B of the application, PDF
7 pages 49 to 63. The pricing that is set out in those
8 rate schedules, in the case of 1360, that's the 25 kW
9 services, 12 cents per minute. In the case of rate
10 schedule 1560, that's the 50 kW service, and pricing,
11 proposed pricing, is 21 cents per minute. And in the
12 case of rate schedule 1561, at 100 kW service, the
13 pricing proposed is 27 cents per minute.

14 **Proceeding Time 2:01 p.m. T8**

15 In addition to the price -- the rate
16 schedules that I just described include non-price
17 terms and conditions, and these are also included in
18 the (audio drops) referred to as the rates. And these
19 are also set out in the applicable rate schedule and
20 also the subject of the Commission's -- or the BC
21 Hydro proposal before the Commission.

22 And then lastly in terms of what BC Hydro
23 seeks in this proceeding, it's proposed an evaluation
24 report that would be issued by March 31, 2024. So,
25 that evaluation report I'll speak to a little bit
26 more, but the idea is that the rates that BC Hydro

1 would be charging, that would be established by the
2 Commission in this proceeding would be in effect at
3 least until that valuation report is filed. It may be
4 sooner than March 31, 2024, but it would be no later
5 than that. So, the idea is that the rates would stay
6 in place at least until that evaluation report.
7 Evaluation report may or may not include a proposal
8 for amending the rates at that time.

9 THE CHAIRPERSON: Mr. Christian, are you okay taking
10 questions now? Or would you prefer that we wait until
11 the end of the --

12 MR. CHRISTIAN: No, I think questions now would be
13 fine. I'm going to be talking for a long time, and I
14 think everybody benefits from breaking that up a bit.

15 THE CHAIRPERSON: Okay. So, I'm going to say a few
16 things back to you that I think I heard you say, and
17 if you could correct me, please, I'd appreciate that.

18 But I think I heard you say that -- I'm
19 just going to pick on two -- or pick two things that
20 you said. One is that when we're setting rates,
21 setting them according to a level playing field
22 criteria is offside with our Act. But we could set
23 them using a revenue maximization principle. Among
24 the other things that you said, did I hear those two
25 things correctly?

26 MR. CHRISTIAN: I would say with respect, not quite. I

1 think avoiding a non-level playing field is a public
2 policy objective, and it is legitimate to set rates to
3 advance public policy objectives. But they only,
4 insofar as the rates that are set to achieve that
5 objective are otherwise within the confines of the
6 *Utilities Commission Act*.

7 THE CHAIRPERSON: Okay.

8 MR. CHRISTIAN: So, for example, let me give one
9 example, energy conservation rates. Energy
10 conservation per se is not a rate design objective.
11 BC Hydro has brought its energy conservation rate
12 applications to the Commission, it has been at pains
13 to identify not just a rate that would maximize energy
14 conservation, but would establish pricing that
15 reflects long run marginal costs. In other words,
16 conservation rates need to be grounded in some
17 economic basis.

18 And so I'm speaking to these examples I'm
19 familiar with, but the idea is, you can advance the
20 public policy objective, in this case that I'm
21 speaking of now, conservation, by setting pricing; you
22 may not pick the rate that gives you the maximum
23 conservation, because you have to keep it within the
24 confines of the Act which requires a cost of service
25 rate or some other economic justification.

26 So, similarly with advancing the playing

1 field objective, we would say that that is a
2 legitimate objective to ensure a level playing field.
3 But only in so far as the pricing is otherwise
4 reflective of cost of service or an economic
5 justification.

6 THE CHAIRPERSON: Okay. And revenue maximization
7 satisfies that criteria then?

8 MR. CHRISTIAN: We would say yes, that's correct.

9 THE CHAIRPERSON: Could you illuminate me a little more
10 on why revenue maximization would and leveling the
11 playing field wouldn't be a valid economic objective?

12 MR. CHRISTIAN: Well, because revenue maximization,
13 because of the Greenhouse Gas Regulations section 6
14 and the *Clean Energy Act*, which require that all of BC
15 Hydro's costs be recovered from all ratepayers,
16 revenue maximization has the inherent built-in
17 economic principle of minimizing cross-subsidization,
18 if I can put it in those terms.

19 It is the only consideration that one can
20 squarely ground in what the Commission normally does
21 when they set rates, which is to ensure that costs
22 reflect rates -- sorry, rates reflect costs incurred
23 by the utility insofar as they don't (audio drops)
24 other justification is there, typically that is some
25 sort of economic justification which in many cases
26 ultimately boils down to ensuring that other customers

1 are no worse off.

2 THE CHAIRPERSON: Okay. Just to change focus slightly,
3 did I also understand you to say that at this time
4 price elasticities are not known? Or not known with
5 any degree of certainty at least?

6 MR. CHRISTIAN: I would say they are not known
7 quantitatively. So I think there is qualitative
8 evidence that I'll be referring to. Quantitatively we
9 don't.

10 THE CHAIRPERSON: Okay.

11 MR. CHRISTIAN: We don't know what (audio drops).

12 THE CHAIRPERSON: So, if you don't know price
13 elasticities, how can you determine what your revenue
14 maximization point is?

15 MR. CHRISTIAN: Well, I already acknowledge that point.
16 There is no doubt that if we knew price elasticity,
17 quantitatively we would have more confidence in
18 determining a revenue maximizing price.

19 **Proceeding Time 2:06 p.m. T9**

20 THE CHAIRPERSON: But at this point we don't know what
21 the revenue maximizing price is?

22 MR. CHRISTIAN: We don't know with confidence.

23 THE CHAIRPERSON: We don't know but we have -- but you
24 have a guess, is that what you're saying?

25 MR. CHRISTIAN: Well, I'll be going into this but I'll
26 just loop into this right now. It's clear that based

1 on prices that other services providers are charging,
2 charging a price much higher than what other service
3 charges are providing is going to result in a lower
4 utilization rate. Because we know there is price
5 elasticity in demand, we don't know how much but there
6 will be some. And at some level of pricing above what
7 the market is already providing, we will have a
8 reduction in usage and a reduction in revenue. And
9 so, in a sense, the outer bounds, what we would say
10 are the price -- a revenue maximizing rates are
11 established in part by what the market is charging,
12 and in part by the analysis that Hydro did in that
13 table 3 that I referred to previously. So it's a
14 range, we would say.

15 THE CHAIRPERSON: Right. So, in other words, if I
16 chose to enter a market and I have deep enough pockets
17 that I can underprice all of my competitors, I'm going
18 to maximize my revenue. Is that the essence of your
19 argument?

20 MR. CHRISTIAN: I'm not sure who the "I" is in the
21 question.

22 THE CHAIRPERSON: Well, if it was me. If I have a
23 business that I'm entering into.

24 MR. CHRISTIAN: Well, I'm not sure. I guess that's not
25 exactly clear. I think it depends what your business
26 -- you know, if you're a regulated utility, then you

1 want to find that revenue maximizing price because you
2 have to have your rates set out by the Commission. If
3 you're a non-regulated entity, that is if you're an
4 exempt electric vehicle service provider, it's unclear
5 whether or not an exempt service provide would want to
6 or even desire to find its revenue maximizing price.
7 As we'll talk about shortly, we know from the evidence
8 in this proceeding that Suncor has a business model
9 that allows for pricing that --

10 THE CHAIRPERSON: Right, but I'm not talking -- sure,
11 I'm not talking about whether I need to maximize my
12 revenue or not. It seems to me that the argument
13 you're presenting is by undercutting the equilibrium
14 market price I can maximize my revenue. That's what
15 it seems to me you're saying. Would you agree with
16 that?

17 MR. CHRISTIAN: Yeah, no, I don't think. I'm not
18 defining it in those economic terms that you've just
19 used. I'm just saying simply that we can see that
20 there's a range of prices already offered. If you put
21 Hydro far beyond that on the up side or far below that
22 on the bottom side, probably it's not going to be in
23 market. The market is defined by those participants
24 who are already there and are setting their prices.
25 And for a reasonably comparable service, which I'll
26 talk about shortly, there should be a reasonably

1 comparable price. And that way those who would use
2 electric vehicle charging services don't have a
3 particularly large economic incentive to seek out
4 those that are lower cost. They will largely be in
5 indifferent, in effect, to who the service providers
6 are and go based on the other amenities and other
7 aspects of the service.

8 THE CHAIRPERSON: Okay, thank you.

9 MR. CHRISTIAN: Great. So, that concludes that bit,
10 I'm going to just turn a little bit to some of the
11 evidence that I think that I'll be touching on a few
12 times first from BC Hydro. And an important part of
13 BC Hydro's evidence that came out really most clearly,
14 I think, in Exhibit B-13, which was the opening
15 presentation for the streamlined review process, and
16 slide 16 in particular, showed that BC Hydro's plans
17 for electric vehicle charging stations are to build
18 325 stations across 145 sites by the end of 2025,
19 December 31, 2025, consistent with the date in the
20 Greenhouse Gas Regulations section 5.

21 In BC Hydro's response to BCUC IR 1.5.2, BC
22 Hydro wrote that the distribution of charger power
23 level across those 145 sites has not yet been
24 determined. That the rollout plan will be informed by
25 the Ministry's -- I'm going to skip a few words here,
26 by the B.C. Ministry's public light duty zero emission

1 vehicle infrastructure study last updated May, 2021.
2 So, BC Hydro is going to be building those stations
3 across those sites. The key point though is the 2025
4 cutoff date.

5 The other evidence I referred to without
6 identifying exactly where it is on the record, is the
7 range of electric vehicle pricing that's available in
8 the market today. And that evidence is primarily and
9 most currently, on this record at least, in Exhibit B-
10 12, attachment 1. And that shows comparative market
11 pricing of all the other service providers that BC
12 Hydro was able to identify in the course of this
13 proceeding.

14 **Proceeding Time 2:10 p.m. T10**

15 And then also there is the SRP
16 presentation, Exhibit B-13, slide 11, and that shows
17 the electricity cost pricing at the assumed
18 utilization rates of 3 percent to 5 percent, it shows
19 what BC Hydro believes to be the appropriate range for
20 its pricing, which is between 17 cents on the low end
21 and 25 cents on the high end.

22 EV service shows price elasticity of demand
23 as well, and again I think this -- I didn't think this
24 is particularly controversial, and I'll speak to
25 Suncor's evidence on this point shortly, but in the
26 application of page 15, PDF page 20, in response to

1 BCUC IRs 1.60.4 and 1.16.5.1, and at transcript 101,
2 lines 1 to 8, and transcript 1, page 208 line 14 to
3 24, there is a number of references to how customers'
4 response to pricing is indicated to be what we expect
5 from a normal product. That is, as the price goes
6 higher, demand goes down. Again, we don't have
7 quantitative evidence on that.

8 Now, a number of interveners have raised
9 issues in this proceeding, but alone of the
10 intervenors that seem to BC Hydro on reviewing the
11 transcript, that only Suncor's opposition to BC
12 Hydro's proposal was really abundantly clear, and they
13 make their proposition that BC Hydro's proposal clear
14 in paragraphs 3 and 4 of their evidence, which is
15 Exhibit C20-4.

16 But, interestingly, despite BC Hydro and
17 Suncor being at odds on the relief sought by BC Hydro,
18 they are actually in agreement on quite a number of
19 key issues that underpin this proceeding. And I'm
20 going to go through those right now.

21 And so, both BC Hydro and Suncor agree that
22 revenue maximization should be a primary consideration
23 setting EV charging rates. I've already talked about
24 BC Hydro in that regard, and at Suncor the panel, if
25 it has a mind to, can refer to Suncor's response to
26 BCUC IR, Information Request 5.2 and 6.1, that's in

1 Exhibit C20-10, and it can refer to transcript volume
2 3, page 507, lines 1 to 3.

3 Like BC Hydro, Suncor agrees that their
4 revenue maximizing price is unknown at this time, or
5 can't be determined with precision in quantitative
6 terms. In Suncor's response to BCUC IR 6.1, that's
7 clear because it implies that an annual reporting by
8 BC Hydro with respect to a revenue maximizing price
9 would allow that price discovery. So, by implication,
10 Suncor agrees that it's not known now what that
11 revenue maximizing price is. And I can also refer the
12 panel to transcript 3, page 513, line 23, and 514 line
13 4, transcript volume 3, page 537, line 20 to 538 line
14 8.

15 Suncor agrees with BC Hydro that pricing
16 too high will undermine that the Provincial policy
17 objective of advancing the electric Vehicle adoption
18 in British Columbia. That is in Suncor's response to
19 BCUC IR 8.2, Exhibit C20-10. BC Hydro agrees that at
20 this time at least, the Commission should not set BC
21 Hydro pricing to recover the full costs of service,
22 and that's in BCUC -- sorry, that is in Suncor's
23 response to BCUC IR 8.2 and 8.21, and in the
24 transcript volume 3, page 492, line 25 to page 493,
25 line 9.

26 Suncor agrees with BC Hydro that changing

1 EV charging prices frequently is an undesirable thing.
2 That's the subject of BC Hydro's evidence at Exhibit
3 B-13, slide 3, and transcript Volume 2, page 399, the
4 line 13, and page (audio drops) to 402 line 6. Suncor
5 for its part, at transcript 3, page 494, that's lines
6 4 to 6, talks about the costly and administrative
7 nightmare associated with monthly price changes.

8 As well as BC Hydro and Suncor agree that
9 regulatory burden should be minimized to think that's
10 possible or feasible. Suncor's evidence on that point
11 was the transcript Volume 3, page 520, line 22, to
12 page 521, line 4.

13 BC Hydro and Suncor both have no
14 expectation of cost recovery in the near term. BC
15 Hydro with respect to its charging rates, of course,
16 that's at pages 25 and 26 of its application. Suncor,
17 with respect to its own pricing speaks to this issue
18 in its response to BCUC IR 2.2 in respect to the
19 pricing of other operators in response to BCUC IR 8.1.

20 **Proceeding Time 2:15 p.m. T11**

21 BC Hydro's expected range or reasonable
22 range of utilization rates at the outset at least, for
23 its 50 kW stations, as I mentioned already, is in the
24 range between 3 and 5 percent. And Suncor in BCUC IR
25 7.1 speaks of that same range, 3 to 5 percent for 50
26 kW stations. And to be clear, though, it also noted

1 -- and to be fair, they also noted in their testimony,
2 in transcripts 3-A redacted, that's the redacted
3 confidential transcript filed on the record on August
4 11th, they talk about the 3 to 5 percent ranges as
5 being aspirational.

6 Suncor and BC Hydro both agree that
7 utilization rate is key to setting a revenue
8 maximizing price. Suncor addresses that topic in its
9 response to BCUC IR 2.4, where it says the break-even
10 electric vehicle fast charging rate is highly
11 dependent on utilization.

12 Recent utilization rates are not a reliable
13 indicator of future utilization rates. Both BC Hydro
14 and Suncor spoke to that. We can't look at the
15 immediate past to figure out what a reasonable
16 utilization rate is. BC Hydro spoke to that at
17 transcript 1, page 102, line 20 to page 103 -- sorry,
18 page 102, line 20 to page 103, line 8. And Suncor
19 referred to the same idea in the transcript Volume 3,
20 445, line 22, to page 446, line 10. And, again, in
21 transcript 3-A redacted version on page 11, line 25 to
22 page 12, line 26.

23 Suncor and BC Hydro rated apples to apples
24 comparisons between operators, that is between
25 electric vehicle service providers, are challenging.
26 Suncor in BCUC response -- Suncor's response to BCUC

1 IR 5.1. Suncor and BC Hydro agree that other
2 amenities are important to consider when comparing --
3 or important to customer selection, that is, of
4 electric vehicle charging services. Suncor speaks to
5 that at BCUC's -- in its response to BCUC 2.4.1, and
6 at the transcript Volume 3, 441 -- page 441, lines 2
7 to 14.

8 BC Hydro and Suncor agree that different
9 charger power levels are a legitimate basis to set
10 different charging prices, at Suncor transcript 3,
11 506, lines 15 to 16. Both BC Hydro and Suncor agree
12 that per kW or per kWh, that is volumetric rates, are
13 not yet allowed because of Measurement Canada's --
14 because Measurement Canada has yet to approve the
15 appropriate meters for that purpose. And Suncor
16 speaks to that in its response to BCUC IR 1.5 and in
17 transcript Volume 3, page 468, line 13, to page 471
18 (inaudible). And in that last transcript testimony,
19 Suncor notes that it charges by the minute rather than
20 by kW or kWh everywhere in Canada.

21 Both BC Hydro and Suncor agree that there's
22 no merit in seeking a dispensation from Measurement
23 Canada's rules. That's BC Hydro transcript 1, line 93
24 -- sorry, page 93, line 15, to page 96, line 3. And
25 Suncor says essentially the same thing at transcript
26 Volume 3, page 466, line 4, to 467, line 21. And,

1 again, at 590 -- page 590, lines 9 to 26 in transcript
2 Volume 3.

3 Both Suncor and BC Hydro agree that a
4 transition to volumetric pricing, that is per kW or
5 per kWh pricing will be a significant undertaking to
6 be handled with care. BC Hydro spoke of this issue at
7 transcript Volume 1, page 113, line 2, to page 115,
8 line 6. And in transcript Volume 2, 365, line 22, to
9 page 368, line 10. And Suncor, again, spoke to that
10 same issue, that is the difficulty in the transition
11 of the care with which the transition will have to be
12 done at transcript Volume 3, 467, 22, to page 469,
13 line 11.

14 And both Suncor and BC Hydro agree that
15 currently time -- simple time based rates are the
16 appropriate way to price electric vehicle charging
17 services. That's here in Hydro's proposal, of course.
18 Suncor speaks to that at transcript 3, page 552, line
19 22, to 553, line 16.

20 And finally, both BC Hydro and Suncor
21 believe that -- you've already heard me with respect
22 to BC Hydro, but Suncor similarly talks about the
23 qualitative kind of evidence with respect to price
24 elasticity of demand. That is, BC -- that is, Suncor,
25 we understand, accepts this and has put evidence on
26 the record that there is price elasticity of demand

1 with respect to electric vehicle charging services.

2 **Proceeding Time 2:20 p.m. T12**

3 And they spoke to that at transcript 3, page 476, line
4 14 to page 477 line 4 where they talked about their
5 utilization rates changing with the advent of BC Hydro
6 pricing. And they talked about it at transcript 3,
7 page 506, through page 507. And then in transcript 3A
8 redacted, page 14 through page 15, lines 14 on page
9 14, to line 1 on page 15.

10 Although I want to note in fairness, and I
11 didn't get the reference to this, I do recall that one
12 of the Suncor witnesses at one time said that he
13 didn't think that the demand for electric vehicle
14 charging services did show price elasticity. My
15 recollection is that what he intended or what he
16 understood -- what I understood at least was that
17 there was no quantitative basis for assessing what
18 that price elasticity is. I'm sure I'll be corrected
19 on that if I got that wrong (audio drops) reply
20 argument or submissions of Suncor.

21 So, for all these reasons, and on all the
22 issues that I've just identified, BC Hydro says that
23 effectively there is no contest, there is no need for
24 a (audio drops) determination on opposing evidence,
25 because the two parties who put evidence in front of
26 the Commission most extensively and most fulsomely

1 would have the most experience in this market so far
2 in bringing on a significant number of points, as I
3 just describe.

4 I'm just going to see if my email is still
5 on, if I can take a moment to check and make sure I
6 haven't missed anything from my client.

7 Great. So to continue then, I said that
8 after I talked about some of the evidence I'm going to
9 be doing a bit of a deeper dive into the rate design
10 considerations. I think some of what I'm about to say
11 I may have already addressed in my questions, my
12 answers to your questions (audio drops) a few minutes
13 ago, but I will (audio drops) in front of me, and I
14 want to make sure I get this all down.

15 As noted previously, the rate design
16 considerations do overlap to some extent, but it's
17 easier to understand them in my submission if we
18 identify them and address them individually in kind of
19 in isolation with each other, at least at the outset.

20 And so I've said already that BCUC
21 determines and sets rate in accordance with the rate
22 setting provisions of the *Utilities Commission Act*,
23 sections 58 to 61. Typically the test, the standard
24 that the Commission applies and other public utility
25 regulators apply when they establish rates under
26 similar utility Commission act provisions, or similar

1 statutory provisions, it's called the "Just and
2 Reasonable standard." Rates are meant to satisfy the
3 just and reasonable standard, and generally that means
4 that rates should be set to recover the costs of the
5 utility, where cost is the full cost of service of
6 providing the service.

7 And there are exceptions though, and these
8 are some of the economic exceptions I talked about
9 already. But I'll go back to one that I mentioned in
10 the streamlined review process first day when I was
11 making submissions, one of the exceptions to full cost
12 of service rates are bypass rates, and the bypass rate
13 situations customer can be allowed to pay a rate much
14 less than what the customer would otherwise pay,
15 typically a full cost of service rate, to keep that
16 customer on the utility system. To the extent that
17 customer continues to pay a rate that's higher, then
18 the utility's variable cost of service, that customer
19 stays on in the service, even though it is a non-cost
20 of service rate, but they thereby contribute to the
21 fixed costs of the system, to the benefit of all other
22 customers. And so that's one of the exceptions I
23 noted in the outset of this proceeding, and I just
24 thought I would remind or reiterate that. I now have
25 a reference to the commission order, which bypass rate
26 principles were established with BC Hydro, and that

1 was by order G-88-99.

2 I've also spoken to the idea that rates can
3 only be set for the purpose of advancing public policy
4 objectives within that cost of service or economic
5 framework that is within the just and reasonable
6 standard. And the basis for that, in my submission is
7 BCUC order G-5-17. That's the Commission's decision
8 with respect to BC Hydro's 2015 rate design
9 application. And that's on page 80 of that decision.

10 The context for that decision was proposal
11 by interveners that the Commission established
12 preferential rates for low income customers to advance
13 the public policy objective of ameliorating the
14 effects of poverty.

15 **Proceeding Time 2:25 p.m. T13**

16 The Commission didn't say that we could not
17 use rate design to advance public policy objective, it
18 said that to advance those public policy objectives
19 using rates designs -- rates that would be used to
20 advance that purpose must fall within the normal
21 standard.

22 THE CHAIRPERSON: Mr. Christian, would you agree that
23 given that electric vehicle charging for BC Hydro is a
24 prescribed undertaking, then BC Hydro's shareholder is
25 going to recover all of the costs of service
26 regardless of what the rate is, would you agree with

1 that statement?

2 MR. CHRISTIAN: I'm not sure I would agree with that
3 statement. I think BC Hydro's shareholder earns the
4 return on equity that's currently fixed under
5 direction, so it earns what it earns through and
6 establishment of revenue requirements that have that
7 built in return on equity. I would -- I agree that
8 the costs of the service are going to borne by all of
9 BC Hydro's customers, and maybe that's the same thing
10 that you're saying.

11 THE CHAIRPERSON: I believe that those are flipsides of
12 the coin, so to speak, yes.

13 MR. CHRISTIAN: Right, fair enough.

14 THE CHAIRPERSON: Yeah. So, given that, then would you
15 agree with the statement that no matter what rate was
16 charged for electric vehicle charging, including zero,
17 the rate would be just and reasonable, because the
18 shareholder would be left whole?

19 MR. CHRISTIAN: It depends which rate we're talking
20 about. If we're talking about the electric vehicle
21 pricing, then no, I don't think that's right. I think
22 that the Commission is obliged to respond to both the
23 imperatives of the Utility's (inaudible) rate setting
24 provisions must strive to find and just reasonable
25 rate within those terms, as those terms are set out in
26 sections 58 to 61. And, in addition, must allow all

1 the costs to be recovered from all ratepayers pursuant
2 to section 18(2) of the *Clean Energy Act*.

3 And so to accommodate both those
4 imperative, the Commission, I don't think, is free to
5 pick any rate it wants. It needs to find a rate that
6 responds to the *Utility Commission Act*, fair, just,
7 and reasonable standard. The idea that rates should
8 either have an economic basis or a full cost of
9 service basis. And that's why we say the revenue
10 maximizing rate, even though it's difficult to
11 determine, is the one that is -- is what the
12 Commission is obliged to take.

13 So, the Commission to simply say it
14 doesn't matter what the rate -- the electric vehicle
15 pricing rate is because all costs are going to be
16 recovered eventually, with respect, I don't think
17 that's correct. I think the Commission should be
18 looking at its obligations, both under the *Clean*
19 *Energy Act* and under the *Utilities Commission Act* in
20 its normal rate setting jurisprudence. And in that do
21 its best, despite the challenges, in mirroring those
22 two objectives.

23 THE CHAIRPERSON: So, to state it another way then, the
24 just and reasonable test, in your submission, is only
25 met by minimizing the cross-subsidization from other
26 ratepayers?

1 MR. CHRISTIAN: I would say that you can only attempt
2 to meet it, of course, we've talked about that
3 already, but to the extent it's ignored, then I think
4 the Commission is not respecting the obligations put
5 on it by the legislature under section 58 to 61.

6 THE CHAIRPERSON: Okay, thank you.

7 MR. CHRISTIAN: And I think those questions actually
8 covered off the rest of what I wanted to say on this
9 topic. That was rate design consideration number one.
10 And I was going to do a bit of a deeper dive on that.
11 I think that covers off what I need to say on that
12 topic.

13 I'm going to go now -- check I don't have
14 any instructions. I don't.

15 So I'm going to take a deeper dive into the
16 rate design consideration number two, that is the
17 avoidance of a non-level playing field. And the first
18 question is, that I'm going to address, is what
19 exactly does a level playing field refer to. And in
20 my submission it's not self-evident, it has a meaning
21 that we don't have a good handle on. But I'm going to
22 refer to what's effectively a definition from the
23 website for the organization of Economic Cooperation
24 and Development, commonly referred to the OECD. And
25 that website reference is
26 www.oecv.org/trade/topics/levelling-the-playing-field.

1 And what the OECD says, with respect to
2 level playing field, is as follows:

3 "Making trade work for all implies that we
4 also address concerns around the world that
5 competition in the global economy is not
6 'fair', that it is..."

7 And these are the key words,

8 "...distorted by market barriers and
9 government actions that favour companies and
10 products that are not necessarily the best.
11 A level playing field in global trade means
12 that all countries and firms compete on an
13 equal footing to offer consumers everywhere
14 the widest possible choice and the best
15 value for money."

16 So, those words are of course stated in a
17 global trade context but in my submission they're
18 equally applicable to understanding at a fundamental
19 level, a definition level, what we're talking about
20 when we talk about a level playing field. And the two
21 points in particular that come out of that OEC
22 definition are the fact that a government actor needs
23 to be involved. I think the distortion by market
24 barriers or government actions is kind of an essential
25 element to understanding the level playing field
26 issue.

Proceeding Time 2:30 p.m. T14

1 And that ultimately, at the highest level,
2 I realize not in this specific context necessarily in
3 this proceeding, but of the kind of fundamental level
4 maybe is better than highest level. The fundamental
5 level in playing field, the level playing field
6 ensures widest possible consumer choice, and the best
7 value for money for consumers.

8 In light of the Greenhouse Gas Regulation,
9 section 5, and the *Clean Energy Act* section 18, one
10 might not unreasonably make at least a superficial
11 inference that those government enactments have been a
12 cause of an unlevel playing field, insofar as public
13 utilities are entering into that market. But, in BC
14 Hydro's submission, it would be wrong to draw that
15 conclusion.

16 Quite the contrary. We think that it's
17 better to think of the Greenhouse Gas Regulation
18 section 5 and *Clean Energy Act* section 18, as allowing
19 public utilities to enter into the market. The normal
20 regulatory regime for public utilities would make it
21 virtually, if not impossible, very difficult for
22 public utilities to enter into that market. Section
23 18 of the *Clean Energy Act* and section 5 of the
24 Greenhouse Gas Reduction Regulation collectively
25 reduce government interference in the market, and
26 enable participation by the public utilities in the

1 market that wouldn't otherwise not be possible.

2 The second thing I would note with respect
3 to the level playing field definition, and that comes
4 directly out of the CEA section 18 provisions with
5 respect to full cost recovery, that's section 18(2),
6 is to note that the fact of subsidizing the service,
7 or the fact that service is subsidized does not
8 necessarily imply a non-level playing field. And so,
9 the fact that BC Hydro's pricing will not recover the
10 full cost of service does not necessarily mean that it
11 is not a level playing field. That fact alone does
12 not establish a non-level playing field.

13 And in this case, I will refer again to
14 some Suncor evidence. It's clear, for example, BC
15 Hydro submits that Suncor is and will continue to
16 provide service, its service, on a subsidized basis.
17 It's got a long-term view of profitability, but in the
18 meantime it is not recovering its costs, and therefore
19 its costs are being subsidized either by its
20 shareholders, or its other customers.

21 So, we would say that vis-à-vis other
22 market participants, BC Hydro is in the same position
23 as BC Hydro, albeit for different reasons. Suncor has
24 deep pockets, and has a long-term objective of
25 profitability as opposed to a short term one. BC
26 Hydro is in the market because of CEA, Section 18 and

1 GGR section 5, it wants to advance the public policy
2 objective of electric vehicle adoption. The big
3 difference between BC Hydro and Suncor in terms of
4 their willingness to provide a subsidized service, I
5 think, I submit, is actually the time period over
6 which the two entities are in that market. And I'll
7 be talking about time periods shortly.

8 To summarize, the legislation does not make
9 a non-level playing. The legislative impetus for BC
10 Hydro to be in this market by itself doesn't create a
11 level playing field, nor is it a fact that BC Hydro is
12 going to be providing service under its proposed rates
13 that would be effectively subsidized by other
14 customers. That also does not by itself create a non-
15 level playing field.

16 THE CHAIRPERSON: Mr. Christian, it seems to me there
17 is a difference however between BC Hydro and Suncor.
18 Its customers. And it's one thing to say that there's
19 a similarity, because in both cases the other
20 customers are subsidizing the lower price of the
21 electric vehicle charging services.

22 But, in Suncor's case, presumably, I'm
23 making the presumption that Suncor is a competitive
24 company working in a competitive market. It can't
25 just add costs on to other customers, it has to ensure
26 that the costs, the goods and services that it's

1 adding costs onto, continue to be competitive in that
2 market, in whatever market those are in.

3 Whereas BC Hydro's customers are captive,
4 they have no other place to purchase electricity. So,
5 to ask them to subsidize, or require them to subsidize
6 electric vehicle charging means that they're going to
7 be paying more money for their electricity. And they
8 can't go somewhere else to get that electricity.

9 Whereas when Suncor adds -- and I'll use Suncor here
10 as a proxy for any competitive company --

11 MR. CHRISTIAN: Exactly.

12 THE CHAIRPERSON: When Suncor adds a cost onto another
13 good or service that another customer is going to
14 purchase, they can say "Well, I'm not going to buy
15 that from Suncor anymore, I'm going to go and buy it
16 across the street from someone else."

17 So, it seems to me that when the OECD is
18 talking about level playing fields, and talking about
19 government involvement in playing fields, this is
20 exactly what they speak of, is that the deep pockets a
21 government have are different from the deep pockets
22 that a corporation has, because the ability of
23 government, and a regulated monopoly like BC Hydro,
24 their ability to raise money from other people is
25 different from a competitive company's ability to
26 raise money from other people.

1 **Proceeding Time 2:35 p.m. T15**

2 And so given that, that means that
3 shareholders are perhaps more likely to have subsidize
4 something in the competitive -- in a situation like
5 this, in a competitive market. Whereas BC Hydro's
6 shareholders are completely insulated from that.

7 So, I'm not sure I understand your
8 comparison in that regard.

9 MR. CHRISTIAN: I think the comparison simply is that
10 the mere fact of subsidization does not by itself
11 evidence a non-level playing field. Because we know
12 that Suncor, at some level, whether it's through its
13 shareholders or through its other customers who are
14 paying for services slightly higher but are in fact
15 are captive because of the location of a Petro-Canada
16 gas station, for example. Whether that subsidization
17 is carried by the shareholders of Suncor or other
18 customers, the point is the mere fact that Hydro is in
19 a position to carry the costs of the service even with
20 prices that don't recover cost of service means it's
21 the same on that substantive point as Suncor.

22 But to go to your first question, of
23 course, or to your first observation in this line of
24 inquiry, it is true that BC Hydro's customers who are
25 going to be carrying the cost of the service that are
26 not carried by the electric vehicle customers

1 themselves have nowhere else to go with their
2 electricity. There's no question of that. But that
3 just underscores, in my view, the importance of the
4 revenue maximization goal, ultimately. From a
5 fairness perspective, quite aside from anything else,
6 that's what the Commission should be striving to do,
7 minimize the cost that other customers of BC Hydro
8 will have to bear to extent that charging prices are
9 less than the cost of service.

10 THE CHAIRPERSON: So you would agree then -- so I would
11 agree with you that, yes, there is a subsidization in
12 both cases when it's a government actor or regulated
13 monopoly actor, or whether it's a competitive actor,
14 there's subsidization in both cases. But would you
15 agree that the nature of the subsidization is
16 considerably different, and when you apply the OECD's
17 definition that you told us, talked about earlier,
18 then that's when the level playing field -- that
19 becomes an issue of a level playing field.

20 MR. CHRISTIAN: I think perhaps the challenge that
21 we're having is that I don't see the level playing
22 field is a binary thing. It's not like playing
23 fields, that is competitive markets are either fully
24 competitive or not fully competitive. They're not
25 perfectly level or perfectly unlevel. There are
26 degrees of levelness of the playing fields, if I can

1 use this expression.

2 THE CHAIRPERSON: Okay.

3 MR. CHRISTIAN: And so in the absence of *Clean Energy*
4 *Act* section 18 and *Greenhouse Gas Reduction Regulation*
5 section 5, there is no level playing field because BC
6 Hydro is not going to get into that market, nor is
7 Fortis Electric. And so one might -- which is why I
8 say that those provisions at least allow entry into
9 the market by BC Hydro and Fortis Electric.

10 Now, whether they create and establish a
11 perfectly level playing field, that's not my position,
12 that's not my argument. My main position is they
13 actually level what would otherwise be impossibly
14 unlevel playing field for the public utilities that
15 we're talking about and make it at least possible for
16 them to enter into the market.

17 THE CHAIRPERSON: Okay, thank you. Thank you.

18 MR. CHRISTIAN: I mentioned earlier when I was talking
19 about the challenges of assessing level playing field
20 issues that different business models can make that a
21 bit of a challenge. And so I just want to refer to
22 some evidence that came out in this proceeding that
23 talks to that.

24 Firstly, Ms. Jubb, in her testimony, noted
25 that the Commission in its gasoline and diesel price
26 enquiry concluded that it was not uncommon for fuel

1 suppliers to sell at less than cost of service to
2 drive traffic to an associated convenience stores.
3 And she commented on that Commission conclusion at
4 transcript 1, page 85, line 16 to 26.

5 In the specific case of Suncor I note a
6 number of instances of its business case that came
7 out. Of course, it doesn't have a business case on
8 the record, we wouldn't expect it to, that's not a
9 complaint. But aspects of it did become apparent over
10 the course of the proceedings, so I'd just like to
11 take the opportunity to point out a few of those. And
12 so the first observation is, the first bit of evidence
13 that I'll refer to, is Suncor's evidence that its
14 charger siting is done, at the outset at least, at a
15 high level perhaps, to allow it to be truthful to its
16 marketing claim. And I think the marketing claim, if
17 I recall, was every 250 kilometres a person could
18 charge up at a Suncor station or a Petro-Canada
19 station. So, the siting is done to meet that
20 objective. And that was at transcript Volume 3, page
21 438, line 1 to 10, and again at line 440, line 24,
22 page 441, line 1.

23 And the next thing that relates directly to
24 that is Suncor's plans to put its charges at current
25 retail locations, the Petro-Canada stations. Which
26 means that its connection costs, the cost of

1 connecting to BC Hydro's service, or Fortis in the
2 case of a station in the Fortis service territory,
3 cannot be minimized. Their marketing claim drives
4 their locationing, their location drives their siting
5 costs. And that's at transcript 3, page 457, line 1
6 to 3.

7 Suncor emphasized that its chasing a
8 different premium market compared to BC Hydro. It
9 effectively wants to provide more energy in less time.

10 **Proceeding Time 2:41 p.m. T16**

11 It's got higher level service charges than BC Hydro,
12 which is mostly 50 kW chargers. So, that premium
13 market that I did chasing a different market comes up
14 in Suncor's evidence at transcript Volume 3, 438, line
15 11, to 439, line 26. And again, transcript Volume 3,
16 page 487, lines 1 to 23.

17 And then at transcript 3, page 510, lines 9
18 to 14, Suncor went on to say that that premium service
19 requires a high enough price differential between it
20 and BC Hydro to justify its service.

21 At transcript 3, 475, line 2 to 476, line
22 12, Suncor defined a success in terms other than
23 profit. And then Suncor pricing was not based on a
24 cost recovery model, at least at this time, and that
25 is transcript 3, page 517, line 9, to 518, line 8.

26 So, none of this is to denigrate, of

1 course, Suncor's business model, whatever it is, but
2 it's simply to show that Suncor doesn't have the kind
3 of default, standard profit maximization commercial
4 objectives, at least at this time, in this market,
5 that one might expect from a commercial entity, or
6 from a more generally non-public utility entity.

7 And so, to say that that is important for
8 the Commission to appreciate when it's assessing level
9 playing field arguments, simply because other would-be
10 entrants into the market are going to have similarly
11 complex, not obvious business plans and business
12 rationales for their pricing schemes for the location
13 of their charging stations and their overall business
14 model. What are they trying to achieve in the market?
15 They're all going to have different objectives.
16 They're not going to be readily obvious or the default
17 commercial and profit maximizing objective that one
18 might expect.

19 And at the end of the day, all that is to
20 say that in BC Hydro's submission, the Commission
21 should approach the level playing field consideration
22 with some caution, because it's not as black and white
23 as it implied.

24 The next aspect of level playing field I
25 want to address is the long term versus the short
26 term. And I would say that BC Hydro's electric

1 vehicle charging service plan is modest in temporal
2 scope. Temporal scope, by that I'm talking about the
3 fact that its plans to date right now at least go only
4 to the date that's in the *Clean Energy Act* section 18
5 and GGR section 5 in particular, and that is December
6 31, 2025. BC Hydro has plans to have 325 stations in
7 service by the end of 2025. That December 31, 2025
8 date is critical. It's a drop-dead date in the GRR,
9 and stations must be in service by then to get the
10 benefit of the *Clean Energy Act* section 18(2)
11 provision, and section 18(3) provision.

12 Specifically from the GRR, the public
13 utility must reasonably expect on the date the public
14 utility decides to construct or purchase an eligible
15 charging station that the station will come into
16 operation by December 31, 2025.

17 And we would say that the establishment by
18 the province of that drop-dead date of December 31,
19 2025, is consistent with the recommendations of the
20 Commission in its Phase II report. At page 3 of the
21 executive summary, page iii. "In the quantum of
22 investment..." -- this is the Commission's words now,
23 "In the quantum of investment by non-exempt
24 public utilities, allowed by prescriptive
25 preparation be carefully limited to ensure
26 that the private sector isn't unfairly

1 impacted by non-exempt utility ratepayers
2 are not put at undue risk."

3 So, BC Hydro's submission is that that
4 December 31, 2025 date in its proposal of 325 -- or
5 not its proposal, its plans to put in 325 charging
6 stations is a reflection directly of the Commission's
7 recommendation of the government on that point.

8 Now, to put some numbers around that,
9 Suncor's evidence, Exhibit C20-4, at paragraph 8,
10 cites a B.C. Government -- not a BC Hydro but a B.C.
11 Government study, and that B.C. Government study says
12 that -- in fact it's relied on by Suncor, says that
13 6,710 electric vehicle public charging stations will
14 need to be established in B.C. by 2040 in order to
15 meet the province's public policy objectives. And so,
16 our submission on this point is that BC Hydro's
17 electric vehicle stations will ultimately compromise a
18 very small share of the ultimate market base.

19 **Proceeding Time 2:45 p.m. T17**

20 It's not in the legislation today. And based on the
21 fact that BC Hydro, unless it can charge a full cost
22 recovery rate, in an unregulated world, will be
23 limited to the 325 stations that it has; that it
24 effectively gets the benefit of the regulatory regime
25 until 2025. And that 325 units, charging stations,
26 out of 6,710 is five percent, approximately.

1 So, what's the gist of all that or the
2 import of that? Now, BC Hydro may be a market leader
3 now, and there was evidence to that from Suncor. I'm
4 not -- I don't think BC Hydro has a position on
5 whether it's a market leader now. But let's accept
6 for the purpose for this discussion that Suncor's
7 correct that BC Hydro is the market leader in the
8 electric vehicles market. It doesn't seem likely that
9 it's going to be a market leader for a long time.
10 It's going to have that relatively small share that
11 gets established at the outset for a few years via the
12 *Clean Energy Act* section 18 and GRR section 5.

13 Suncor, for its part, is pretty clear that
14 it has long-term ambitions in the market. And just
15 one of the references I noted on that point was
16 transcript Volume 3, page 475, lines 11 and 12.

17 So, again, to the extent there's a level
18 playing field issue arising from BC Hydro's initial
19 entry into the market and whatever relative benefit it
20 gets from the legislative scheme, BC Hydro says that
21 under the law and the facts we have on the record in
22 this proceeding, the Commission can infer that that
23 advantage is a short-term one and not a long-term one.

24 Another level playing field --

25 COMMISSIONER LOCKHART: Mr. Christian?

26 MR. CHRISTIAN: Yes?

1 COMMISSIONER LOCKHART: Do we have evidence on the
2 record that BC Hydro intends to stop at 325 stations
3 at the end of December and that that's the extent of
4 its intent?

5 MR. CHRISTIAN: What we have on the evidence,
6 Commissioner Lockhart, is that BC Hydro has a plan to
7 put those 325 units in by December 31, 2025. We know
8 that the cost recovery rules that allow Hydro to
9 recover its costs are only applicable to those 325
10 stations. And we know that that current pricing,
11 current market pricing, is much less than a full cost
12 of service rate that would be required in order for
13 Hydro to continue to provide that service after that
14 date.

15 So, no, we do not have a statement or
16 evidence, or a commitment, or anything of that sort.
17 What we have is a law that establishes a, kind of,
18 room for BC Hydro, and again Fortis Electric, to enter
19 into the market. We know that that room is created
20 for a very short period of time. And we know that the
21 amount of stations that BC Hydro is going to be
22 putting into service in that short window of time is a
23 fraction of what Suncor says and what the government
24 says is going to be required over the longer term in
25 order to achieve the electric vehicle adoption
26 objectives of the province.

1 COMMISSIONER LOCKHART: We have no idea that that law
2 is not going to be extended or continued?

3 MR. CHRISTIAN: There is always uncertainty about the
4 law. And, as a general rule -- sorry, just give me a
5 moment.

6 The Commission, I submit, is obliged to
7 accept the law as it is and it's not permissible to
8 speculate on what the law might be in terms of
9 rendering a decision, at least in this proceeding, on
10 the subject matter before the Commission panel.

11 COMMISSIONER LOCKHART: All right, thank you.

12 COMMISSIONER FUNG: Mr. Christian, this is follow-up to
13 Commissioner Lockhart's question though, there's
14 nothing in the language of the GGRR currently that
15 would cap BC Hydro's investment in terms of charging
16 stations before December 31st, 2025, is there?

17 MR. CHRISTIAN: That's correct. So nothing prohibits
18 Hydro from making further investments, but one can
19 expect that any electric vehicle charging stations
20 that BC Hydro puts into service after that date, to
21 the extent that BC Hydro can't recover the costs of
22 those servicing rates, will be the province eating
23 those costs and not BC Hydro through a disallowance
24 through the BC Hydro's revenue requirement and the
25 costs associated with that. That would be the normal
26 default regulator response to the service, right? And

1 that indeed -- it's because of that normal default
2 regulator response that the *Clean Energy Act* section
3 18 and GRR section 5 exist. So, they create that
4 space to enter.

5 They don't preclude a continued
6 participation in that market after that date, but in
7 practical terms, based on the evidence we're seeing on
8 the relative costs and revenues associated with the
9 service, we say that one can reasonably infer that
10 Hydro's participation in the market will be for a
11 limited period of time and not over the 40-year period
12 -- or, sorry, the 20-year period that is the subject
13 of that government study from which this 1,710 station
14 number came from.

15 COMMISSIONER FUNG: Okay, thank you.

16 THE CHAIRPERSON: Sorry, I just -- I'm sorry, I'd just
17 like to ask a follow-up question to both Commissioner
18 Fung and Commissioner Lockhart's questions. So, do we
19 -- is it on the record that Hydro will not build more
20 than, what was it, 325 stations between now and 2025,
21 is that on the record, Mr. Christian?

22 MR. CHRISTIAN: No, I don't believe it's on the record
23 and I don't believe I stated that either.

24 THE CHAIRPERSON: Okay.

25 MR. CHRISTIAN: What I said is that there's a plan to
26 build 325 stations before December 31, 2025. That

1 aspect of level playing field. I've touched on this
2 already, but I wanted to do a bit of a deeper dive
3 into this, and that is the actual rates of exempt
4 service providers in comparison to BC Hydro's proposed
5 rates. And as I've said already, BC Hydro's proposed
6 pricing is squarely in the middle of the pack with
7 respect to other service providers. And the best
8 price comparison was provided in this Exhibit B-12-1
9 and that was the table that shows the different prices
10 of all the different service providers that BC Hydro
11 was able to identify at that time. And in comparison
12 to the prices charged by the participants as shown in
13 that exhibit, BC Hydro's prices seem to be comparable.

14 Now, we do bear in mind, and do acknowledge
15 that apples to apples comparisons are difficult. Both
16 (inaudible) Suncor agree with that, and there is a
17 number of issues that all -- that make particular
18 issues that you can see when you look at that table
19 that make apples to apples comparisons challenging.
20 So, the relative availability of amenities at charging
21 stations of course is an issue. The different
22 charging rates, the maximum charging rates is of
23 course something that makes the pricing difficult to
24 compare directly. The availability and use of
25 promotional schemes, to exempt EV -- for exempt --
26 sorry, that are available for exempt EV charging

1 providers. And here I reference the arrangement that
2 Suncor has with the bank RBC for a free charging
3 rebate program that was mentioned at transcript 3,
4 page 553, line 17 to page 555, line 25. And then
5 lastly, the freedom that exempt EV charging providers
6 have to set prices without -- to serve whatever
7 business objective they happen to have in mind.

8 So, all those factors mean that direct
9 price-to-price comparisons are not one that should be
10 given determinative weight, but they should be given
11 significant weight, we say, despite those challenges.
12 And that's because when you look at the pricing, Hydro
13 comes in right at the middle. Again, Exhibit B-12-1,
14 at the 50 kW level, BC Hydro's proposed 21 cents a
15 minute rate for 50 kW is higher than the rate offered
16 by Ministry of Transportation which currently offers
17 the service at free, Nanaimo Airport which offers the
18 service for free, and slightly higher than North
19 Vancouver which offers the service at 20 cents per
20 minute. And like BC Hydro none of those providers is
21 offering any amenities.

22 The BC Hydro proposed rate for the 50 kW
23 chargers is lower than some of the other service
24 providers. It's lower than Electrify, which is
25 charging a 28 cents per minute with some amenities.
26 Suncor, 27 cents per minute with amenities, and Tesla,

1 25 cents per minute, again with some amenities.

2 Only two of the entities proposed on that
3 table, proposed or offer substantially similar service
4 that is no amenities at a higher rate, and that's
5 Fortis, its proposal in front of the commission still
6 for final resolution, as I understand it is 27.3 cents
7 per minute, but of course Fortis and BC Hydro are not
8 in the same service territory, so they are not
9 actually competitors.

10 And there is the City of Vancouver which
11 offers its service at a slightly higher rate than BC
12 Hydro at 23.5 cents per minute. And so, we say that
13 an examination of that table really kind of is the
14 evidence that demonstrates that Hydro's proposed
15 pricing is in the middle of pack, and from a level
16 playing field, it's not like BC Hydro is coming in
17 super low trying to undercut a market where there is a
18 market where there is significant free pricing and low
19 pricing still.

20 Now, I want to take the opportunity to note
21 that yesterday BC Hydro filed Exhibit B-19 in this
22 proceeding. And Exhibit B-19 explains an
23 implementation issue that BC Hydro has had with its
24 electric vehicle service provider that it's trying to
25 resolve, and that was only identified somewhat
26 recently. Namely that its pricing, which is meant to

1 be exclusive of GST, has actually been charged on an
2 inclusive of GST basis. So, the pricing of 21 cents
3 per minute is meant to be a little bit higher with the
4 addition of GST, but in fact it's not, or hasn't been
5 to date, and it will be fixed soon.

6 The reason I bring it to the attention to
7 the Commission is in case there is any doubt about
8 whether or not my submissions that I've just made
9 count for that information provided in that exhibit,
10 and they do account for it in my submission.
11 Everything I just said about BC Hydro being in the
12 middle of the pack with respect to its pricing remains
13 the same even when that five percent adder is put on
14 to the pricing at the electric vehicle charging
15 stations.

16 **Proceeding Time 2:56 p.m. T19**

17 And then my last few comments about level
18 playing field. A level playing field is not about
19 removing all of the advantages that different
20 companies have in a competitive market. They all come
21 to a competitive market with different locations,
22 different size, different, you know, financial
23 resources. They come in at different times. They
24 have more or less clever engineering staff and
25 marketing staff. And those are all differences
26 between companies that actually create competitive

1 markets and give the advantages of lower consumer
2 costs and greater consumer choice. So it's important
3 for the Commission not to believe that -- or take away
4 from the concept of minimizing level playing field
5 that all entities should be treated -- effectively
6 treated as if they were the same or made to be treated
7 the same. They all come into the market with their
8 own business plans, their own staff, their own
9 advantages and disadvantages. That is the essence of
10 a competitive market.

11 And, lastly, the level playing field is not
12 about ensuring the exempt service providers can earn a
13 return on their investment. Exempt service providers,
14 exempt EV service providers are not burdened by, but
15 nor may the benefit from the regulator regime that
16 applies to regulated public utilities.

17 And that takes me to rate design
18 consideration number three, supporting electric
19 vehicle adoption. Again, I was going to do a bit of
20 deeper dive. I won't be talking about this issue as
21 much. But just to observe that looked at in isolation
22 the encouragement of EV adoption is a public policy
23 objective that would suggest a lower price and perhaps
24 even a zero price. And that's because a lower
25 electric vehicle charging rate will encourage the
26 adoption of electric vehicles by lowering the cost of

1 owning and operating an electric vehicle. The lower
2 the cost of owning and operating an electric vehicle,
3 the more one can expect people to buy electric
4 vehicles and eventually switch over from their fossil-
5 fuel powered vehicles. And it seems self-evident that
6 an approach of lower pricing would be appropriate, at
7 least in the near term, from the narrow perspective of
8 this one consideration. That is, if you looked at
9 this consideration in isolation from others.

10 And in fact, as we know, even when you
11 think about the other options we know that BC Hydro
12 has zero pricing which we've had in place, I think,
13 from 2013 until this fall -- into this spring, I
14 should say. It did not dissuade Suncor from entering
15 the market.

16 We would say that over the longer term
17 though, the longer term, the policy of below-cost
18 pricing would probably discourage the entrance of new
19 participants and impede the adoption. So, again, it's
20 the difference between long-term and short-term. So,
21 we acknowledge that over the longer term a policy
22 below cost, unnecessarily low pricing, does have a
23 problematic effect on the adoption of EV markets
24 because it would discourage other entrants in. But,
25 again, we say that's a long-term problem and not a
26 short-term issue, given Hydro's role and BC Hydro's

1 ability to enter into the market before the four-year
2 period from now to the end of 2025. The Commission
3 should not be unduly concerned about setting a lower
4 price, in terms of achieving what are long-term and
5 provincial objectives.

6 So, now I'd like to say just a few words
7 before I move on to specific cases, to tie this all
8 together. So, BC Hydro's proposed pricing, we say, is
9 consistent with the Commission's rate setting
10 requirements under the *Utilities Commission Act*. It's
11 intended to maximize revenues from the service and
12 therefore minimize cross-subsidization from customers.
13 It's also based on the cost of general service, the
14 general service charges that electric vehicle chargers
15 collectively would pay if they were buying the
16 service, kind of, together.

17 It's consistent with the policy objective
18 of encouraging electric vehicle adoption. It's
19 consistent with a level playing field consideration.
20 It's squarely within the range of market prices. And
21 reflects the short-term role of non-exempt providers
22 in market versus the long-term role we can expect to
23 see, at least from Suncor and those other larger
24 entrants that we will see coming in the market over
25 the next 20 years.

26 Slide 11 in the BC Hydro's SRP

1 presentation, which is Exhibit B-13, shows a range of
2 pricing for 50 kilowatt stations that reflects BC
3 Hydro's best judgment on where the likely revenue
4 maximizing range lies, that's between 17 cents and 25
5 cents, acknowledging of course that we don't have a
6 quantitative model to show to the Commission to
7 explain why that's the -- the price is the right price
8 within that range. The 21 cents, we say, is the right
9 price, it's the best price. I note that the range
10 between 17 and 21 cents is not an equal distribution.
11 BC Hydro doesn't say that it's equally likely that 17
12 cents is going to be the revenue maximizing price is
13 25 cents. That's at transcript 2, page 292, line 8 to
14 18.

15 Nevertheless, the provincial policy
16 objective of encouraging EV adoption, as I said, at
17 least in the short term, does suggest a lower price in
18 this field rather than the higher price. So we, BC
19 Hydro, would submit that when the Commission comes to
20 set EV pricing, if it has regard to that table, that's
21 slide 11 in the SRP presentation, that it should err
22 on the side of the lower end of the range rather than
23 the higher end of the range.

24 Hydro submits that increasing the pricing
25 above the proposed rate, and in particular, above the
26 rate set out in that table, that is above 25 cents for

1 the 50 kW service, would not level the playing field.
2 It would simply give exempt service providers more
3 headroom to increase their pricing and reduce their
4 near-term losses. This should not be a BCUC
5 objective.

6 **Proceeding Time 3:02 p.m. T20**

7 That would also simply decrease utilization
8 by BC Hydro's service resulting in less revenue and
9 less EV options. So, in short, the table on slide 11
10 sets out the range which in BC Hydro's best judgment
11 reflects the appropriate pricing at this time given
12 all the rate design considerations of reflected. In
13 BC Hydro's submission the Commission should and can
14 select the 21 cents proposed by BC Hydro and should
15 err on the side of the lower end of the scale bearing
16 in mind the short-term nature of the market that we're
17 talking about, public utilities being (audio drops).

18 Ultimately, BC Hydro estimates that the
19 Commission can and should defer to BC Hydro's judgment
20 on the proposed pricing. There is nothing on the
21 record to suggest that BC Hydro has a legitimate
22 pricing objectives, or it's notably deficient in its
23 analysis. BC Hydro's rate design group did not come
24 to this task trivially, there has been a lot of work
25 put into it, and they are in many respects the experts
26 in terms of establishing pricing for electric services

1 in the province, with FortisBC similarly having a kind
2 of hands-on role.

3 And that concludes what is really in many
4 ways the summary of the argument for BC Hydro's
5 proposed rates. I note that we've been going for it
6 looks like an hour and a half now. If the Commission
7 was inclined, it would probably be the useful time to
8 take a break, because the rest of my submissions is
9 going to be dealing with specific issues that came up
10 in the course of the proceeding and concluding with my
11 response to the Commission's five questions.

12 Mr. Chairman, you are on mute.

13 THE CHAIRPERSON: Thank you. Is 10 minutes sufficient,
14 Mr. Christian?

15 MR. CHRISTIAN: That would be excellent, thank you very
16 much.

17 THE CHAIRPERSON: Okay, we'll come back at 3:15 then,
18 thank you.

19 **(PROCEEDINGS ADJOURNED AT 3:04 P.M.)**

20 **(PROCEEDINGS RESUMED AT 3:14 P.M.)** **T21/22**

21 THE CHAIRPERSON: Whenever you're ready.

22 MR. CHRISTIAN: Thank you very much, appreciate it.

23 I'm going to go back to one submission I
24 made earlier, the question, I can't remember, I think
25 it might have been Commissioner Fung asking me this
26 question, with respect to BC Hydro's plans and whether

1 BC Hydro might build more or less than the 325 it
2 currently plans to build. And I said yes, it could --
3 there is no limit in the regulation, and I think
4 that's where maybe I've got off track a little bit.

5 There is in fact a sort of limitation
6 within the Greenhouse Gas Regulation. And that arises
7 from the definition of the eligible charging stations.
8 And so in municipalities of greater than 9,000 people,
9 the public utilities, BC Hydro and Fortis, are limited
10 to putting in only about one, I think it's one
11 electric vehicle charging station per approximately
12 9,000 people in a municipality. So, that does act not
13 as a hard limit on the number of charging stations
14 that public utilities might put into service between
15 now and December 31, 2025, but it acts as a, if you
16 will, a soft limit. Clearly with that limit, kind of
17 completely dominating the market isn't possible. So,
18 I just wanted to add that, thank you for that.

19 COMMISSIONER FUNG: Actually, Mr. Christian, I'm glad
20 you raised that point, because I do have a follow-up
21 question if you don't mind.

22 MR. CHRISTIAN: Of course.

23 COMMISSIONER FUNG: Assuming that we buy your argument,
24 and I'll persuade it that, you know, because BC
25 Hydro's intention really currently is limited to 325
26 stations that they plan to build by December 31st,

1 2025, that would have a, if I can put it, perhaps a
2 minimal impairment in terms of the level playing field
3 that we're seeking to maintain. If we accept that
4 argument, would it be appropriate for us to condition
5 our approval of the rate that is being sought by BC
6 Hydro at this time in this application to those 325
7 stations that BC Hydro has stated that it intends to
8 build by that date)?

9 MR. CHRISTIAN: With respect, Commissioner Fung, I
10 don't believe that would be permissible. I don't
11 think the establishment of pricing can be conditioned
12 on a matter that is largely been left by the
13 legislature to BC Hydro. So, BC Hydro's 325 station
14 plan is not described by the province, it is described
15 by BC Hydro. It's its current plan that it feels it
16 can effect within the sandbox, if you will, that's
17 been established by the Greenhouse Gas Reduction
18 Regulation. So, for the Commission to condition an
19 order for pricing on BC Hydro's current plans would, I
20 suggest, be interfering with what the legislature's
21 intention is.

22 I would also suggest that to the extent
23 that it is -- just thinking a little bit off the top
24 of my head here, if that's permissible, I may have to
25 come back to this in reply, but it seems to me that
26 conditioning your rate is going to be very

1 challenging. If BC Hydro exceeds 325, then what
2 happens to the pricing? Is it no longer -- it clearly
3 can provide the service, and the question simply for
4 the Commission is not whether it can provide the
5 service, it is whether it should be charging a rate
6 for the service or not. And it didn't charge a rate
7 at all for the service until it filed its application
8 this year.

9 So, conditioning a rate order in this
10 proceeding or even in a future proceeding on something
11 that is within the bailiwick of the province and BC
12 Hydro to decide seems to have that practical issue as
13 well. How do you kind of condition a rate if you can
14 -- I guess I'm not really following how that would
15 work.

16 But anyway, I think the main point is, I
17 don't think that would be permissible, because I think
18 that interferes with the jurisdiction really that the
19 province effectively is giving Hydro -- jurisdiction
20 is not the right word, but their kind of
21 responsibility that it has given BC Hydro to make
22 those plans to achieve those objectives.

23 COMMISSIONER FUNG: But you can see my difficulty in
24 terms of accepting your argument, that the five
25 percent participation by BC Hydro in a market of
26 6,710, may be minimal, and therefore, perhaps

1 acceptable, when it comes to interference with a level
2 playing field, but as you state, there is no limit on
3 what BC Hydro could conceivably be building by 2025.
4 So, nothing stops BC Hydro the moment after it
5 receives approval of this application from choosing to
6 build 1,000 stations, for instance, practicalities
7 aside, by 2025.

8 MR. CHRISTIAN: Commissioner Fung, I think the gist of
9 my submissions, but there is a limit. In my response
10 to your questions before the break I was saying Hydro
11 might build more, or might less, but I was reminded at
12 the break that in fact there is a limit on what Hydro
13 can do, and that's because of the geographical site
14 limit that's inherent in the Greenhouse Gas Reduction
15 Regulations. So there is a soft limit on what BC
16 Hydro can do.

17 And I think, with respect, that, you know,
18 if BC Hydro's plan today was 1,000 rather than 325,
19 we'd be making the same argument. BC Hydro is given
20 the right to build electric vehicle charging stations,
21 it is given the right to provide the service.

22 **Proceeding Time 3:20 p.m. T23**

23 It's come to the Commission with a pricing proposal
24 that, from a level playing field perspective and from
25 a revenue maximization perspective, is far superior to
26 the zero pricing that it was offering the service at

1 prior to bringing its application to the Commission.
2 The only benefit that zero pricing has from those
3 three rate design consideration is that, to the extent
4 it continued, it would encourage the adoption of
5 electric vehicles. Clearly one of the rate design
6 considerations.

7 COMMISSIONER FUNG: Okay, thank you, Mr. Christian.

8 MR. CHRISTIAN: Thank you.

9 So, the issue, the first issues, I want to
10 deal with in my long list of specific issues is the
11 demand charge basis of the BC Hydro proposal. One of
12 the issues raised in this proceeding is whether BC
13 Hydro's proposed electric vehicle charging rates are
14 based on the appropriate underlying general service
15 rate schedule, and in particular whether it should be
16 based on the large general service rate schedules or,
17 as BC Hydro's proposed, whether it should be based on
18 the medium general service rate schedules.

19 And the issue was raised, as BC Hydro
20 understands, primarily in relation to BC Hydro's 50 kW
21 stations and 100 kW stations. So, by way of
22 background, BC Hydro provides general service pricing
23 based on consumption level. So, for meeting general
24 service, or MGS, that's for peak demand between 35 and
25 150 kW. The pricing is 9.62 cents per kilowatt hour
26 and \$5.38 per kW, it's a basic charge at 26.56 cents

1 per day. And large general service has -- is for
2 service of a peak demand in excess of 150 kW, and it's
3 priced at 6.02 cents per kilowatt hour and \$12.26 per
4 kW, and has the same basic charge.

5 All these prices are non-priced terms and
6 conditions of those respective services are, of
7 course, established by the Commission, or determined
8 and set by the BC [sic] under the *Utilities Commission*
9 *Act*. I thought I would make a point of emphasizing
10 that because at transcript Volume 3, page 507, 13 to
11 14, that is lines 13 to 14, Suncor's witnesses
12 testified that BC Hydro controlled the price. And
13 that, of course, is incorrect. The rates that BC
14 Hydro charges are its rates insofar as it's the rates
15 for Hydro's service, but they're always determined by
16 the Commission under the *Utilities Commission Act*.

17 Nevertheless, back to the main point, BC
18 Hydro's electric -- sorry, electric vehicle charging
19 service will be offered primarily at the 50 kW level,
20 at least for the near future. Currently there's 94
21 sites, 23 dual sites and a remaining 48 single
22 charging sites, that are at the 50 kW level. And
23 right now there's only 100 kW charging station that is
24 projected to be in service sometime this fall.
25 That's, by the way, the reference for that is the
26 application, PDF page 60.

1 So, adding to the charging stations, the 50
2 kW, 100 kW limits are maximum outputs that will rarely
3 be seen in practice at an individual station. But BC
4 Hydro acknowledges that it's more likely as time goes
5 on and the average demand capability of electric
6 vehicle increases that it becomes more likely that the
7 maximum demand of those charging stations will be
8 seen.

9 As I've said, BC Hydro in trying to grapple
10 with the question of how to establish pricing for the
11 electric vehicle charging service, chose the
12 methodology of considering what electric vehicle
13 charging customers would pay collectively as general
14 service customers and built up the rates from that.
15 So they had to make that choice between medium general
16 service and large general service.

17 And let's deal with the 50 kW charging
18 stations first. For both the single and duo kilowatt
19 service stations, the choice is relatively easy. In
20 both cases, whether it's a single or a duo 50 kW
21 station, peak demand at that station, again whether
22 it's a single or duo, will not exceed the 150 kW
23 threshold between medium general service and large
24 general service. So, the choice from BC Hydro's
25 perspective is easy with respect to 50 kW charging
26 stations, we based the pricing on the medium general

1 service.

2 With respect to the 100 kilowatt electric
3 vehicle charging stations, again, the question turns
4 -- or not again, but in this case the question turns
5 on whether there should -- there's going to be a
6 single station at a site or a duo station at a site.
7 Where there's a single station at a site, for 100 kW
8 service, the 150 kW threshold between MGS and LGS will
9 not be exceeded. And so for a single station 100 kW
10 charger, again, it's appropriate to base the price on
11 medium general service rates.

12 **Proceeding Time 3:24 p.m. T24**

13 Only at a dual station under kW services
14 the issues seem to rise from BC Hydro's perspective.
15 So there the choice is do you charge -- do you build
16 up the pricing for the dual 100 kW station on the
17 basis of the MGS rate or the LGS rate, knowing that
18 it's possible because it's a dual station that BC
19 Hydro will face instantaneous demand that might well
20 be in excess of a 150 kW threshold at least
21 occasionally. So there is a choice with respect to
22 the dual 100 kW stations and whether or not they
23 should be based on LGS pricing or MGS pricing.

24 BC Hydro chose the customer perspective, or
25 chose the MGS perspective largely because the customer
26 perspective, the customer who shows up at that station

1 would never actually see the 150 kW threshold because
2 the charger it would be connected to only has a
3 maximum capacity of 100 kW. So from a customer's
4 perspective it seemed appropriate to go with the MGS
5 approach, and that is described in transcript Volume
6 2, page 396, lines 17 to 24.

7 Now, reflecting the LGS pricing for those
8 dual stations also didn't seem appropriate for the
9 following reasons. For a customer, again, who is
10 buying service at 100 kW level, whether there's two
11 stations there or one station, there doesn't seem to
12 be a rational price difference from the perspective of
13 the customer. The customer is taking maximum 100 kW
14 service and so should be paying the same price
15 regardless of whether or not there's one station at a
16 site or two stations at a site. And simply put,
17 putting in two pricing machines, one for the dual 100
18 kW stations and a different pricing machine for the
19 single 100 kW stations we think would cause customer
20 unhappiness, and confusion, and misunderstanding, and
21 in turn -- not in a dramatic way, but in a modest way
22 at least undermine the objective of encouraging
23 electric vehicle adoption.

24 And then, of course, referring back to my
25 earlier commentary, there is in fact only one 100 kW
26 station coming out in the near future. So whether

1 it's a single station or a double station, the point
2 is almost mute we would say.

3 So in summary, with respect to its 50 kW
4 stations, BC Hydro submits that the MGS rate is the
5 appropriate basis to establish its electric vehicle
6 pricing. With respect to the 100 kW service we
7 similarly think that medium general service continues
8 to be the right way to go reflecting the customer
9 experience.

10 So the next issue I'm going to take on is
11 Suncor's -- what I'm going to refer to as their
12 minimum/maximum pricing proposal. In response to BCUC
13 IR 6.1 and in its testimony, Suncor proposed a pricing
14 regime for BC Hydro's electric vehicle charging
15 service. I'm going to read it onto the record so that
16 it's clear what we're talking about.

17 "If non-exempt utilities are required to follow
18 a regulatory proceeding to enable price changes,
19 Suncor recommends that the BCUC use the
20 proceeding to set a minimum (and possibly, a
21 maximum) rate within which non-exempt utilities
22 must operate their EV fast charging service, and
23 require non-exempt utilities to report annually
24 with evidence demonstrating their diligence in
25 ensuring maximum revenue directly from the EV
26 charging network to minimize the subsidization

1 of applying losses to all ratepayers."
2 That evidence by the way is the evidence I referred to
3 earlier in which we talked about Suncor supporting the
4 revenue maximization rule that BC Hydro says is the
5 most important objective for the Commission.

6 "This would include a system of surveying
7 competitor pricing to determine the appropriate
8 rate that could have been set to maximize
9 revenue. Given the differences in customer
10 needs, vehicle capability and individual
11 experience, BCUC should not set a specific rate
12 that is locked for the proposed three years."

13 So that's the Suncor proposal. I realize that the
14 Commission panel asked largely the same question, I'll
15 be dealing with that when I get to it. There's a few
16 nuances between what we understand the Commission
17 panel question to be and the Suncor proposal. I'll
18 deal with the Suncor one first, and then the
19 Commission panel question later.

20 So in response to the question from the
21 panel chair, Suncor agreed that the BCUC could or
22 would set triggers to require price changes within
23 that range, whatever that range is. But there is no
24 suggestion from Suncor and there is no other evidence
25 on the record on what such triggers might look like or
26 how they would be implemented. Indeed, it is unclear

1 on the record how they would be implemented. So the
2 idea of changing prices would require some triggers.
3 We can say that the -- you know, on this specific
4 point, the evidence simply isn't there in what this
5 would look like.

6 At transcript 3, page 489, line 6 to 17,
7 the Suncor panel acknowledged that it hadn't come to
8 grips with how that minimum rate could be set and it
9 wasn't in apposition to make recommendations. So,
10 again, we have a concept on the table before us, but
11 not a specific pricing proposal. Finally, there was
12 some uncertainty in the minds of Suncor witnesses
13 regarding the time periods that the rates would be
14 fixed for. In transcript 3, page 494, lines 1 to 10,
15 the Suncor panel initially seemed to suggest monthly
16 changes in pricing.

17 **Proceeding Time 3:29 p.m. T25**

18 But then later on acknowledged the costly
19 administrative nightmare associated with monthly
20 changes and reverted to -- but then simply reverted to
21 three years being too long. So we're left with a fair
22 bit of uncertainty about what the Suncor proposal
23 actually was.

24 At transcript 3, 516 to 816 -- or 516 --
25 sorry, I have to check this reference. I think it's
26 516, lines 8 to 16, the Suncor witness panel asserted

1 that the BCUC had jurisdiction to approve its proposal
2 but it didn't -- but even if it didn't, the proposal
3 was worth considering and we think clearly before the
4 Commission should embark in consideration of a novel
5 rate design proposal it should understand its
6 jurisdiction to establish it and so we would say that
7 the idea that you should consider it without
8 understanding your jurisdiction to do it is simply
9 incorrect.

10 Some further responses, just to say that it
11 is not a BC Hydro proposal, of course. It's not
12 fleshed out and so just describe it -- and -- but we
13 may hear more from Suncor on that proposal in their
14 argument and BC Hydro reserves the right to make a
15 full reply in writing at the appropriate time.

16 There's an additional procedural issue. So
17 I've described some of the -- what I would call maybe
18 the purposes of this discussion evidentiary gaps or
19 proposal gaps, if you will. The Suncor proposal has a
20 number of issues that weren't put on the table.
21 That's not simply a (inaudible) of what they want,
22 there's actually more fundamental legal issue arising
23 from that, and that's because while the Commission
24 determines and sets rates under section 58 of the
25 *Utilities Commission Act* you can only do so after it
26 has a hearing and that's a procedural hurdle that's

1 particularly important in the case of rate design
2 because rate design ultimately is in most cases some
3 sort of zero-sum game. When a rate is established in
4 a rate design proceeding some customers end up paying
5 more and some customers end up paying less.

6 It's for that reason that the section 58 of
7 the *Utilities Commission Act* the words "after a
8 hearing" are in there. That "after a hearing" ensures
9 that those customers who might be affected by a rate
10 will have an opportunity to understand what that rate
11 is and how it might affect them and make submissions
12 or provide evidence in respect of it.

13 So we say that the vagueness of the Suncor
14 proposal not only is difficult for anybody to respond
15 to, but to the extent that it's difficult for
16 participants need to respond to it, it raises the
17 legal issue associated with the Commission's
18 requirement to have a hearing as a pre-condition to
19 establishing rates under section 58.

20 BC Hydro is aware of section 60(1)(b.1) of
21 the *Utilities Commission Act*. That's 60(1)(b.1) and
22 I'll read that in the record here and so that the
23 panel can follow along. The Commission says -- or the
24 statute at the provision says:

25 "(1) In setting a rate under this Act
26 (b. 1) the commission may use any mechanism,

1 formula, or other method of setting the rate
2 that it considers advisable..."

3 And we just would point out that the Suncor
4 proposal does not include any mechanism, formula or
5 method that we can discern and therefore we don't
6 think that section 60(1)(b.1) is a meaningful answer
7 to the proposal, or meaningful way to avoid the kind
8 of inherent uncertainties associated with the Suncor
9 proposal.

10 The next issue I want to address is the
11 potential for the Commission to establish a
12 depreciation rate for BC Hydro's electric vehicle
13 charging stations in this proceeding. We understand
14 this is still a live issue. As I said at the outset
15 of today's session, if only because the Commission
16 hasn't made a ruling on it in these proceeding. I may
17 relay on the submissions that I made at transcript
18 Volume 1, line -- sorry, page 41, line 22 to page 46,
19 line 16. And the gist of those submissions was that
20 the establishment of the depreciation rate for BC
21 Hydro's electrical vehicle charging stations should be
22 an issue addressed in the Fiscal '23 to Fiscal '25
23 revenue requirement application. That was just filed
24 by BC Hydro at the end of August.

25 And I can add a few things that have
26 happened since then that underscore those submissions.

1 Particular I will be dealing with some of these issues
2 a little bit further, but a full cost of service rate
3 suffers from the fact that it would almost undoubtedly
4 be far out in market relative to other service
5 providers that would drive down utilization. At some
6 point that becomes inconsistent with the *Clean Energy*
7 *Act* section 18(3) and the prohibition on the
8 Commission doing anything that would directly or
9 indirectly prevent BC Hydro from carrying out its
10 electric vehicle fast charging service.

11 Ms. Jubb's testified to some of the issues
12 also associated with the full cost of service rate, in
13 particular one that might be established to recover
14 past costs, namely the F2020 to F2022 electric vehicle
15 charging costs, and she talked about those issues at
16 transcript volume 2, page 251, line 9 to page 253,
17 line 10; transcript Volume 1, page 67, line 2 to page
18 70, line 8; transcript Volume 1, page 142, line 19, to
19 page 143, line 17; and then BCUC -- or in response to
20 BCUC IR 1.14.1. And I've mentioned just a moment ago
21 that there are problems with a full cost of service
22 rate in the face of section 18(3) of the *Clean Energy*
23 *Act*, I'm going to get to those a little bit later,
24 because they are addressed specifically, I think by
25 Mr. Flintoff.

26 Other factual underpinnings to BC Hydro's

1 position with respect to the more appropriate
2 establishment of a -- or the reason that it's
3 unnecessary to establish a depreciation rate in this
4 proceeding in order to establish EV pricing was the
5 price elasticity evidence, and you've heard more of
6 that, and I've given you some of the references
7 already, and that a full cost of service rate will be
8 out of market.

9 So, that is all I wanted to add to my
10 submissions from the first day of the proceedings in
11 respect of that issue. To summarize, BC Hydro doesn't
12 believe that the Commission needs to, nor should it
13 establish a depreciation rate in this proceeding for
14 the electric vehicle charging stations that Hydro is
15 bringing into service.

16 The next issue I want to address is an
17 issue that was brought up by counsel for the
18 Commercial Energy Consumers and the BCOAPO, and that
19 was whether or not there is even sufficient evidence
20 on the record of this proceeding for the Commission to
21 establish pricing whether -- and as I understood those
22 submissions, there was questions as to whether there
23 is evidence sufficient to establish BC Hydro's
24 proposed pricing, or any pricing. Although at least
25 one of Ms. Worth's -- or Mr. Weafer talked about the
26 failure of BC Hydro to meet its burden of proof.

1 BC Hydro agrees, and we talked about this
2 already, there is no mystery here, quantitative
3 evidence that wouldn't be desirable to have, that
4 would be ideal to have to establish pricing that would
5 maximize their -- is not available, it's not on the
6 record, it's not BC Hydro's failed to provide it, it
7 simply doesn't exist. So, the relationship between
8 price and utilization rate, future growth and
9 evolution of the electric vehicle market, and future
10 growth and evolution of the electric vehicle charging
11 market, those are all things that we would like to
12 know that we don't know. That's not through any fault
13 of BC Hydro. The markets are new, policy and market
14 are advancing at a breakneck speed, and the desired
15 quantitative evidence, right, it is the quantitative
16 evidence that one can use to achieve what we're
17 talking about here. I mean, the revenue maximizing
18 rate doesn't exist.

19 But frankly, it doesn't matter. We can see
20 electric vehicle charging rates, they are visible. I
21 refer to the evidence I talked about earlier, that
22 table by BC Hydro filed in Exhibit B-12. We know that
23 there is no chance of a full cost of service rate, and
24 I think we hope that it's fairly clear to the
25 Commission that continuing to set pricing at zero is
26 similarly inappropriate for the reasons I talked about

1 earlier.

2 So there is a decision to be made, we say,
3 by the Commission, difficult as it might be, to
4 establish a price somewhere between those outer ranges
5 and ideally between that range of 17 and 25 -- 17
6 cents and 25 cents that I have referred to earlier.

7 But, let's take the submissions at face
8 value. What would be the BCUC's options if it was
9 concerned that it simply didn't have the evidence to
10 set the prices here? The BCUC could reject BC Hydro's
11 application. The consequence would be to restore zero
12 pricing for EV charging services. This would
13 certainly advance one of the objectives, one of the
14 rate design considerations, because it would reduce
15 the price of owning and operating electric vehicle and
16 so encourage the adoption of electric vehicle use in
17 British Columbia. Nevertheless, that's not the only
18 rate design objective, and we don't think that's
19 appropriate for the Commission to continue with zero
20 pricing. It shouldn't reject the application, it
21 should set a price, ideally one that reduces --
22 maximizes revenue and reduces cross-subsidization.

23 **Proceeding Time 3:40 p.m. T27**

24 Another option for the Commission if it
25 were to take the submissions about sufficiency of
26 evidence on their face as being meritorious, is that

1 the Commission could maintain the current EV charging
2 rate, which is an interim rate of course, and put this
3 proceeding in abeyance and pending the development of
4 further evidence. This would have the effect of
5 maintaining the period of time during which the
6 current rates are maintained interim. Interim rates
7 generally, it's not a good practice to keep the
8 interim. The larger the final rate is, or the further
9 out in time the final rate is the more difficult the
10 refund issues become, if there are any refund issues.

11 And, also, the idea of putting the
12 proceeding in abeyance pending the development of
13 better evidence assumes that better evidence would
14 become available. And it's not clear that, at least
15 in the next three years, we're going to be able to get
16 the type of quantitative evidence that the Commission
17 would ideally have before it today. So, BC Hydro does
18 not support putting this proceeding in abeyance.

19 The last comment I would make on this is,
20 you know, the Commission I panel will forgive me, I'm
21 going to quote both Churchill and Confucius.
22 Attributed to Churchill are the words, and these are
23 possibly attributed to him, I'll confess, "Perfection
24 is the enemy of progress." I can contribute to
25 Confucius, "Better a diamond with a flaw than a pebble
26 without." And sometimes the same idea is expressed in

1 the 80/20 rule, which says that 80 percent of a task
2 is done with 20 percent of the time leaving the last
3 20 percent of the task to be done in 80 percent of the
4 time. They're all reflections of the same idea, which
5 is that sometimes chasing the best answer doesn't give
6 you the best result.

7 And so we would say in response
8 fundamentally to the Commission, the proceedings
9 before you, there is a great deal of evidence and it
10 doesn't include all the evidence we'd like. But you
11 have the task, difficult as it may be, of setting
12 electric vehicle pricing and we urge the Commission to
13 do so on the basis of the evidence in this proceeding
14 and the submissions that I'm making today and will
15 make in reply.

16 COMMISSIONER FUNG: So, Mr. Christian, before you move
17 on, I just want to explore the idea of putting the
18 proceeding in abeyance. And it's based on your, I
19 guess, argument that BC Hydro currently is only in
20 this market on a short-term basis, at least according
21 to the GGRR, until 2025. Which is really not that far
22 away, it's four years from now.

23 And we also heard a lot from interveners
24 during this proceeding about -- and from customers,
25 actually, about the need for a time -- not a time-
26 based rate, but a volumetric rate for EV charging. We

1 also heard that Measurement Canada is working hard at
2 this and they may have something ready in a couple
3 years' time.

4 So why would putting this proceeding in
5 abeyance with an interim rate not be appropriate in
6 light of all those factors?

7 MR. CHRISTIAN: Because keeping an interim -- with
8 respect, Madam Chair, keeping an interim simply
9 creates an accounting and refund issue down the road.
10 You can set final rates now and then the minute
11 Measurement Canada approves revenue meter require all
12 those who are subject to your jurisdiction to start
13 developing volumetric rates. We don't think that's a
14 trivial task. Both Suncor and BC Hydro think that
15 volumetric, that is per kW or per kWh rates, the
16 implementation of them and bringing them into service
17 takes some care and some time. But in the meantime
18 there's no reason to keep rates interim.

19 Set the rates as final and when it's time
20 to move to a volumetric rate, set a new rate. The
21 Commission's rate setting jurisdiction is always
22 prospective, right? When you set rates, you're
23 setting rates until you come back to that same rate
24 and set it again for an indefinite period.

25 Keeping it interim does nothing other than
26 create an accounting headache. Somebody's going to

1 it's appropriate for exempt service providers to have
2 to pay connection fees or demand charges, and whether
3 or not demand charge relief or connection fee relief,
4 as I'll term them, are appropriate or not.

5 Now, just to speak to the two participants
6 who most clearly talked about this issue, in the case
7 of ChargePoint, they raised this issue, and raised
8 this concern, but they, ChargePoint, I think as I
9 understand the submissions of counsel, does not expect
10 those issues to be resolved in this proceeding. At
11 transcript Volume 1, page 17, lines 16 to 18, counsel
12 for ChargePoint said, "This is not a rate design
13 proceeding for rates, other than those in this
14 application," and we accept that.

15 So, we understand that ChargePoint will not
16 be advocating for the establishment of some sort of
17 demand charge or connection fee relief in this
18 proceeding.

19 Suncor, on the other hand, suggests that
20 the issues are properly addressed in this proceeding,
21 and I refer to transcript Volume 1, page 15, lines 16
22 to 25. It's not at all clear where the other
23 interveners are in this issue.

24 In its most simplistic form, the argument
25 seems to be that since BC Hydro doesn't pay those
26 charges, or those fees, exempt service chargers

1 shouldn't have to pay them either, and they shouldn't
2 have to pay them to advance the level playing field
3 rate design consideration.

4 You've heard my submissions on level
5 playing field generally, we think it needs to be
6 always treated with a bit of caution for the reasons
7 that I'd described earlier, but in the case of these
8 specific proposals, if I can call them that, there is
9 no application of course before the Commission, there
10 are both substantive and procedural issues.

11 So, the substantive issues with the demand
12 charge relief and connection fee relief, are -- arise
13 from the fact that the proposals are premised on some
14 assumptions that are at most only partially true. So,
15 one of the premises is that BC Hydro doesn't face the
16 charges of fees directly, so is indifferent to them,
17 unlike the exempt service providers who need to be
18 cognizant of them. In fact, BC Hydro's evidence is
19 that it explicitly takes into account connection costs
20 when making its siting decisions. That's at
21 transcript Volume 1, page 131, lines 3 to 11. And
22 meanwhile, exempt customers pay the full connection
23 fees, but less a contribution or (audio drops) from BC
24 Hydro. So they actually pay a little bit less than
25 what they, what they would otherwise have to pay.

26 Suncor's, of course, business model

1 prevents it from choosing the siting in a way to
2 minimize connection fees. Its business model as we
3 talked about earlier includes among other things,
4 siting it's electric vehicle charging stations at
5 existing Petro-Canada stations, and that means it is
6 captive to whatever the connection costs happen to be.

7 One of the other premises underlying the
8 concern is that exempt service providers could earn a
9 profit if they were to get a demand charge or
10 connection fee relief. This is -- a demand charge
11 relief (inaudible) identified as a big deal. However,
12 I suggest that there is no actual evidence on this
13 point that shows that to be the case. In fact, to the
14 contrary, Suncor's evidence is that it would require a
15 utilization rate of 45 percent. That's 45 percent to
16 make a profit on its stations, that is to recover the
17 charges it pays BC Hydro for the electricity and then
18 still earn something back towards the cost of the
19 service. And that's a very large utilization increase
20 from current utilization rates.

21 And BC Hydro suggests, as Suncor has said
22 already, that near-term profitability is not anything
23 in the cards, long term profitability at best is the
24 objective, and we would say that the idea that
25 connection fee relief or demand charge relief would
26 (audio drops) any exempt service provider into

1 profitability is not supported by the evidence.

2 There is another premise underpinning the
3 request for a demand charge relief and a connection
4 fee relief, and that is that having profitable EV
5 charging stations by getting rid of those kind of
6 charges that exempt service providers face would be
7 necessary, or is necessary for them to enter into the
8 market. And just on that narrow point, we note that
9 Suncor as noted by the Commission panel during the SRP
10 observed that Suncor clearly entered into the market
11 with hopes of that long-term profitability.

12 **Proceeding Time 3:50 p.m. T29**

13 That its business strategies, at least partially
14 related to meeting marketing claims and that it came
15 into the market at a time when BC Hydro's pricing was
16 zero.

17 Then the last premise that seems to
18 underpin at least some of the submissions we heard
19 with respect to demand charge relief and connection
20 fee relief is that the legal or regulatory framework
21 in other jurisdictions supports that type of relief
22 and we note that there's nothing on the record
23 regarding, for example, the legal framework under
24 which Quebec offers -- Hydro Quebec offers demand
25 charge relief. Hydro Quebec was the example offered
26 by Suncor panel in respect to demand charge relief at

1 transcript Volume 3, page 470, line 10 to page 471,
2 line 3.

3 Respect it falls on those interveners who
4 make the jurisdictional arguments in favour of demand
5 charge relief or connection fee relief to identify the
6 legal regime in which those relief provisions have
7 been established.

8 So the procedural issues applicable to
9 demand charge relief and connection fee relief are
10 essentially things you've heard me talk about just
11 recently in another context. There are no proposals
12 in front of the Commission. Nobody's applied to the
13 Commission for demand charge relief, for connection
14 fee relief. The idea has been canvassed and raised in
15 the evidence but no application is made. Had an
16 application been made by anybody, whether it's Suncor
17 or ChargePoint or any of the other exempt service
18 providers who are interested in pursuing this, the
19 BCUC would have provided -- required notice to be
20 provided, parties whose interest might be affected
21 would have had an opportunity to intervene and there
22 would be a proper hearing on the issue.

23 Again, this is a procedural issue but it's
24 also a legal issue because of section 58(1) of the
25 *Utilities Commission Act* which requires the Commission
26 to have a hearing as a pre-condition to establishing

1 rates or to change rate schedules. So we say that in
2 the absence of people knowing that this is an issue
3 that could be coming out of this proceeding in a fair
4 and transparent way, consistent with the way other
5 rate relief is sought, that there's problematic,
6 likely going to run afoul with section 58 if the
7 Commission were to establish a connection fee relief
8 or demand fee relief -- sorry, demand charge relief in
9 this proceeding at this time.

10 That's all I want to say about that topic.
11 And that takes me to BCUC staff pre-SRP legal
12 questions.

13 And I'm going to read the question onto the
14 record and then respond on behalf of BC Hydro. The
15 first one was BCUC 2.1 and the question as whether --
16 "Please discuss whether violating section 9(1) of the
17 EGIA result in penalties or sanctions against BC Hydro
18 to sell electricity to its customers."

19 EGIA refers to *Electricity and Gas*
20 *Inspection Act*, statute of Canada that makes it
21 unlawful to use a meter for sale of electricity that
22 has not been verified and sealed by Measurement
23 Canada. And for the record the citation to the EGIA
24 is the Revised Statute of Canada, Chapter -- 1985,
25 Chapter E-4.

26 The question, in BC Hydro's submission,

1 seeks information that is relevant only on an implicit
2 assumption that BC Hydro might make a business
3 decision or a business choice to use revenue meters
4 for time-based electric vehicle charging that haven't
5 been approved by Measurement Canada if the penalties
6 were small in comparison to the benefits of using
7 those meters.

8 And in BC Hydro's submission that's a false
9 assumption. BC Hydro would not act in violation of
10 the Energy Gas -- *Electricity and Gas Inspection Act*
11 regardless of whether sanctions resulted in
12 consequences of that violation. Compliance with the
13 law, in BC Hydro's submission, is not a choice to be
14 weighed against cost and benefits. And so that is
15 fundamentally, whatever the sanctions are that might
16 imply they simply aren't -- BC Hydro is not going to
17 act in violation of Measurement Canada requirements
18 regardless of what the sanction might be.

19 Section -- or question 2.2, "To the best of
20 BC Hydro's knowledge please provide the criteria for
21 the Ministry responsibly for the EGIA to grant a
22 dispensation or exemption from section 9(1) in the
23 EGIA. As part of the response please outline the
24 process and estimated time required to obtain the
25 dispensation."

26

Proceeding Time 3:55 p.m. T30

1 And in response BC Hydro observes that all
2 of BC Hydro, Suncor and ChargePoint agree that working
3 with Measurement Canada to develop, as they currently
4 are, an electric vehicles fast charging metering
5 standard is the preferred course of action. No entity
6 working in the space that testified at the SRP
7 supports seeking the exemption or a dispensation. And
8 that's because in Suncor's words, it's tough to go
9 against the grain and there are legal issues
10 associated with that. That's at transcript 3, page
11 466, line 4 to page 467, line 7. And it's also not
12 appropriate, in BC Hydro's testimony, to pursue that
13 option when a process is already underway to establish
14 appropriate standards. And that's BC Hydro's
15 testimony at transcript Volume 1, page 93, line 15,
16 page 96, line 3.

17 And the BCUC staff asked two other legal
18 questions regarding the uses of a rate rider or just
19 the rate generally, the EV charging rate generally, to
20 collect an past under-recovery from EV charging
21 customers. Those were pre-SRP questions 28.3, 28.4.
22 And I will address those in my response to Commission
23 panel question number 2.

24 COMMISSIONER FUNG: Sorry, Mr. Christian, I just want
25 to go back to the response you just gave about why you
26 feel it's inappropriate to go after a dispensation.

1 That's clearly contemplated under the legislation.

2 Why is that inappropriate?

3 MR. CHRISTIAN: Well, that was not the submission.

4 That was -- well, that was my summary of evidence, I
5 suppose, Commissioner Fung. And so I think, I don't
6 know that I can say more than refer to the evidence
7 that I just gave you, the transcript reference. So,
8 it was thought to be inappropriate by the BC Hydro
9 witness panel for the reasons they gave on that point,
10 at transcript 1, page 93, line 15 to page 96, line 3.

11 But let me take it back another step.

12 Regardless of what the evidence is or the concerns
13 that BC Hydro had as a business organization, it's
14 clearly not inappropriate for a legal perspective.
15 And I think that's perhaps where your question's
16 coming from. So, I would say from a legal perspective
17 there's an application process available to a member
18 of the public to seek relief from anything they want.
19 Then, course, there's nothing inappropriate with using
20 it. So, if there's inappropriateness, it's a business
21 inappropriateness, not a legal one.

22 COMMISSIONER FUNG: Okay, thank you very much. Because
23 why else would the legislature provide it for that
24 relief?

25 MR. CHRISTIAN: Quite right, quite right.

26 COMMISSIONER FUNG: And what you're saying is that BC

1 Hydro, for business reasons and other reasons, does
2 not wish to pursue that as an avenue?

3 MR. CHRISTIAN: At this time. And so, again, I would
4 refer you to the transcript reference where that was
5 discussed.

6 COMMISSIONER FUNG: Thank you.

7 MR. CHRISTIAN: And I would say that's the same as
8 Suncor and ChargePoint too, right? None of the --
9 nobody in this proceeding who's actually involved in
10 the space suggested that seeking that dispensation was
11 a preferred business approach, despite it being legal
12 and appropriately legal if somebody wanted to.

13 COMMISSIONER FUNG: But I think the reason is that
14 they're counting on Measurement Canada to come up with
15 a solution. But the way I look at this relief is that
16 it's a temporary relief until Measurement Canada is
17 able to overcome the obstacle creating a standard
18 that's acceptable to Measurement Canada for making
19 this happen.

20 MR. CHRISTIAN: My point only was that BC Hydro, and
21 Suncor and ChargePoint, all have business reasons for
22 not pursuing a dispensation. It's not simply BC
23 Hydro. It's legally appropriate for anybody, whether
24 it's BC Hydro, Chargecor [sic] and SunPoint [sic] to
25 make an application to seek relief under an enactment
26 that provides for that relief. There's no doubt of

1 that from a legal appropriateness. But from a
2 business perspective, all three of the people who
3 testified or talked to this issue in our proceeding
4 didn't think it was appropriate for business reasons.
5 And their business reasons vary, and you can read the
6 transcript to see exactly what they said. But it
7 boils down to, essentially, now's not the right time,
8 let's get the Measurement Canada standard approved.

9 COMMISSIONER FUNG: Great, thank you.

10 MR. CHRISTIAN: Okay, so Mr. Flintoff asked a number of
11 questions in Exhibit C12-8 that we agreed to address
12 in final argument. The first one was Flintoff --
13 sorry, Mr. Flintoff, in you're listening, I'm not
14 meaning to disparage you. I'm going to refer to
15 Flintoff 1.1, I appreciate you are Mr. Flintoff, if
16 you're listening. Flintoff 1.1,

17 "If the Commission was to set rates that
18 allow the public utility to collect
19 sufficient revenue in each fiscal year to
20 enable it to recover its costs incurred with
21 respect to the prescribed undertaking
22 without additional recovery from the
23 ratepayers, would those rate directly or
24 indirectly prevent a public utility referred
25 to in subsection (2) from carrying out the
26 prescribed undertaking?"

 So, we had to interpret that question a

1 utilization rates at this time in the market.

2 So, accordingly, a full cost of service
3 rate would at this time, we say, indirectly prevent BC
4 Hydro from carrying out the undertaking of providing
5 EV charging services. So that is, we say, full cost
6 of service would likely be unlawful, at this time.
7 But, I do say "likely" and I do have knowledge that
8 there is no bright line here. In the market and the
9 policy framework dynamic and the quantitative evidence
10 is lacking. So, there is a matter of judgment at the
11 outset that needs to be employed. Evidence ultimately
12 would show what the effect of the full cost of service
13 rate are at this time. And if indeed as BC Hydro
14 suspects, a full cost of service rate would cause
15 utilization rates to plummet, then it would be up to
16 BC Hydro to say that can't happen, because this is
17 contrary to section 18(3) of the *Clean Energy Act*.

18 We think fundamentally though that setting
19 a full cost of service rate to see what happens in the
20 hope that it wouldn't unduly depress demand for the
21 service, would be inappropriate and unwise at this
22 time, and BC Hydro does not support that course of
23 action.

24 Flintoff, 1.2 is,

25 "Could the Commission set any rate between free
26 (full cost recovery from ratepayers) and with any

1 shortfall being recovered from all the
2 ratepayers...under *CEA* section 18(2)?"

3 And this is a question, effectively
4 Commissioner Morton that you asked me earlier this
5 afternoon. The question was whether or not you could
6 set any rate, and I answered no, I don't think you can
7 set any rate, and need to try and set a rate that both
8 respects the *Clean Energy Act* section 18(2) and (3),
9 but also respects your obligation to set rates that
10 meet the fair, just and reasonable standard as set out
11 in the *Utilities Commission Act*. And the way to do
12 that is to try and find, despite the difficulties in
13 doing so, to try to find a revenue maximizing rate.

14 So, we say the answer to Mr. Flintoff's
15 question is, no, the BCUC can't simply set any rate it
16 wants between free and full cost of service in light
17 of section 18 of the *Clean Energy Act* which requires
18 that the Commission not indirectly or directly prevent
19 the Utility from carrying out the undertaking, and
20 from the constrains imposed by the *Utilities*
21 *Commission Act*, requiring fair, just and reasonable
22 rate that is a cost of service, or other economic
23 based rate.

24 COMMISSIONER FUNG: Mr. Christian, before you move on,
25 why can't a fair, just and reasonable rate be simply
26 the market rate for the particular service that you're

1 talking about?

2 MR. CHRISTIAN: Well, what would a market rate mean in
3 the context of the *Utilities Commission Act*? The
4 *Utilities Commission Act* doesn't speak to market
5 rates. So, if the Commission undertook a process of
6 identifying what a market rate simply by itself in
7 isolation of other considerations, you might well end
8 up with a revenue maximizing rate, but it wouldn't be
9 the appropriate use of your jurisdiction, is what I
10 say. The tools available to you are to look at the
11 *Utilities Commission Act* and the *Clean Energy Act*, and
12 reconcile those objectives that are inherent in both
13 of them. And as I understand your question, what if
14 we just simply picked a market rate without regard for
15 other factors? It's those other factors that I think,
16 with respect, get you into trouble. If you don't look
17 at the *Utilities Commission Act*, understand that is
18 your role, and trying to find a way to fit your rates
19 within that scheme, while respecting *Clean Energy Act*,
20 then I think that the responsibility put on you by
21 those statutes is probably been missed.

22 COMMISSIONER FUNG: But what happened to three
23 objectives that you talked about at the start of your
24 submissions? One is revenue maximization, the second
25 is try not to create an un-level playing field, and
26 the third is government objectives? Doesn't a market

1 rate achieve all of those objectives? (Inaudible).

2 MR. CHRISTIAN: I think right now --

3 COMMISSIONER FUNG: (Inaudible)?

4 MR. CHRISTIAN: I would say absolutely right now, and
5 that is part of our submission. But I took your
6 question to mean why can't we go straight to market
7 without worrying about the other things.

8 **Proceeding Time 4:05 p.m. T32**

9 So if your question is does a market rate,
10 i.e. a rate that's kind of right within the range of
11 what other service providers will meet, meet all those
12 objectives, I agree with that. That is BC Hydro's
13 point. I'm sorry if I took your question incorrectly.
14 I thought you were saying, "Can't we just set a market
15 rate without regard for the other consumers?"

16 COMMISSIONER FUNG: No, no, that's not what I'm saying.
17 Yeah. And I think we are *ad idem* on that. Because
18 you said that the rate that we're picking is simply a
19 reasonable proxy because we all know that you cannot
20 charge a full cost of service rate under the
21 circumstances. So reasonable proxy to me could be
22 whatever the prevailing market rate is.

23 MR. CHRISTIAN: Yes. Commissioner Fung, we're on the
24 same page. Sorry that I misunderstood your question
25 at the outset there and got us down a garden path as
26 it were.

1 COMMISSIONER FUNG: Okay, thank you.

2 MR. CHRISTIAN: In fact, Hydro's submission is that the
3 proposed pricing is the market rate. We developed it
4 in a certain way and then assessed it against what the
5 range of market prices are, and they fall squarely
6 within that market range, so it is (audio drops) given
7 what the current market is.

8 So Flintoff 1.2, I think I just talked
9 about that one. Yeah, that's been addressed.

10 Flintoff 1.3,
11 "Does the Commission have to set time-based
12 rates or can it set [alternating current]
13 energy-based rates?"

14 So this is an interesting question. It
15 relates to the legality of volumetric rates, but the
16 question as posed speaks not to whether BC Hydro can
17 charge volumetric rates, but whether the Commission
18 can establish volumetric rates. It's a slight nuance
19 in difference there. Most of the evidence and
20 discussion today had been whether BC Hydro or other
21 service providers can charge on the basis of per
22 kilowatt hour or per kilowatt, this question asks can
23 the Commission require them, require these timed rates
24 to be set on that way.

25 And I'll start of course by observing that
26 volumetric rates are not lawful currently under

1 federal legislation under the *Electricity and Gas*
2 *Inspection Act*. And then we pause to say this is a
3 very difficult legal question, whether the BCUC may or
4 may not in law determine and set volumetric rates,
5 right? Because the Measurement Canada entity is
6 acting in a federal jurisdiction and the B.C.
7 Utilities Commission is acting under provincial
8 jurisdiction, and to the extent that Measurement
9 Canada prohibits right now at least the use of revenue
10 metres for electric vehicle direct current fast
11 charging service, the BCUC might require Hydro to set
12 rates on that basis and how do we get over that
13 question.

14 We say at a high level it's a very
15 difficult question. It's a fundamentally a
16 constitutional question that indicates the division of
17 powers between federal and provincial governments. In
18 general, conflicts between federal and provincial
19 governments are resolved in favour of federal
20 government, federal government legislation under the
21 paramountcy principle. So we would say the Commission
22 should not be setting a rate that required service to
23 be provided in a way that was inconsistent with
24 Measurement Canada requirements.

25 And so the next question, if the Commission
26 sets such rates, would this prevent Hydro from

1 directly or indirectly preventing Hydro from carrying
2 on a prescribed undertaking? Yes. It would be
3 because it would be unlawful to charge rates on that
4 basis and that would indirectly prevent BC Hydro from
5 carrying out the undertaking and providing electric
6 vehicle charging services contrary to section 18(3) of
7 the *Clean Energy Act*.

8 Now, last but not least, we're coming to
9 the Commission panel questions. I just want to pause
10 to say we've got I think 22 minutes left in the day.
11 I'm free, Mr. Chairman, to continue on. I don't know
12 if others will. I think we have -- what time we have
13 here? I think I'll be able to finish pretty close to
14 the time allotted for this session. That may not
15 allow for Commission questions. So I think I'm in
16 your hands. I'm prepared to go a little bit longer,
17 but I don't if know others were. Since we're 20
18 minutes away I thought now might be the time to raise
19 that timing issue.

20 Mr. Chairman, you're on mute.

21 THE CHAIRPERSON: So I am. I am not sure that we have
22 an alternative, but my fellow commissioners, do you
23 want to motor on or what do you think? You're both on
24 mute.

25 COMMISSIONER FUNG: Sorry. I'm free. But --

26 THE CHAIRPERSON: Okay, let's keep going. Somebody's

1 got a hand up here, so let me just --

2 COMMISSIONER FUNG: Mr. Flintoff, Mr. Chair.

3 THE CHAIRPERSON: Mr. Flintoff?

4 COMMISSIONER FUNG: Yes.

5 THE CHAIRPERSON: Mr. Flintoff?

6 MR. FLINTOFF: Yeah, I'm just trying to come off mute.

7 I have -- on that last response --

8 THE CHAIRPERSON: Mr. Flintoff, I'm sorry, this is for

9 the panel. I'm not sure if you were with us at the

10 beginning, but I did make it clear that any other

11 parties are here on -- as a listen -- on a listen only

12 basis. So we're not entertaining questions from

13 interveners. You will have an opportunity though to

14 make your final submission.

15 MR. FLINTOFF: Right. It was just the meter question

16 was not DC, it was AC.

17 THE CHAIRPERSON: Okay, thank you. Thank you.

18 Go ahead then, Mr. Christian, please. Now

19 you're on mute.

20 MR. CHRISTIAN: It's only been a year and a half I've

21 been doing meetings and stuff like that and I still

22 forget to take myself off mute on a regular basis.

23 THE CHAIRPERSON: Absolutely, yeah.

24 MR. CHRISTIAN: All right. So Commission panel

25 question number 1, this is from Exhibit A-24 and it

26 asks whether the Commission should establish a

1 separate class of service for BC Hydro's electric
2 vehicle charging service. There's two aspects to the
3 question as we understand it.

4 **Proceeding Time 3:50 p.m. T33**

5 First of all, can, as a matter of law, the
6 Commission establish a separate class of service.
7 Does it have the legal jurisdiction? And the second
8 aspect of the question is should the Commission
9 exercise its discretion and actually establish that
10 separate class of service.

11 We'll deal with the jurisdiction or the
12 legal question first. The *Utilities Commission Act*
13 sections 58 to 61 set out the Commission's power with
14 respect to rate setting. Section 60(1)(c) imposes on
15 the BCUC certain obligations. If the utility provides
16 more than one class of service -- class of service is
17 a term that's not defined in the *Act*. Nothing in the
18 UCA directly speaks to it.

19 Section 58.1 of the *Utilities Commission*
20 *Act* refers to classes of customers and it imposes on
21 the BCUC certain restrictions in its rate setting
22 powers as well, and I'll note again the classes of
23 customers is not expressly defined. Nothing the UCA
24 speaks to directly.

25 So there are two actual expressions in the
26 *Utilities Commission Act* that are at play that are

1 very similar. In our submission there's no meaningful
2 distinction in the context of today's submission,
3 right? There's a general statutory interpretation
4 principle that different words mean different things
5 and there's no doubt in my mind that in some
6 circumstances the classes of customer terminology and
7 the classes of service terminology might mean
8 different things, but we don't think they mean
9 anything different for the purpose of answering your
10 question that you posed to us.

11 And in general the kind of general
12 observation is that the Commission has a very broad
13 discretion with respect to rate setting and the
14 establishment of classes of services or classes of
15 customer and in general terms we don't think there's
16 any legal impediment to the Commission establishing a
17 class of service or class of customer for electric
18 vehicle charging service.

19 Now, section 58.1 was specifically raised
20 in the question and the question is whether 58.1(7)
21 imposes a legal restriction. 58.1(7) prohibits the
22 BCUC from setting rates and I'm going to quote now,
23 "for the purpose of changing revenue-cost ratio for a
24 class of customers except on application by the
25 authority."

26 So that provision effectively prevents the

1 BCUC from initiating a rate-rebalancing rate
2 proceeding and then rate rebalancing, that's where the
3 class rates are increased or decreased with a view to
4 bringing their revenue costs ratios of each class
5 closer to unity.

6 In such a proceeding the average rates of
7 all customer classes are necessarily impacted. If the
8 class average rate of one class goes up then the class
9 average rate of another class has to go down to allow
10 the utility to still earn its revenue requirement.

11 We would say that certainly BC Hydro is not
12 proposing its electric vehicle charging service for
13 the purpose of changing the revenue cost ratio for a
14 class of customers. That is not the rationale behind
15 BC Hydro's application. Nothing in the application
16 suggests it is. You heard my submissions earlier
17 today about why BC Hydro's entering in the market.
18 You've heard my submissions about why some -- BC Hydro
19 thinks the price is appropriate rather than continuing
20 zero pricing.

21 There's no proposal from any participant on
22 this proceeding to establish class-wide cost of
23 service or change the average class rates of classes
24 of customers.

25 So we don't think 58.1(7) has any
26 application to the question. That is, to be clear, in

1 our submission 58.1(7) does not prohibit the
2 Commission from establishing a class of customers for
3 electrical vehicle charging service or class of
4 service for that matter.

5 The next question then though is I think
6 perhaps more meaty one, which is should the Commission
7 establish a sub-class of service for customer of
8 electric vehicle charging service. BC Hydro is not
9 supportive of the idea. Its reasons are given in
10 large whether in its responses to BCUC IR 1.1.1, BCUC
11 IR 1.1.3.1. Fundamentally it sees the idea of
12 establishing separate classes of service or separate
13 class of customer as increasing administrative and
14 regulatory burden and therefore increasing cost with
15 no obvious benefit.

16 The only benefit that we could imagine
17 comes from the idea establishing separate classes is
18 the idea that there might be -- and we think this may
19 be motivating the thought behind this, there might be
20 greater transparency with respect to cost of service
21 and thus potentially greater insight into the degree
22 to which the service is subsidized by other customers.

23 So we appreciate that is something that the
24 Commission was -- and should have a keen interest in
25 understanding, as should BC Hydro. In fact all of BC
26 Hydro's customers, I suspect, will have an interest in

1 proceeding required all the costs to be identified and
2 reported on on an ongoing basis, that was the EV
3 charging costs. And it's clear that reporting on EV
4 charging costs, or for that matter reporting on EV
5 charging revenue, doesn't require the establishment of
6 a class of customer or class of service.

7 And that is all I wanted to say on that
8 topic. So law (audio drops) is a matter of whether
9 the Commission should exercise its discretion under
10 the law to establish that class of customer service,
11 BC Hydro submits not necessary.

12 The next question is panel question number
13 2. This is bit of a meatier one, although I think
14 I've covered some of these issues already, so I might
15 try and shorten it a little bit. The question relates
16 to the recovery of previous years' under-recovery.
17 This is similar to the BCUC staff question, 28.3 and
18 28.4, and effectively asks the same thing. And the
19 question is whether or not the BCUC could establish
20 through electric vehicle charging rates or electric
21 vehicle charging rates plus a rate rider could recover
22 from electric vehicle customers all the previous
23 years' under-recovery arising from the provision of
24 electric vehicle service at prices that do not recover
25 the full cost of service. And I think there's a
26 number of potential legal issues that are identified

1 in the question which I'll speak to now.

2 Before I do that, I want to address the
3 idea that this has to be, and my understanding is
4 future issue, not an issue for this proceeding. And
5 that's because with respect to -- well, first of all,
6 the reason only under-recovery in the sense that there
7 is some sort of price that can be used to establish
8 the -- used to recover those costs. So, with respect
9 to F20 and F21 and the balance of F22 costs after the
10 pricing is established for this year, there isn't
11 going to be a mechanism, we say, to get at that.
12 Current F22 EV charging rates generate much less
13 revenue than the cost of service and assuming BCUC
14 decision later in the year, those rates will have been
15 in place for the better part of F22.

16 So that is for each of the last two fiscal
17 periods of BC Hydro and the current fiscal period of
18 fiscal 2022 there will be under-recoveries as referred
19 to question 2 of Exhibit A-24.

20 But if there are under-recoveries and we've
21 already established, I think, and I talk about this at
22 the SRP on the first day, that under the Commission's
23 decision regarding the F22 Revenue Requirement
24 Application all F20 to F22 EV charging costs are to be
25 (inaudible) to the electric vehicle cost regulatory
26 account and in the F23 to F25 RRA that regulatory

1 account balance is meant to be disposed of. Hydro's
2 meant to make a proposal and by implication the
3 Commission is going to make an order.

4 So, this all relates to when might the
5 Commission establish EV charging rates that recover
6 the full past cost of the service not in this
7 proceeding, not until after the F23-F25 RRA
8 proceeding, frankly, which is where the order -- the
9 kind of cost issue, at least, is already established.

10 So, leaving aside the question of timing,
11 between the three questions of staff and the
12 Commission panel, three legal issues were identified
13 as being potentially problematic. The first one is
14 the section 18(2) of the *Clean Energy Act* prevent past
15 recovery, or recovery of past under-recoveries in a
16 rate or in a rate rider. The recovery of past under-
17 recoveries amount to unlawful retroactive rate-making
18 and is there a difference in legal position between
19 the use of the rate in full or the rate plus a rate
20 rider?

21 **Proceeding Time 4:21 p.m. T35**

22 And so, in general it's up to one exception
23 and a few caveats, BC Hydro believes that it would be
24 permissible, that is it would be permissible in law to
25 recover previous years under-recoveries from EV
26 charging customers rates established in the future

1 proceeding and that's whether those rates were
2 established directly to recover those under-recoveries
3 or whether they were established through a rate rider.

4 So, dealing with the legal question of rate
5 riders first, rate riders are commonly used by
6 utilities and utility regulators to recover costs
7 incurred by utilities that are meant to be temporary.
8 The use of a rate rider asserts the objective of
9 transparency, allows customers to see that their
10 increased bill is for a short period of time to deal
11 with the specific issue. And so that's the general --
12 (inaudible) rate rider, so if the Commission were
13 inclined to establish a rate rider for the purpose of
14 recovering past under-recoveries that would be
15 consistent with the way rate riders are typically
16 used.

17 However -- well, not however. I will say
18 that rate riders are subject to all the usual
19 restrictions and obligations on a regulated rate-
20 making authority. That is, there's no extra-legal
21 burdens on the use of a rate rider, nor are there any
22 avoidance of any legal burdens. Rate riders and rates
23 have no distinction in the *Utilities Commission Act*
24 and both subject to the fair, just and reasonable
25 standard. So, there's no issue between rates and
26 rates rider on this question.

1 Dealing next with retroactive rate-making
2 concerns, the question is whether or not setting rates
3 or our rate plus rate rider to recover past under-
4 recoveries would conflict with the prohibition against
5 retroactive rate making. We say firstly that there's
6 been a lot of ink spilt on exactly the meaning of the
7 rule against retroactive rate-making, in addition the
8 various exceptions to that rule.

9 And I don't think it's time or place to
10 elaborate exactly on the scope of that rule and how
11 it's been applied and how it's not been applied,
12 because in our submission the Commission in
13 interpreting the *Clean Energy Act* section 18(2), in
14 the Fiscal '22 Revenue Requirement effectively did
15 away with whether this is an issue and in that
16 decisions remember the Commission determined that the
17 section 18(2) allowed the Commission to recover past
18 under-recoveries, effectively, and so whether or not
19 retroactive rate-making might have applied, as a bar,
20 we would say that the section 18(2) as it's understood
21 by the Commission panel in the F22 RRA proceeding
22 makes it clear that it's no longer a bar.

23 So, to make that answer even shorter, 18(2)
24 takes care of your retroactive rate-making concern.

25 So, however, it is necessary to consider
26 section 18(3). I talked about this again already as a

1 potential bar to setting a full cost of service rate,
2 at least at this time. And so it's by implication to
3 the extent that full cost of service rate was barred
4 by section 18(3) of the *Clean Energy Act*, a full cost
5 of service rate that also in addition would seek to
6 charge electric vehicle customers past unrecoveries
7 would similarly be running afoul with section 18(3) of
8 the *Clean Energy Act*.

9 So to summarize, in terms of legal
10 prohibitions on the recovery of past under-recoveries
11 in the rates of EV charging customers whether through
12 the rates directly or with a rate and a rate rider,
13 there's only one legal prohibition that arises under
14 section 18(3) and it arises in the current
15 circumstances.

16 In a future proceeding when the potential
17 for setting EV charging rates that recover precious
18 years under coverage might be on the table, current
19 circumstances of low utilization rates and unknown
20 price elasticity might not be applicable when section
21 18(3) of the *Clean Energy Act* may not be an issue in
22 terms of if the Commission was desiring to go that
23 way.

24 So I said there was one exception, that's
25 the section that arises under 18(3) and that arises
26 now, maybe not in the future. I also noted that there

1 full cost of service rate. So that is the revenue
2 maximizing rate has to be higher than a full cost of
3 service rate. And at the (inaudible) the revenue
4 maximizing rate was lower than a full cost of service
5 rate, then building in previous years under-recovery
6 would simply result in less revenue a year over year,
7 and the balance of the hypothetical regulatory account
8 that we're talking -- that I talked about a few
9 minutes ago would not decrease, it would simply
10 increase. So again, you need to have a bit of
11 headroom, if I can call it that, between your higher
12 revenue maximizing rate and your lower cost of service
13 rate.

14 So, that headroom, that difference between
15 a higher revenue maximizing rate and a low cost of
16 service rate could be used by the Commission if it so
17 chooses in the future, to attribute, or to allocate to
18 electric vehicle charging customers past under-
19 recoveries. But here comes the second (inaudible).
20 That headroom needs to be large enough we would say to
21 recover the previous years' under-recoveries in a
22 reasonable amount of time to avoid intergenerational
23 equity.

24 So, if there is just a tiny little
25 difference between the higher revenue maximizing rate
26 and the lower full cost of service rate, then it's

1 going to just simply take too long to fairly, within
2 -- within the scope of what intergeneration equity
3 means, to recover those costs from that single class
4 of customers. And I can refer here to the evidence
5 again. Mr. Song at the transcript Volume 2, page 357,
6 lines 11 to 24, using some reasonable assumptions
7 calculated that we'd be looking at a 13-year recovery
8 period for the purpose of capturing previous under-
9 recoveries from current electric vehicle charging
10 customers.

11 Ms. Jubb has also testified to the issues
12 associated with capturing previous years' under-
13 recoveries solely from BC Hydro's electric vehicle
14 charging customers, at transcript Volume 2, page 356,
15 line 12, to page 358, line 24.

16 Okay, we are down to panel question 3.
17 This relates to the obligation to serve, and the
18 question is,

19 "If BC Hydro's public EV fast chargers can
20 only serve one customer at a time and
21 customers aren't able to charge their EVs
22 within a reasonable timeframe due to
23 congestion, would BC Hydro be in breach of
24 its obligation to serve or provide adequate,
25 safe, efficient, just and reasonable service
26 as required of the public utility under
section 38 of the *Utilities Commission Act*?"

1 So, to start, under the *Utilities*
2 *Commission Act* and virtually all public utility
3 legislation enacted in North America in the last 120
4 years or so, the obligation to serve, what it means,
5 the scope of that obligation and so on, are determined
6 in two ways. One by the legislative scheme that's
7 applicable now that has largely replaced the common
8 law, and the rules of the regulators who act under
9 that legislative scheme.

10 So, just to give a legislative examples, to
11 see what I'm talking about under the *Utilities*
12 *Commission Act*, section 29, (inaudible) has an
13 obligation to serve with those who are within 200
14 metres of its facilities, subject to a B.C. Order --
15 BCUC Order to the contrary. In terms of what the BCUC
16 has already done with respect to obligation to serve,
17 generally, the (inaudible) has a number of powers in
18 relation to service and obligation to serve. Under
19 section 30 it can make orders with respect to the
20 extensions of service, under section 34 it can require
21 the extension of service into a municipality.

22 Under section 38 that's the section
23 referred to in the question, utilities have an
24 obligation to provide service that the BCUC considers
25 adequate. And so, fundamentally, to start off with,
26 in the absence of a question -- or an order by the

1 Commission under section 38, there is no section 38
2 issue. The section 38 really establishes a Commission
3 power to establish adequate levels of service in the
4 absence of that order, there is no specific issue as
5 set out in the question.

6 But I want to observe that, you know, more
7 generally, under its rate-making powers, the
8 Commission generally has these powers to establish
9 terms and conditions of service, and with the manner
10 in which Utilities provide service. In general, and
11 but for the *Clean Energy Act* section 18, we think BC
12 Hydro could be directed by the Commission with respect
13 to how it provides service. That's essentially what
14 the Commission does. It set the interface between the
15 utility and the customer and the nature of the service
16 is fundamentally what the Commission is involved in.
17 However, we say the *Clean Energy Act*, section 18(3)
18 significantly alters the scope of the Commission's
19 powers in regard to EV charging services specifically,
20 and that's because the Commission cannot exercise the
21 powers that would directly or indirectly prevent BC
22 Hydro from carrying out the prescribed undertaking,
23 and by necessary implication, that means, and I've
24 talked about this already tonight -- this afternoon,
25 BC Hydro gets a term the scope of its involvement in
26 the delivery of EV charging service, subject to the

1 constraints of the GRR.

2 **Proceeding Time 4:31 p.m. T37**

3 And we talked about two of those constraints, the
4 timeline constraints, the (audio drops) 2025 in terms
5 of new charging stations being put into service and
6 the -- also the geographic scope of the extent to
7 which BC Hydro can put two vehicle charging stations
8 in municipalities with greater than 9,000 people in
9 them.

10 But the gist of it is, the Commission does
11 not have its normal powers to determine the scope of
12 BC Hydro's obligation to provide electric vehicle
13 charging services.

14 Complaints that the Commission may receive
15 with respect to service quality we say could in
16 general be addressed by the BCUC but there will be
17 some orders that the Commission might be inclined to
18 give that will run afoul of section 18(3). There's no
19 specific example put forward in this question that
20 would allow us to say whether or not it would run
21 afoul of 18(3) or not. But we simply observe that
22 there is going to be some limits to the Commission's
23 normal powers with respect to terms and conditions of
24 service or nature of service.

25 Commissioner Lockhart, you had your hand up
26 there? You're frozen.

1 COMMISSIONER LOCKHART: Yeah, I didn't intend to ask a
2 question, no.

3 MR. CHRISTIAN: Oh, my apologies. Anyway --

4 COMMISSIONER FUNG: Mr. Christian, maybe I can take
5 this opportunity then to chime in. I take it your
6 submission is that a Commission should not be making
7 an order under section 38 against BC Hydro if a
8 customer complains about congestion at your stations,
9 or at BC Hydro stations more precisely?

10 MR. CHRISTIAN: I don't think I'd go that far. It's
11 not that sweeping because there are many powers the
12 Commission has to address adequacy of service
13 complaints and some of the powers might well be within
14 the confines of section 18(3), some might not. Or
15 some -- sorry, flip around. Some orders the
16 Commission might give with respect to adequacy of
17 service might well be permissible and some might not.

18 Certainly, I think, if the Commission were
19 to say to BC Hydro, you know, "Everyone of your
20 stations needs to be a dual station, not a single
21 station." I think that would clearly run afoul of
22 18(3). That wasn't asked of us, which is why I didn't
23 express it, but I think that's maybe where you're
24 going. I don't think the Commission can order Hydro
25 to build only dual stations or quadruple stations or
26 whatever it thought desirable. I don't think that

1 would be okay.

2 But there are other things that I would
3 imagine through the establishment of a tariff rate,
4 the electrical vehicle charging rates that the
5 Commission might be able to do that wouldn't run
6 afoul.

7 Remember, at the end of the day the section
8 18(3) really says to the Commission, within the
9 confines that the government has prescribed the
10 utilities get to decide the scope of their service
11 within that little sandbox the government has set up
12 and the Commission, you get to regulate as best you
13 can -- you must regulate as best you can, in fact, we
14 have to respect that sandbox. Where the bounds of the
15 sandbox are going to be is going to be fact specific
16 and, you know, that's why I made my general
17 observations that I did.

18 COMMISSIONER FUNG: All right, thank you.

19 MR. CHRISTIAN: Anyway, I was just going to conclude on
20 that by noting that two things. Firstly, everything
21 I've said I think is quite consistent with what the
22 Commission itself said in its Phase II report
23 regarding regulation of electric vehicle charging
24 service at page 31 of the report. The Commission
25 says:

26 "Accordingly, we find there's no obligation on

1 non-exempt utilities to build any specific
2 station or stations in any specific location,
3 however once the non-exempt utility has built a
4 station it must ensure that the station remains
5 in good working condition unless the BCUC orders
6 otherwise."

7 And so, you know, I think that captures it
8 almost exactly what I was just talking about. I don't
9 think the Commission can tell Hydro to build dual
10 stations if it prefers to build single stations. But
11 if BC Hydro isn't maintaining a station to a level
12 that is deemed adequate by the Commission, the
13 Commission can certainly make orders in that regards.
14 And they've said that previously and what they said is
15 consistent with my submissions on the point today.

16 I just wanted to finalize on this topic by
17 talking about, you know, there's wasn't a lot of
18 evidence in this proceeding on congestion. I'd give
19 the Commission panel a few references if they're
20 interested. Transcript Volume 1, page 109, lines 1 to
21 18. This testimony was to the effect that queuing at
22 the few stations where queuing occurred seemed to go
23 down after the introduction of the electrical vehicle
24 charging pricing. At transcript Volume 1, page 210,
25 line 19 to page 212, line 15 there's discussion about
26 the definition of congestion and how to evaluate it.

1 rates for BC Hydro to charge its public EV fast
2 charging service customers and require BC Hydro
3 to report annually...demonstrating its diligence
4 in ensuring maximum revenue...? Why or why not?"

5 And on the face to it, on the face of it it
6 seemed at first glance that this issue, that the
7 Commission's proposing this proposal, that the
8 Commission quickly decided it was different than the
9 Suncor proposal. And the difference seems to be, as
10 we understood the Suncor proposal, that -- well,
11 actually as we understood the BCUC's proposal is that
12 it would establish a number of rates within a range
13 rather than letting BC Hydro select rates within the
14 rage which was the Suncor proposal. But then if you
15 read this whole question, the question was obviously
16 BC Hydro would have to demonstrate diligence --
17 demonstrate its diligence in ensuring a maximum
18 revenue.

19 And so I guess we were a little confused
20 about whether or not the proposal was to let Hydro set
21 a rate or to have the Commission set kind of pricing
22 through this period of time. We're taking it to be
23 the former, that it's really the same as the Suncor
24 proposal. And I've made submissions on that point
25 already, I don't want to repeat those. But we will
26 add just a few things that come up more directly I

1 think when you think about the distinction between
2 letting Hydro set a rate and having the Commission set
3 a series of rates or a number of different rates over
4 the course of a period of time.

5 And the main one is like to let Hydro set
6 the rate we think is problematic because it's -- it
7 would amount to what is effectively a delegation, a
8 sub-delegation of legislative authority. The
9 legislature though the *Utilities Commission Act* has
10 charged the Utilities Commission to establishing
11 public utility pricing and rates, terms and
12 conditions. And for the Commission to allow a utility
13 to set its own pricing with any -- without any
14 transparent mechanism by which those prices would be
15 set, we think probably runs into that sub-delegation
16 issue. So in terms of the max/min pricing proposal of
17 Suncor, we rely on those submissions. As far as the
18 Commission's question, the additional point made that
19 -- allowing Hydro free reign to set the price has that
20 condition (audio drops) no issue.

21 And I'm coming to the last of the panel
22 questions now and for better or for worse I don't have
23 much to say about the last question. This is a series
24 of questions about asset management and I'm not going
25 to read the question into the record in this case.
26 The three questions ask how BC Hydro will ensure that

1 it's technology is kept current, how will BC Hydro
2 address disposal, retirement, technology is obsolete
3 sooner than expected, and how will BC Hydro minimize
4 stranded cost risks. So those are what I'd call asset
5 management questions.

6 In large measure these are evidentiary
7 questions that as counsel I can't speak directly to in
8 argument, and there was very little evidence on the
9 record with respect to these specific questions at
10 least. And so, I don't have a lot to offer in
11 response to this Commission panel question. I will
12 offer some comments, however, on those questions.

13 And the first comment relates to the nature
14 of stranded costs. Stranded costs arise when an asset
15 is taken out of service with some net book value
16 remaining on the balance sheet. Typically the assets
17 do not return -- returning equity after that point,
18 although as noted by the panel Chair in the streamline
19 review process, return on equity is not currently
20 applicable to BC Hydro at least currently under the
21 current legislative scheme.

22 But in general, for a normal utility that's
23 providing a service that isn't subject to the *Clean*
24 *Energy Act* and section 18(2), when an asset is taken
25 out of service and there's some remaining net book
26 value, it falls within the Commission's discretion to

1 allow that net book value to be recovered in rates or
2 not. And so, the utilities will apply sometimes or it
3 happens in revenue requirements proceedings sometimes,
4 that the net book value of an asset that's been taken
5 out of service is either recovered in future rates or
6 not depending on the circumstances. It's going to be
7 different in the case of BC Hydro's electric vehicle
8 charging stations, we submit, because of section 18(2)
9 of the *Clean Energy Act* which requires the Commission
10 to allow all costs of the electric vehicle service to
11 be recovered from all ratepayers.

12 **Proceeding Time 4:41 p.m. T39**

13 And so when -- if there was a circumstance
14 in which Hydro has stranded assets, and if we had to
15 take out its electric vehicle charging stations before
16 the end of their useful life, there could well be a
17 stranded asset issue. But not in the normal sense
18 because of section 18(2), which requires the
19 Commission -- or would require the Commission in that
20 hypothetical circumstance to allow BC Hydro to recover
21 those costs.

22 Again, though, we talked about the
23 expansion of Hydro's fleet after 2025 isn't something
24 that we should or can reasonably infer. Talking a bit
25 about the timeframe within which BC Hydro is going to
26 be building and bringing to service electric vehicle

1 fast charging stations and in light of that we would
2 suggest that this kind of cost risk is relatively
3 modest. And so that's the only other suggestion I can
4 on this.

5 I'm reminded, before I conclude here, that
6 I didn't (audio drops) state one thing earlier in my
7 conversation about the timeline and BC Hydro's
8 involvement in this market. So, the December 31, 2025
9 cutoff date refers to the establishing of new electric
10 vehicle charging stations and bringing them into
11 service and the costs associated with those service
12 stations. I did not mean to imply, as I think I may
13 have from the email I have here, that BC Hydro will
14 not be in that market at all after December 31, 2025.
15 This is a timely time to raise that question, right?
16 After December 31, 2025, BC Hydro will have its
17 electric vehicle charging stations in service, it will
18 need to have a rate for the provision of that service.
19 What I've tried to make clear is that it won't be
20 expanding, based on the legislative scheme and facts
21 before us, past that date. I hope that was clear and
22 I didn't mislead the panel.

23 THE CHAIRPERSON: Thank you, Mr. Christian.

24 MR. CHRISTIAN: That concludes what I have to say.
25 And, panel Chair, I'm sorry, I had to rush through
26 your questions. Yours are the most important

1 questions I was saving them to last, and I feel like I
2 gave them a bit, perhaps, shorter shrift than I could
3 have. We would be happy to elaborate on anything that
4 we didn't get a chance to respond to fully in our
5 reply submissions.

6 THE CHAIRPERSON: Okay, thank you.

7 MR. CHRISTIAN: I don't want the Commission panel to
8 think that they got short changed because you're the
9 decision makers and you need to hear what you need to
10 hear to do that job.

11 THE CHAIRPERSON: No, I'm fine. Thank you, Mr.
12 Christian. And we'll talk about it and if there is
13 anything further, we'll let you know and you can
14 address them in reply. But I think we're good, thank
15 you.

16 I'm not hearing any questions from my
17 fellow panel members. I'll assume we are concluded
18 then. And thank you very much, Mr. Christian, and
19 your team at BC Hydro for your thoughtful and thorough
20 responses to -- and thorough analysis that you've
21 provided in your submission today. It was very
22 helpful.

23 MR. CHRISTIAN: Thank you, Mr. Chair.

24 THE CHAIRPERSON: So, thank you, I'll wish everyone a
25 good afternoon. And, Mr. Christian, I'll wish you a
26 good evening.

1 COMMISSIONER FUNG: Thank you.
2 THE CHAIRPERSON: Thanks very much.
3 **(PROCEEDINGS ADJOURNED AT 4:44 P.M.)**

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

15 

16 A.B. Lanigan, Court Reporter

17 September 23rd, 2021
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