

NEWFOUNDLAND AND LABRADOR
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

120 Torbay Road, P.O. Box 21040, St. John's, Newfoundland and Labrador, Canada, A1A 5B2

Hearing Transcript

**Newfoundland and Labrador Hydro
2017 General Rate Application**

July 17, 2018

The Board:

Darlene Whalen, Chair and CEO
Dwanda Newman, Vice-Chair
James Oxford, Commissioner

Board Counsel/Staff:

Jacqueline Glynn, Board Counsel
Maureen Greene, Q.C., Hearing Counsel
Sara Kean, Assistant Board Secretary

Newfoundland and Labrador Hydro:

Geoffrey Young, Counsel
Alex Templeton, Counsel

Witness/Witnesses:

Ms. Jennifer Williams, Vice-President of
Production, Hydro
Mr. Ron LeBlanc, Vice-President of
Transmission, Distribution & the NLSO,
Hydro
Mr. Terry Gardiner, Vice-President of
Engineering Services, Hydro

Newfoundland Power Inc.:

Gerard Hayes, Counsel
Liam O'Brien, Counsel

Consumer Advocate:

Stephen Fitzgerald, Counsel

Island Industrial Customers:

Paul Coxworthy, Counsel
Dean Porter, Counsel

Labrador Interconnected Group*:

Senwung Luk, Counsel

Iron Ore Company of Canada*:

Benoit Pepin, Counsel

*Note – These two parties will not be in attendance every day

<p style="text-align: right;">Page 1</p> <p>1 (9:00 a.m.) 2 MS. GIBBONS: 3 Q. We're back on the record. Sorry for the 4 delay. 5 CHAIR: 6 Q. Thank you so much. All right, to you, Mr. 7 O'Brien. 8 MR. O'BRIEN: 9 Q. Thank you, Madam Chair. When we left off 10 yesterday, I think, Ms. Williams, I was 11 talking with you about the Nalcor Energy 12 Marketing and approach to power purchases. 13 One of the question I had regarding that, 14 and thank you for your answer just in terms 15 of how the purchases get made, how is it 16 that Nalcor Energy Marketing charges Hydro 17 for their services? 18 MS. WILLIAMS: 19 A. They're currently not charging Hydro for 20 their services. 21 MR. O'BRIEN: 22 Q. Okay, is there anything built into the test 23 year for anything like that into the future, 24 for 2018 or 2019? 25 MS. WILLIAMS:</p>	<p style="text-align: right;">Page 3</p> <p>1 directly to talk about the off island 2 purchases now for the test years. I wonder 3 if we could bring up the additional cost to 4 service information from March 22nd, Page 7, 5 and I'm looking for Table 5. Here we go. So 6 these are the supply sources for the 7 recapture energy and maritime link 8 purchases, and these are all built in, these 9 purchases are built into the 2018/2019 test 10 year. The recapture energy, what 11 assumptions went into these projections here 12 of the 388 gigawatt hours? 13 MS. WILLIAMS: 14 A. Those assumptions would not include 15 additional information that is to be filed 16 this week. 17 MR. O'BRIEN: 18 Q. Okay. 19 MS. WILLIAMS: 20 A. I believe Mr. Young mentioned at the start 21 of the hearing or the recommencement of the 22 hearing yesterday that there is additional 23 contracts now in place to provide for more 24 firm energy this coming winter, and that 25 will be filed – I believe it's the intention</p>
<p style="text-align: right;">Page 2</p> <p>1 A. There's nothing in the test year for that. 2 MR. O'BRIEN: 3 Q. All right, thanks, and in terms of how Hydro 4 ensures that the purchases done by Nalcor 5 Energy Marketing meet with least cost 6 principles, I understand that there's – from 7 one of the responses to the consumer 8 advocate's questions, that you were 9 developing a review process to ensure that 10 that would happen, is that something that's 11 in the works or has been completed? 12 MS. WILLIAMS: 13 A. As we discussed yesterday, when they 14 undertake to do a purchase for us, we will 15 not approve that purchase if it does not do 16 better than it would cost for us to 17 dispatch. 18 MR. O'BRIEN: 19 Q. So that's prior to purchasing, that review 20 process, there's nothing after that? 21 MS. WILLIAMS: 22 A. Correct. 23 MR. O'BRIEN: 24 Q. All right. I just want to turn, I guess, in 25 terms of those types of purchases just</p>	<p style="text-align: right;">Page 4</p> <p>1 of this week. So this information would not 2 have included the new firm contracted supply 3 that's in place. It would have assumed some 4 amount of Maritime Link energy, as is 5 indicated there, up to 5 percent of the 6 monthly energy purchases, as well as the 7 recapture, and with the intention of, I 8 think, 110 megawatts on peak, and then it 9 could be more outside of those hours, but 10 the 110 megawatts and the associated energy 11 on peak would have been another part of the 12 assumptions in the derivation of that table 13 of data. 14 MR. O'BRIEN: 15 Q. That additional information in terms of the 16 more firm energy, how much in 2018 would you 17 – are you aware of how much has been 18 estimated? 19 MS. WILLIAMS: 20 A. I believe over the pending two years or the 21 pending two seasons, 2018 and 2019, so the 22 new contracted supply will provide for an 23 additional 200 gigawatt hours of energy. 24 MR. O'BRIEN: 25 Q. And is that over both years?</p>

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1 MS. WILLIAMS:
 2 A. Correct. It's the sum of the two years.
 3 MR. O'BRIEN:
 4 Q. And do you know what's in 2018? Do you know
 5 the breakdown?
 6 MS. WILLIAMS:
 7 A. I believe I do. 2018, an additional – let
 8 me see, about 90.
 9 MR. O'BRIEN:
 10 Q. 90 gigawatt hours?
 11 MS. WILLIAMS:
 12 A. Again this will all be clarified certainly
 13 with the evidence.
 14 MR. O'BRIEN:
 15 Q. Sure, yeah.
 16 MS. WILLIAMS:
 17 A. And then, therefore, must be about 100.
 18 Might be a split of 100 and 110 – it will
 19 have to be clarified, obviously, with the
 20 evidence.
 21 MR. O'BRIEN:
 22 Q. Okay, so possibly 100 to 110 or somewhere in
 23 that range?
 24 MS. WILLIAMS:
 25 A. Yeah.

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1 MR. O'BRIEN:
 2 Q. For 2019.
 3 MS. WILLIAMS:
 4 A. Correct.
 5 MR. O'BRIEN:
 6 Q. Okay, so that would come over the Maritime
 7 Link, would it, or is it –
 8 MS. WILLIAMS:
 9 A. So all of the – all of the imports will be a
 10 mix of the Labrador Island Link and the
 11 Maritime Link.
 12 MR. O'BRIEN:
 13 Q. All right. So in terms of, let's say, the
 14 recapture for 2018 here, that 388, that was
 15 based on an assumption of in service July 1,
 16 is that right?
 17 MS. WILLIAMS:
 18 A. Yes.
 19 MR. O'BRIEN:
 20 Q. Okay, and as of now, present purchases right
 21 now, where are they right now?
 22 MS. WILLIAMS:
 23 A. I don't think we're going to have a material
 24 difference in the delivery based on the
 25 commissioning date that's changed because we

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1 are receiving energy “as is” now, and,
 2 obviously, the benefit of the recapture
 3 we'll hopefully see in the fall with being
 4 able to bring 100 units on later. So we're
 5 not expecting a material difference in the
 6 timing of the official commissioning.
 7 MR. O'BRIEN:
 8 Q. Is there any difference in price?
 9 MS. WILLIAMS:
 10 A. Different in price?
 11 MR. O'BRIEN:
 12 Q. Like, say, the recapture right now, we see
 13 this is based on July 1 in service, so you
 14 are seeing energy flowing right now. Are
 15 you purchasing that energy as it comes in?
 16 MS. WILLIAMS:
 17 A. Yes, at .2 cents, right.
 18 MR. O'BRIEN:
 19 A. Yeah, and is there any difference then in
 20 what you will see as well for the firm
 21 energy?
 22 MS. WILLIAMS:
 23 A. Sorry, no, the firm energy has not commenced
 24 yet.
 25 MR. O'BRIEN:

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1 Q. Okay, but will there be a difference in
 2 price in that from the .2?
 3 MS. WILLIAMS:
 4 A. The contracted firm energy is over and above
 5 the recapture, so it is a different price.
 6 MR. O'BRIEN:
 7 Q. It is a different price, okay, and you
 8 expect the recapture energy of 388, even
 9 with the in service later into the fall,
 10 will you still have 388 gigawatt hours in
 11 2018?
 12 MS. WILLIAMS:
 13 A. What the contracted firm supply allows us to
 14 do is to – the words that we're using within
 15 Hydro is called “fill the LIL”. Basically,
 16 we're able to maximize the amount of energy
 17 and capacity coming from Labrador over the
 18 Labrador Island Link into Newfoundland at
 19 the maximum starting – it starts at 225
 20 megawatts in Labrador and is delivered to
 21 the island at 214 megawatts due to losses,
 22 and so we're actually able to get more
 23 recapture down because we have more firm
 24 capacity at which to bring it, whereas we
 25 couldn't do that when we could only maximize

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1 the capacity at 110 on peak.
 2 MR. O'BRIEN:
 3 Q. And when you can only maximize it at 110,
 4 was that as a result of what was available
 5 for recapture power?
 6 MS. WILLIAMS:
 7 A. It was as a result of the Labrador load. We
 8 had to satisfy the Labrador requirements
 9 before we could bring the additional
 10 capacity in energy to the island.
 11 MR. O'BRIEN:
 12 Q. So the Maritime Link purchases there that we
 13 see in terms of estimations, can you just
 14 give me a quick overview as to how they were
 15 estimated in the first place? I think you
 16 just said 5 percent of the load. How does
 17 that work?
 18 MS. WILLIAMS:
 19 A. Correct. It was basically with this asset
 20 and our interaction with it was new. You
 21 know, we've only really been interacting
 22 with this since February, late February, so
 23 we didn't want to over estimate and,
 24 therefore, under estimate the needs for our
 25 existing assets. We didn't think that would

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1 be a prudent course of action. So we went
 2 for a more conservative 5 percent of the
 3 monthly energy requirement as is noted, and
 4 again those are market purchases, those are
 5 not firm purchases. So we also didn't want
 6 to over estimate what the market might be
 7 able to provide because certainly our
 8 neighbours in the Maritimes are, you know,
 9 peaking in the winter season the same as us,
 10 so we have to be cognizant of that. So that
 11 was really some of the logic behind choosing
 12 that somewhat conservative number.
 13 MR. O'BRIEN:
 14 Q. Okay, and up until now, where are purchases
 15 on the Maritime Link?
 16 MS. WILLIAMS:
 17 A. I believe we're at around – gosh, I had it
 18 noted because I – 26, I think, gigawatt
 19 hours is the number we are today.
 20 MR. O'BRIEN:
 21 Q. 26 gigawatt hours, and is that above and
 22 beyond testing purchases?
 23 MS. WILLIAMS:
 24 A. That is, I'll call it, true economic market
 25 purchases, yeah, not testing inadvertent

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1 energy.
 2 MR. O'BRIEN:
 3 Q. All right, and Mr. Haynes kind of talked
 4 about, and I think you've alluded to the
 5 idea of off peak versus on peak delivery and
 6 purchases. He mentioned somewhere in his
 7 evidence about there being an ability to
 8 store energy. You can bring some down and
 9 store it, and he even, I think, used the
 10 phrase, "Import water". Are you able to
 11 give me a little bit more information on
 12 what he was talking about there?
 13 MS. WILLIAMS:
 14 A. He was likely referring to what we are all
 15 starting to talk about now, which is
 16 ponding.
 17 MR. O'BRIEN:
 18 Q. Okay.
 19 MS. WILLIAMS:
 20 A. And the concept of ponding is that if, for
 21 example, somewhere in the Maritimes was
 22 having a spring and they had a lot of energy
 23 that they were going to have to spill, and
 24 we had capacity in our reservoirs to
 25 basically store energy, what we could do is

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1 we could avail of the opportunity to take
 2 what would be very cheap energy if a –
 3 sorry, if a partner or somebody in the
 4 Maritimes is going to spill energy, it would
 5 be very cheap for them, they'd rather get
 6 some revenue for it as opposed to zero. So
 7 we could bring over the Maritime Link or
 8 through the Labrador Link if that made
 9 sense, basically, import energy. We would
 10 have to pay for that, obviously, and what
 11 that would mean is it would just ramp back
 12 on our own generation, and the intention is
 13 that it would likely offset later use of
 14 Holyrood or, you know, a more expensive
 15 source. Then later when it was at an
 16 appropriate market price to resell that
 17 energy out, we would just generate more than
 18 our customers needed and we would import the
 19 difference at a higher price, and that would
 20 be an opportunity that could – sorry,
 21 export, thanks, that we could avail of in
 22 the future.
 23 MR. O'BRIEN:
 24 Q. Is there a plan in place, a formal plan, as
 25 to how to do that?

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1 MS. WILLIAMS:
 2 A. We're working on that, actually, and we do
 3 intend to discuss that more with the Board
 4 and certainly put that to the Board for
 5 review and approval of exactly how that
 6 would work.
 7 MR. O'BRIEN:
 8 Q. Any timeline on that?
 9 MS. WILLIAMS:
 10 A. Hopefully within the next month or so.
 11 MR. O'BRIEN:
 12 Q. Okay. So with the new firm sort of
 13 contracts, any idea when they're going to
 14 come on line, when you're going to be able
 15 to use those?
 16 MS. WILLIAMS:
 17 A. The details of that are included in the near
 18 term generation adequacy R5's, which I know
 19 is not part of this proceeding, and I know
 20 that they are currently going through the
 21 confidentiality review process.
 22 MR. O'BRIEN:
 23 Q. Okay.
 24 MS. WILLIAMS:
 25 A. I don't want to say too much about the exact

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1 details of it.
 2 MR. O'BRIEN:
 3 Q. No, no.
 4 MS. WILLIAMS:
 5 A. But they will be in place for this winter.
 6 The contracts are signed and confirmed, and
 7 the supply is available for this coming
 8 winter.
 9 (9:15 a.m.)
 10 MR. O'BRIEN:
 11 Q. Okay. So in terms of full – I just want to
 12 make sure I got it accurately. In terms of
 13 full gigawatt hours for recapture, the 388
 14 that we see here is likely accurate for the
 15 year?
 16 MS. WILLIAMS:
 17 A. Sorry, I might have led you astray. That's
 18 actually – the new forecast is closer to 500
 19 for recapture.
 20 MR. O'BRIEN:
 21 Q. Okay.
 22 MS. WILLIAMS:
 23 A. We're able to bring more recapture with the
 24 firming of the LIL.
 25 MR. O'BRIEN:

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1 Q. Okay, and in terms of Maritime Link, is
 2 there any change in that for 2018, the 93?
 3 MS. WILLIAMS:
 4 A. What we might end up doing is using a little
 5 bit less of the Maritime Link purchases as
 6 it might not be the more cost effective
 7 solution than recapture, obviously.
 8 MR. O'BRIEN:
 9 Q. Yeah, it wouldn't be as economical, okay.
 10 So Maritime Link right now, will we be using
 11 that to date – from to date until when you
 12 start technically using the LIL, will you be
 13 making much purchases, Maritime Link
 14 purchases?
 15 MS. WILLIAMS:
 16 A. So just to confirm, you're wondering if from
 17 where we are today –
 18 MR. O'BRIEN:
 19 Q. Until the fall when the LIL, yeah, when you
 20 can get the recapture on.
 21 MS. WILLIAMS:
 22 A. I don't anticipate a lot more of the
 23 Maritime Link. I think we would continue to
 24 use it in the way that we have been if
 25 there's an opportunity that makes sense.

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1 For example, if we're still going through
 2 the commissioning process on the Labrador-
 3 Island Link, the Maritime Link is still a
 4 very good opportunity for us to avail of
 5 when it makes economic sense.
 6 MR. O'BRIEN:
 7 Q. All right, and for 2019, do you anticipate
 8 those figures going up for recapture energy
 9 as well?
 10 MS. WILLIAMS:
 11 A. No, I think recapture in 2019 will be
 12 similar.
 13 MR. O'BRIEN:
 14 Q. Would be similar. So I had some questions
 15 for Mr. Haynes just in terms of the
 16 availability of recapture power, and we had
 17 talked about data centres and some of the
 18 load in Labrador possibly affecting
 19 recapture power. With these new contracts
 20 now in place, does that sort of push that
 21 off to the side as being a problem or
 22 concern?
 23 MS. WILLIAMS:
 24 A. I don't have a concern with our ability to
 25 bring down the amount that we currently

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1 have, and as well there are other processes
 2 that have been put in place to help soften
 3 some of the requests that we were seeing in
 4 Labrador.
 5 MR. O'BRIEN:
 6 Q. Yeah.
 7 MS. WILLIAMS:
 8 A. So, you know, I'm not – I'm not overly
 9 concerned with our ability to bring as much
 10 energy as possible, the recapture.
 11 MR. O'BRIEN:
 12 Q. And when you say "soften", it concerns a
 13 process is what you're talking about there?
 14 MS. WILLIAMS:
 15 A. The application for MAC, I think, it's
 16 putting a cap on the amount or the quantity
 17 of a request that a customer could come to
 18 in Labrador that would – I think it's 100
 19 kilowatts. I think that's correct. Mr.
 20 LeBlanc might be able to speak to that.
 21 MR. LEBLANC:
 22 A. Right now there is an application before the
 23 Board to put a cap of 100 kilowatt hours for
 24 a new customer in Lab East. Again that's
 25 only in Lab East. Also if there are new

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1 data centres that require building and
 2 funding, the timeline for them to get online
 3 will be outside the 2018/2019 test year.
 4 MR. O'BRIEN:
 5 Q. Outside of the test years, okay, and if you
 6 do have those contracts, in any event,
 7 you're talking about fill the LIL, I guess,
 8 it gives you that opportunity to avoid that
 9 concern?
 10 MS. WILLIAMS:
 11 A. Correct.
 12 MR. O'BRIEN:
 13 Q. Okay. I'd just like to briefly talk about
 14 the O & M costs with respect to the
 15 Labrador-Island Link. I wonder if we could
 16 move to Appendix "H" of this document, Page
 17 1. This is the total system revenue
 18 requirement under the expected supply cost
 19 scenario, which is what we're now looking at
 20 as a result of a settlement agreement.
 21 Power purchases for off-island, line 9
 22 there, and that's the – the total is 10
 23 million there. That may change somewhat, I
 24 guess, based on the information that we'll
 25 receive now with the firm contracts that are

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1 coming in place, is that right?
 2 MS. WILLIAMS:
 3 A. That's correct.
 4 MR. O'BRIEN:
 5 Q. Okay, but it'll only change to the extent of
 6 whatever the price change is in those extra
 7 purchases?
 8 MS. WILLIAMS:
 9 A. The volume of purchases obviously will
 10 impact it.
 11 MR. O'BRIEN:
 12 Q. Yeah, and the LIL and LTA cost there of –
 13 and this is for 2018 of 27 million there, is
 14 it still anticipated to be the same, that
 15 won't change?
 16 MS. WILLIAMS:
 17 A. I think Mr. LeBlanc is going to speak to the
 18 LIL O & M costs.
 19 MR. LEBLANC:
 20 A. The LIL O & M costs will only start once
 21 commissioning is complete.
 22 MR. O'BRIEN:
 23 Q. Okay.
 24 MR. LEBLANC:
 25 A. So that is expected in the fall, and we do

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1 have a revised number for that.
 2 MR. O'BRIEN:
 3 Q. Good, okay.
 4 MR. LEBLANC:
 5 A. And we are expecting it to be approximately
 6 8.3 million for 2018.
 7 MR. O'BRIEN:
 8 Q. Okay, and what's that based on?
 9 MR. LEBLANC:
 10 A. I didn't hear you. Pardon?
 11 MR. O'BRIEN:
 12 Q. I'm sorry. What was that based on? Is that
 13 a figure given to you by Nalcor or is that
 14 something you guys calculated?
 15 MR. LEBLANC:
 16 A. That was given to us by Nalcor, and it's a
 17 proration of the months in service.
 18 MR. O'BRIEN:
 19 Q. And in terms of fuel, is that fuel estimate
 20 there different now as a result of the LIL
 21 coming into line later on in the fall, or as
 22 a result of more purchases being available,
 23 are you able to estimate any difference in
 24 fuel that we might see in the 2018 year?
 25 MS. WILLIAMS:

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1 A. I don't want to speak necessarily for the
 2 testimony that, you know, Mr. Fagan is going
 3 to present, but I believe the improvement in
 4 fuel costs is in excess of 100 million
 5 dollars.
 6 MR. O'BRIEN:
 7 Q. Okay.
 8 MS. WILLIAMS:
 9 A. Yeah.
 10 MR. O'BRIEN:
 11 Q. And that's for 2018?
 12 MS. WILLIAMS:
 13 A. It's for the combined years.
 14 MR. O'BRIEN:
 15 Q. The combined.
 16 MS. WILLIAMS:
 17 A. I'm going to say 50 to 60 each year.
 18 MR. O'BRIEN:
 19 Q. Okay. And Mr. Fagan can speak to that
 20 directly, I guess, in terms of the amounts?
 21 MS. WILLIAMS:
 22 A. I think that's best for Mr. Fagan to do,
 23 yes.
 24 MR. O'BRIEN:
 25 Q. Yeah. Now, there was an application before

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1 the Board just in terms of whether or not
 2 the LIL and LTA costs ought to be included
 3 in the test years and there's some
 4 indication by the Board that perhaps more
 5 evidence might come through in the hearing,
 6 just in terms of the context behind why they
 7 should be charged, that sort of thing. Is
 8 anyone on the panel here able to talk about
 9 say the context behind the Orders in Council
 10 and that kind of thing? Would anyone here
 11 have been involved in any of that?
 12 MR. LEBLANC:
 13 A. No, that would be best left to Mr. Fagan to
 14 discuss.
 15 MR. O'BRIEN:
 16 Q. Okay. And in terms of how those costs get
 17 determined, Mr. LeBlanc, you indicated that
 18 Nalcor had provided you with that estimate?
 19 MR. LEBLANC:
 20 A. That is correct.
 21 MR. O'BRIEN:
 22 Q. Will you have an opportunity to review that
 23 estimate with Nalcor once you're invoiced
 24 for those costs?
 25 MR. LEBLANC:

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1 A. Yes. The actual invoices will be actual
 2 costs, not forecast costs, and we will have
 3 a chance to review them and they are also
 4 updating their costs.
 5 MR. O'BRIEN:
 6 Q. Okay.
 7 MR. LEBLANC:
 8 A. So, they expect to have an update by the end
 9 of August for 2019.
 10 MR. O'BRIEN:
 11 Q. Okay. And when they give you those updated
 12 costs, do you have any discussions – will
 13 you have any discussions with them as to how
 14 they're based, that sort of thing?
 15 MR. LEBLANC:
 16 A. Yes, we'll ask for complete detail.
 17 MR. O'BRIEN:
 18 Q. And is that you who is involved with that or
 19 is it someone else?
 20 MR. LEBLANC:
 21 A. There's a number of us. I'll be involved,
 22 as well as Ms. Hutchens from the accounting
 23 side as well.
 24 MR. O'BRIEN:
 25 Q. In the normal course of things, these types

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1 of costs, O&M costs, in an open access
 2 regime, they're normally included as part of
 3 the transmission tariff, are they? Kind of
 4 built into your price?
 5 MR. LEBLANC:
 6 A. Yes. It's a complicated scenario here, but
 7 their revenue requirements are included in
 8 the transmission tariff that was – is in
 9 place.
 10 MR. O'BRIEN:
 11 Q. So, in this case, Hydro is expecting to pay
 12 100 percent of those costs, I take it, for
 13 those two years?
 14 MR. LEBLANC:
 15 A. In this case, we will be billed directly by
 16 Nalcor. We will pay 100 percent of the
 17 costs outside of the tariff.
 18 MR. O'BRIEN:
 19 Q. Okay.
 20 MR. LEBLANC:
 21 A. And then within the tariff, because they do
 22 have a revenue requirement, Hydro will get a
 23 credit for the payments made to Nalcor. So,
 24 there won't be any double payment on these
 25 costs.

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1 MR. O'BRIEN:
 2 Q. Okay. And over the 2018 and '19 test year,
 3 do you anticipate anyone else using the LIL
 4 or the LTA?
 5 MR. LEBLANC:
 6 A. No, we do not.
 7 MR. O'BRIEN:
 8 Q. And if there were, would you expect to have
 9 some proration of those costs?
 10 MR. LEBLANC:
 11 A. If other people – the way the mature
 12 transmission tariff would work, if there
 13 were third party revenues that were not
 14 budgeted or accounted for, they would go
 15 towards reducing the rates when the – the
 16 next time the rates would be updated and
 17 that would result in everyone paying less
 18 for transmission.
 19 MR. O'BRIEN:
 20 Q. That'll be into the future though when the
 21 rate's updated?
 22 MR. LEBLANC:
 23 A. Yes.
 24 MR. O'BRIEN:
 25 Q. Okay. How often do rates get updated?

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1 MR. LEBLANC:
 2 A. We are planning – right now we have an
 3 interim transmission tariff.
 4 MR. O'BRIEN:
 5 Q. Right.
 6 MR. LEBLANC:
 7 A. But post-Muskrat, we'd be looking at annual
 8 updates is the plan.
 9 MR. O'BRIEN:
 10 Q. Okay.
 11 MR. LEBLANC:
 12 A. Subject to approval.
 13 MR. O'BRIEN:
 14 Q. So, you've indicated that there is some
 15 contracts too that now with some firm energy
 16 for the rest of 2018 and 2019. Are there
 17 any others that are in contemplation?
 18 MS. WILLIAMS:
 19 A. No contracts, for example, of LIL because
 20 that does make it firm now.
 21 MR. O'BRIEN:
 22 Q. Yeah.
 23 MS. WILLIAMS:
 24 A. That is – really we are contracting the
 25 maximum capacity.

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1 MR. O'BRIEN:
 2 Q. It's full, yeah.
 3 MS. WILLIAMS:
 4 A. And there's no other contracts currently
 5 contemplated, but we continue to pursue
 6 anything that would be economic in nature
 7 that could give us the flexibility to – you
 8 know, to further reduce costs.
 9 MR. O'BRIEN:
 10 Q. And I'll talk about this a little bit later
 11 when I talk about standby generation, but
 12 just in terms of say emergency reserves and
 13 that sort of thing, are there any contracts
 14 contemplated with Nova Scotia Power or NB
 15 Power or anything like that?
 16 MS. WILLIAMS:
 17 A. Not currently, however, some of the parties
 18 or all the parties would be aware of the
 19 reliability review that we're completing
 20 this year; that for post-Muskrat we are
 21 undertaking what the future system
 22 reliability looks like and we need to
 23 compare ourselves to our neighbours to
 24 understand what is – how does the system
 25 need to run with regards to reliability;

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1 what are the metrics, what are the planning
 2 criteria we need to have in place. And once
 3 we have that review completed, we'll
 4 understand exactly what the future needs and
 5 then we'll pursue various opportunities if
 6 indeed we want to address those needs due to
 7 cost. I think we do – Mr. LeBlanc could
 8 probably mention about reserve assistance,
 9 but with regards to reserves, I'll call it,
 10 to supply off island -
 11 MR. O'BRIEN:
 12 Q. Okay.
 13 MS. WILLIAMS:
 14 A. - we would look at that if we need something
 15 else as an alternative in the least cost
 16 analysis concept.
 17 MR. O'BRIEN:
 18 Q. I understood there was some reserve
 19 assistance.
 20 MR. LEBLANC:
 21 A. Yeah.
 22 MS. WILLIAMS:
 23 A. Yeah, with that, yeah.
 24 MR. LEBLANC:
 25 A. Right now, with Nova Scotia Power, we do

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1 have reserve assistance, but it's not
 2 mandatory.
 3 MR. O'BRIEN:
 4 Q. Yeah.
 5 MR. LEBLANC:
 6 A. So, if we are – if we anticipate that we'll
 7 be light on reserves, we can give them a
 8 call and if they have it, they will provide
 9 it. But if they don't have it, there's no
 10 obligation. And that's a reciprocal
 11 agreement.
 12 MR. O'BRIEN:
 13 Q. Is it?
 14 MR. LEBLANC:
 15 A. If they're short, they can ask us.
 16 MR. O'BRIEN:
 17 Q. Okay.
 18 MR. LEBLANC:
 19 A. And again, only supplied if the party has it
 20 available.
 21 MR. O'BRIEN:
 22 Q. Has it available. Have you ever called on
 23 that?
 24 (9:30 a.m.)
 25 MR. LEBLANC:

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1 A. I believe we have, and they did supply it
 2 and I think once they said they did not have
 3 it.
 4 MR. O'BRIEN:
 5 Q. Okay.
 6 MR. LEBLANC:
 7 A. So, then it resulted in starting the CT.
 8 MR. O'BRIEN:
 9 Q. When was that assistance agreement put in
 10 place?
 11 MR. LEBLANC:
 12 A. That was put in place as part of the myriad
 13 of agreements with – so, it's part of the
 14 operators' agreement, IOC, Interconnected
 15 Operators Agreement with Nova Scotia Power.
 16 MR. O'BRIEN:
 17 Q. So, it was last year sometime or the year
 18 before?
 19 MR. LEBLANC:
 20 A. It was at least in 2017. I'm not sure of
 21 the inking day.
 22 MR. O'BRIEN:
 23 Q. All right. Just in terms of back to the O&M
 24 costs and I did have some questions just in
 25 terms of whether or not there's additional

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1 information to be provided on that and why
 2 Hydro should – or why customers should pay
 3 those costs. Am I better bringing all that
 4 up with Mr. Fagan?
 5 MR. LEBLANC:
 6 A. If it's the mechanics and the why should
 7 they pay -
 8 MR. O'BRIEN:
 9 Q. Yes, yeah.
 10 MR. LEBLANC:
 11 A. - that would be best with Mr. Fagan.
 12 MR. O'BRIEN:
 13 Q. Okay. Does the same apply then, I guess,
 14 for both LIL and LTA costs?
 15 MR. LEBLANC:
 16 A. Yes.
 17 MR. O'BRIEN:
 18 Q. Okay. Moving on to another topic then. I'd
 19 just like to ask about some of the hydraulic
 20 generation performance to date. I wonder if
 21 we could bring up one of the documents that
 22 I provided on Friday, which is the June 2018
 23 Energy Supply Report.
 24 MS. GLYNN:
 25 Q. We'll enter that as Information No. 9.

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1 MR. O'BRIEN:
 2 Q. Thank you. So, this is the most recent
 3 Energy Supply Report for the Island
 4 Interconnected System. Is that right?
 5 MS. WILLIAMS:
 6 A. Correct.
 7 MR. O'BRIEN:
 8 Q. Okay. Page one just talks about system
 9 hydrology. I just had a couple questions.
 10 So, it looks like storage hydrology levels
 11 in June are below average. Is that right?
 12 MS. WILLIAMS:
 13 A. Below average, so, you're looking at which
 14 numbers? You're looking at the 2018 1903
 15 versus the 21-year average? Is that what
 16 you're comparing?
 17 MR. O'BRIEN:
 18 Q. Yes, yeah.
 19 MS. WILLIAMS:
 20 A. I guess it's below the 21-year average.
 21 MR. O'BRIEN:
 22 Q. Yeah, okay. All right. So, it's below the
 23 maximum operating level, but 67 percent
 24 above minimum storage level?
 25 MS. WILLIAMS:

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1 A. Correct.

2 MR. O'BRIEN:

3 Q. I guess my question is more along the lines

4 of the minimum storage level and it's the

5 next page there, there's a chart that shows

6 minimum storage level there, and that's the

7 bottom dotted line? Is that right?

8 MS. WILLIAMS:

9 A. That's correct.

10 MR. O'BRIEN:

11 Q. I'm given to understand that that minimum

12 storage level has actually dropped in the

13 last few months from where it was

14 traditionally. Is that fair?

15 MS. WILLIAMS:

16 A. Sorry, it's dropped in the last?

17 MR. O'BRIEN:

18 Q. Since February it's actually come down?

19 MS. WILLIAMS:

20 A. The minimum storage level -

21 MR. O'BRIEN:

22 Q. How does that work?

23 MS. WILLIAMS:

24 A. Sorry, yeah, the minimum storage level curve

25 that you see there -

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1 MR. O'BRIEN:

2 Q. Yeah.

3 MS. WILLIAMS:

4 A. - is re-evaluated ideally on a yearly basis,

5 but sometimes we do it every say two years.

6 MR. O'BRIEN:

7 Q. Okay.

8 MS. WILLIAMS:

9 A. And this would have been re-evaluated

10 partway through this year to reflect, you

11 know, the things that we would know on the

12 system. And so, the current line that you

13 see there actually reflects - I think the

14 minimum number there is 300, if you see that

15 there?

16 MR. O'BRIEN:

17 Q. That's what it looks like.

18 MS. WILLIAMS:

19 A. The first of May.

20 MR. O'BRIEN:

21 Q. Yeah.

22 MS. WILLIAMS:

23 A. I believe that's actually higher than it's

24 been in the past.

25 MR. O'BRIEN:

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1 Q. Is it?

2 MS. WILLIAMS:

3 A. And that is - sorry?

4 MR. O'BRIEN:

5 Q. So, that minimum drop down there in May 1st

6 is higher?

7 MS. WILLIAMS:

8 A. I think as a bottom threshold number.

9 MR. O'BRIEN:

10 Q. Okay.

11 MS. WILLIAMS:

12 A. From say a previous year.

13 MR. O'BRIEN:

14 Q. All right. And maybe we can have a look at

15 say the December one?

16 MS. WILLIAMS:

17 A. Yeah.

18 MR. O'BRIEN:

19 Q. And I think I've got that there as well. I

20 just want to get - really, I just want to

21 get an idea of sort of how that works and

22 how you -

23 MS. WILLIAMS:

24 A. Yeah.

25 MS. GLYNN:

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1 Q. And we'll enter that one as Exhibit - or

2 sorry, Information No. 10.

3 MR. O'BRIEN:

4 Q. All right.

5 MS. WILLIAMS:

6 A. Yeah, I have -

7 MR. O'BRIEN:

8 Q. That must have been the year before, is it,

9 for May 1?

10 MS. WILLIAMS:

11 A. Yeah, it basically is the - sorry, thank

12 you. The minimum storage that we would

13 choose is based on our need for riding

14 through, if you want to call it that, the

15 driest sequence that we have seen, which was

16 the '59 to '61 into '62 period.

17 MR. O'BRIEN:

18 Q. Yeah.

19 MS. WILLIAMS:

20 A. And then it also considers since that period

21 if there's been any anomalous shorter

22 periods of time. So, for example, in that

23 three-year period -

24 MR. O'BRIEN:

25 Q. Right.

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1 MS. WILLIAMS:
 2 A. - we protect ourselves in that realm that we
 3 would not – we would have to make sure we
 4 have enough hydraulic production, enough
 5 sort of thermal production, to ride through
 6 that driest period. And so that’s what the
 7 curve develops to – so, this is when you
 8 have to take action through the year.
 9 MR. O'BRIEN:
 10 Q. Okay.
 11 MS. WILLIAMS:
 12 A. And so, yeah, the 300 is the lowest number
 13 that we could go to, reflecting -- at that
 14 point in time, reflecting that we would –
 15 you know, if you hit – sorry, if you hit
 16 below 300 at that point in time, you would
 17 not be able to, on a probabilistic basis,
 18 get through the dry period, if the dry
 19 period was to reoccur.
 20 MR. O'BRIEN:
 21 Q. Okay.
 22 MS. WILLIAMS:
 23 A. And so, the number would have dropped in
 24 reflection of what we know on the system.
 25 In the future coming, we’ve got the in-

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1 service of the LIL. We’ve got the recapture
 2 available. So, we would have developed the
 3 storage guidelines on the basis of knowing
 4 what we know at this point in time.
 5 MR. O'BRIEN:
 6 Q. Okay. So, you’d – and that’s kind of where
 7 I was going. It’s on the basis of what you
 8 know what’s coming up, the LIL and -
 9 MS. WILLIAMS:
 10 A. Correct.
 11 MR. O'BRIEN:
 12 Q. Is that fair?
 13 MS. WILLIAMS:
 14 A. Yeah.
 15 MR. O'BRIEN:
 16 Q. Okay. And how does that affect how you
 17 operate, where the minimum storage line is?
 18 How does that affect your operational
 19 decisions?
 20 MS. WILLIAMS:
 21 A. Right. On a weekly basis, we have meetings
 22 where you look at where you are. So, for
 23 example, if you look at – if you go to this
 24 year report, sorry, Caryn, if you don’t
 25 mind, just pop to the one from June? Yeah.

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1 All right. So, for example, if you look at
 2 in May, if we kept trending toward that
 3 purple line, if you see where May, the
 4 orange line?
 5 MR. O'BRIEN:
 6 Q. Yeah.
 7 MS. WILLIAMS:
 8 A. If the orange line had kept trending and we
 9 didn’t get the snow melt or, for example, if
 10 we didn’t have snow, we had kept trending
 11 toward the purple line, we would be then
 12 saying “okay, we need to change our thermal
 13 generation mix to prepare for” – so that we
 14 don’t head into that line. And even if you
 15 did cross the line, it is not a guarantee
 16 that you won’t be able to, you know, serve
 17 customers. It’s that if the three-year dry
 18 sequence materializes, then you would have
 19 to, you know, add some additional generation
 20 to the mix. So, basically, it’s a line that
 21 we aim not to cross, but you know, if you do
 22 head toward there, because of extreme rare
 23 hydrology, we could still take some action,
 24 but we generally dispatch so that we don’t
 25 cross that line.

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1 MR. O'BRIEN:
 2 Q. Okay. But it affects your dispatch decision
 3 making?
 4 MS. WILLIAMS:
 5 A. Correct.
 6 MR. O'BRIEN:
 7 Q. Is that right? Okay.
 8 MS. WILLIAMS:
 9 A. Yeah, on a weekly basis we’d look for it.
 10 This is created basically every week and we
 11 look at it every week and you’d look at,
 12 okay, we are at a very dry sequence.
 13 MR. O'BRIEN:
 14 Q. Yeah.
 15 MS. WILLIAMS:
 16 A. We’d take that point in time and we say,
 17 okay, if we’re at a very dry sequence or
 18 very wet sequence and have a range of
 19 outcomes that we could end up in, and then
 20 you make your judgments on that basis.
 21 MR. O'BRIEN:
 22 Q. So, it’s not in terms of a long-term
 23 planning? This is short-term?
 24 MS. WILLIAMS:
 25 A. It’s a bit of both, yeah. It’s both. I

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1 mean, certainly, immediate term, you make
 2 your decisions, you know, for the weeks
 3 ahead.
 4 MR. O'BRIEN:
 5 Q. Right.
 6 MS. WILLIAMS:
 7 A. And for example, if you see something
 8 building, you say "okay, in six weeks' time,
 9 if this trend continues, we could have to"
 10 and you start wrapping your head around what
 11 that might look like.
 12 MR. O'BRIEN:
 13 Q. Okay.
 14 MS. WILLIAMS:
 15 A. And you think about that. And then, but
 16 again, you do always plan, for example, that
 17 this is a long-term planning view as well.
 18 MR. O'BRIEN:
 19 Q. Will that affect – I mean, if you see sort
 20 of weeks ahead, will that affect your
 21 decision making process as to whether you'll
 22 go to the market to search for reserves
 23 versus -
 24 MS. WILLIAMS:
 25 A. Yes.

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1 MR. O'BRIEN:
 2 Q. - just looking at standby generation?
 3 MS. WILLIAMS:
 4 A. Absolutely, it does.
 5 MR. O'BRIEN:
 6 Q. Okay. And these are done annually or you
 7 see one every week different?
 8 MS. WILLIAMS:
 9 A. We see a new -
 10 MR. O'BRIEN:
 11 Q. You see the trending, the orange line every
 12 week?
 13 MS. WILLIAMS:
 14 A. Well, I look at it every day, but no, we do
 15 have, I'll call it, sort of a formal
 16 document that we look at with the decision
 17 making around how we decide to dispatch.
 18 MR. O'BRIEN:
 19 Q. Okay.
 20 MS. WILLIAMS:
 21 A. We have a formal document that documents the
 22 decision making every week and exactly what
 23 each unit then is expected to do through
 24 that week.
 25 MR. O'BRIEN:

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1 Q. So, the top line and the bottom line though,
 2 those are annual lines, are they, those
 3 dotted lines?
 4 MS. WILLIAMS:
 5 A. Well, the top line doesn't really change.
 6 MR. O'BRIEN:
 7 Q. No.
 8 MS. WILLIAMS:
 9 A. Because that's just the maximum of your
 10 reservoir.
 11 MR. O'BRIEN:
 12 Q. That's the maximum anyway, okay.
 13 MS. WILLIAMS:
 14 A. Correct.
 15 MR. O'BRIEN:
 16 Q. But the bottom line is an annual line?
 17 MS. WILLIAMS:
 18 A. In theory, it's annual. Again, you wouldn't
 19 change if there's nothing really material
 20 changing.
 21 MR. O'BRIEN:
 22 Q. Okay. In terms of – I want to talk a little
 23 bit about hydraulic performance as well.
 24 So, I wonder – I understand there's some –
 25 there's been some equipment issues at Bay

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1 D'Espoir generation station that's affected
 2 the DAFOR performance since 2014. I saw
 3 that in the evidence. What exactly were
 4 those issues that you think had the effect
 5 on that performance?
 6 MS. WILLIAMS:
 7 A. The most significant impact on Bay d'Espoir
 8 because--the rest of the hydraulic units
 9 have had very good performance.
 10 MR. O'BRIEN:
 11 Q. Yes.
 12 MS. WILLIAMS:
 13 A. So, it really has been the performance of
 14 the units that have been associated with the
 15 penstock that would out of service at a
 16 point in time. So, really two units.
 17 MR. O'BRIEN:
 18 Q. Two units.
 19 MS. WILLIAMS:
 20 A. As opposed to across the fleet. And it's
 21 been obviously the deterioration, the
 22 condition of the welds in those penstocks
 23 have affected it, and I think into 2017,
 24 last year, the result in the day 4 was 2.29
 25 of which 1.64 was related to the unplanned

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1 penstock outage.
 2 MR. O'BRIEN:
 3 Q. That's 1.64 out of –
 4 MS. WILLIAMS:
 5 A. 2.29.
 6 MR. O'BRIEN:
 7 Q. 2.29, okay. And this was—was this penstock
 8 1?
 9 MS. WILLIAMS:
 10 A. Correct.
 11 MR. O'BRIEN:
 12 Q. Okay. And Mr. Haynes had talked about as
 13 well that there being recent repairs to a
 14 leak and it was something that had occurred
 15 before with that particular penstock?
 16 MS. WILLIAMS:
 17 A. Um-hm.
 18 MR. O'BRIEN:
 19 Q. Is that right?
 20 MS. WILLIAMS:
 21 A. Correct, so in May of 2016 we had a leak in
 22 penstock 1. It was addressed and put back
 23 in service, and then we had another leak
 24 develop in the same penstock.
 25 MR. O'BRIEN:

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1 Q. Right.
 2 MS. WILLIAMS:
 3 A. Downstream or upstream. It was, you know,
 4 within a couple of cans. Each can are nine
 5 feet from that one, but it wasn't the exact
 6 same location.
 7 MR. O'BRIEN:
 8 Q. Okay.
 9 MS. WILLIAMS:
 10 A. In a similar location, in September, and it
 11 was addressed along with a lot if the
 12 interior welds and were replaced at the time
 13 due to the issues, the corrosion and the
 14 degradation that had been seen. And then,
 15 in 2017, in November, the second leak that
 16 we had seen, that's the one that reopened,
 17 and we had to go back in and address that.
 18 And some of the welds that had been
 19 previously addressed in 2016 had to be
 20 completed again. I think it was 26 or 29
 21 welds had to be re-completed.
 22 MR. O'BRIEN:
 23 Q. And of the earlier one?
 24 MS. WILLIAMS:
 25 A. Of the earlier ones.

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1 MR. O'BRIEN:
 2 Q. The 2016 one.
 3 MS. WILLIAMS:
 4 A. And there's a Root Cause Report that has
 5 been completed and submitted to the Board in
 6 May on that.
 7 MR. O'BRIEN:
 8 Q. In May, that's what I understood.
 9 MS. WILLIAMS:
 10 A. And the most material contribution found in
 11 the Root Cause Report was operating in a
 12 rough zone which was never understood to
 13 affect the penstock condition. It was
 14 understood that it can affect the generating
 15 unit itself, its performance, and you have
 16 various measures in place to ensure that
 17 rough zone operation doesn't impact your
 18 generating unit itself, but it wasn't
 19 understood to impact the penstock condition.
 20 So, that was certainly a new finding for us
 21 and we've taken that learning and made some
 22 changes in how we operate those units. And
 23 so, as of November when we received the
 24 report, the rough zone operation has been
 25 materially reduced for those units, and

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1 actually, as a bit of an update, the Board
 2 and parties would be aware that we submitted
 3 for and were approved a condition assessment
 4 to undertake this year, and I think it was
 5 yesterday we completed the last weld
 6 inspection on penstock 1. And so, penstock
 7 1 there were 60 welds that were inspected in
 8 two areas. One area was the previously
 9 refurbished welds, as well as the section
 10 that is in the lower portion downstream of
 11 the surge tank. And this is the area where
 12 we saw issues this year in penstock 3, and
 13 that was a bit of a surprise. And we had
 14 looked at those welds before, but we really
 15 had a really good look with all of the
 16 appropriate technology this year on penstock
 17 1. So, we were a little wondering what we
 18 were going to see there, but they've come
 19 back clean. So, we did have, out of the 60
 20 welds, every one was fine, except for 1.
 21 MR. O'BRIEN:
 22 Q. Right.
 23 MS. WILLIAMS:
 24 A. And it was a small crack, and we've cleaned
 25 that up, and put it back. So, that is done

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1 and now reviewed. So, we're very pleased
 2 that the changes that we've made have not
 3 caused any recurrence of degradation of the
 4 welds or a cracking in the welds.
 5 MR. O'BRIEN:
 6 Q. And there's no issue now with penstock 3?
 7 (9:45 a.m.)
 8 MS. WILLIAMS:
 9 A. So, penstock 3, that's done and completed as
 10 well.
 11 MR. O'BRIEN:
 12 Q. Yes.
 13 MS. WILLIAMS:
 14 A. And I'm not sure if the parties would be—be
 15 up to date yet. There's a Rolling
 16 Generation Report that's due at the end of
 17 the month. So, there'll be an update
 18 certainly in that at the time, but penstock
 19 3's condition assessment has been done and
 20 completed. That did have welding that had
 21 to be addressed, similar in quantity to what
 22 we saw in penstock 1. The anomaly on
 23 penstock 3 is in the lower portion of the
 24 penstock, and we have found a different
 25 specification and an actual different base

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1 metal that was used for construction.
 2 MR. O'BRIEN:
 3 Q. Okay.
 4 MS. WILLIAMS:
 5 A. And so, now that we've seen the lower
 6 portion of penstock 1 with no issues, we're
 7 wondering if what we saw in penstock 3 might
 8 be related to the base metal that we have—
 9 that we had found. A coupon has been cut
 10 out and is sent away for assessment.
 11 MR. O'BRIEN:
 12 Q. Okay.
 13 MS. WILLIAMS:
 14 A. But penstock 3 is put back in service. And
 15 again, too, the most contributing factor to
 16 the degradation of the welds that--the
 17 practice again, the rough zone operation,
 18 has been, you know, as much as eliminated
 19 and I know the operators in Mr. LeBlanc's
 20 group have a much tighter, a tighter range
 21 in which to operate those units now. So,
 22 but they're doing it and we're seeing, you
 23 know, the obviously the improvements in the
 24 results of penstock 1.
 25 MR. O'BRIEN:

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1 Q. And are you expecting to have to do similar
 2 type of repairs in the future in either of
 3 these penstocks?
 4 MS. WILLIAMS:
 5 A. We'll wait for the condition assessment
 6 recommendations.
 7 MR. O'BRIEN:
 8 Q. Yes.
 9 MS. WILLIAMS:
 10 A. It could range from get in and look at these
 11 every year, and if they see a bit of an
 12 issue here and there, address it, or you'll
 13 have a much larger issue. I was very
 14 heartened again to know that after one year
 15 of operation with the reduced rough zone
 16 operation that we haven't really seen
 17 anything material.
 18 MR. O'BRIEN:
 19 Q. Yes.
 20 MS. WILLIAMS:
 21 A. Because you know, if we had a major
 22 significant issue, a solution might have
 23 been a much more significant investment.
 24 MR. O'BRIEN:
 25 Q. Yes.

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1 MS. WILLIAMS:
 2 A. And obviously, you know, we prefer not to
 3 do—have to do up massive investment in
 4 penstocks, but we'll do what's required. We
 5 do have to get into penstock 2 this year as
 6 well. That will tell us a little more
 7 exactly what the long-term solutions are for
 8 the reliable operation. And penstock 2,
 9 that was also refurbished last year.
 10 MR. O'BRIEN:
 11 Q. Yes.
 12 MS. WILLIAMS:
 13 A. Under a supplemental project, and it had
 14 also seen I think about half of the amount
 15 of refurbishment required that we did see in
 16 penstock 1 and penstock 3.
 17 MR. O'BRIEN:
 18 Q. Right
 19 MS. WILLIAMS:
 20 A. About 1500 feet I think is the range versus
 21 3,000 and 3500 on the other two.
 22 MR. O'BRIEN:
 23 Q. The same issues or -
 24 MS. WILLIAMS:
 25 A. The same, similar issues.

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1 MR. O'BRIEN:
 2 Q. The same parts, yeah.
 3 MS. WILLIAMS:
 4 A. Yeah, exactly. So, the rough zone
 5 operation, and you know, not to get too
 6 technical, but there's this peaking
 7 phenomenon that also existed from original
 8 construction that the rough zone operation
 9 and the peaking phenomenon together would
 10 have resulted in what we're seeing now. So,
 11 by removing the rough operation, I'm hopeful
 12 that that is going to be a good portion of
 13 the long-term solution, but the, you know -
 14 MR. O'BRIEN:
 15 Q. Yes. So, you expect performance to be a
 16 little bit better and—forward into the
 17 future?
 18 MS. WILLIAMS:
 19 A. I expect the performance to be very good
 20 into the coming winters.
 21 MR. O'BRIEN:
 22 Q. Okay. Because there's a large portion here
 23 of that performance associated with or the
 24 reduction -
 25 MS. WILLIAMS:

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1 A. Yes.
 2 MR. O'BRIEN:
 3 Q. - associated with those?
 4 MS. WILLIAMS:
 5 A. Exactly.
 6 MR. O'BRIEN:
 7 Q. Yes.
 8 MS. WILLIAMS:
 9 A. And even the 2.29 in our near-term
 10 generation adequacy we assume, I think it's
 11 combined, day 4 of 2.6. So, I would not
 12 want to plan for 2.29. You know, I'm
 13 disappointed obviously when we have an
 14 unplanned issue, but from our near-term
 15 generation planning perspective, even with
 16 the unplanned issue on penstock 1, we were
 17 below our estimation.
 18 MR. O'BRIEN:
 19 Q. Yes.
 20 MS. WILLIAMS:
 21 A. And I don't minimize it at all. We take it
 22 very seriously, but it was better than the
 23 (unintelligible) energy adequacy, and also
 24 was better than CEA.
 25 MR. O'BRIEN:

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1 Q. So, you had actually—the 2.29 is below what
 2 you had planned for? Yes.
 3 MS. WILLIAMS:
 4 A. What we had modelled in our near-term
 5 generation adequacy.
 6 MR. O'BRIEN:
 7 Q. Yes.
 8 MS. WILLIAMS:
 9 A. Yes, it was 2.6 I think.
 10 MR. O'BRIEN:
 11 Q. Okay. And just in terms of just moving to
 12 the thermal generation performance, I
 13 understand just in terms of unit 1 at
 14 Holyrood, it's been derated for most of the
 15 year.
 16 MS. WILLIAMS:
 17 A. Yes.
 18 MR. O'BRIEN:
 19 Q. What types of issues have you dealt with
 20 there and where do you see that unit into
 21 the future this year?
 22 MS. WILLIAMS:
 23 A. The units in Holyrood are experiencing
 24 significant deration due to the airflow
 25 buildup, you know, the combustion particles

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1 build up in the—some of the critical
 2 components out in Holyrood. So, absolutely
 3 Holyrood is not performing obviously where
 4 we want it to be, and it does exceed, you
 5 know, what we would like to see. The
 6 project that we have before the Board and
 7 for approval, and obviously there's some
 8 continuing information to be provided to the
 9 Board on that file, but we are proceeding
 10 with a project to replace the hot end air
 11 heater baskets and to address an airflow
 12 seal—sorry, seal clearance leakage issue on
 13 unit 3. So, we fully expect that project to
 14 reinstate materially if not to full capacity
 15 those units in advance.
 16 MR. O'BRIEN:
 17 Q. Unit 3 or all three?
 18 MS. WILLIAMS:
 19 A. All three.
 20 MR. O'BRIEN:
 21 Q. All three?
 22 MS. WILLIAMS:
 23 A. Yeah, very close to full, in advance of
 24 winter. So, the historical--the most recent
 25 performance I don't believe is indicative of

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1 what we can expect this coming winter.
 2 MR. O'BRIEN:
 3 Q. Okay. I was going to ask that because
 4 historically you haven't had all three rated
 5 at full?
 6 MS. WILLIAMS:
 7 A. No, and the previous year, in 2017, we came
 8 in just under 15 percent day 4 at Holyrood.
 9 MR. O'BRIEN:
 10 Q. Yes.
 11 MS. WILLIAMS:
 12 A. And this year, we're not tracking to 15.
 13 MR. O'BRIEN:
 14 Q. What are you tracking to this year?
 15 MS. WILLIAMS:
 16 A. We're in exceeding of 20.
 17 MR. O'BRIEN:
 18 Q. Okay.
 19 MS. WILLIAMS:
 20 A. But again, that is not going to be
 21 indicative of what we're going to see this
 22 coming winter. You know, I've said I will
 23 not go to the Board and ask for a project
 24 unless somebody can be making very sure that
 25 this project will work.

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1 MR. O'BRIEN:
 2 Q. And when is that contemplated to be? When
 3 do you contemplate having units ready?
 4 MS. WILLIAMS:
 5 A. In advance of December 1st.
 6 MR. O'BRIEN:
 7 Q. Okay. So, right now where the three units—
 8 right now unit 1 is around, what, 116?
 9 What's it rated at right now?
 10 MS. WILLIAMS:
 11 A. Both of the units offline now.
 12 MR. O'BRIEN:
 13 Q. All are offline?
 14 MS. WILLIAMS:
 15 A. Yeah.
 16 MR. O'BRIEN:
 17 Q. Okay. So, there's none in synchronous
 18 condenser mode now?
 19 MS. WILLIAMS:
 20 A. Unit 3 I think is in sync.
 21 MR. O'BRIEN:
 22 Q. Unit 3 is?
 23 MS. WILLIAMS:
 24 A. Yeah.
 25 MR. O'BRIEN:

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1 Q. Okay, but the other two are offline?
 2 MS. WILLIAMS:
 3 A. Right.
 4 MR. O'BRIEN:
 5 Q. Okay. I think you've covered performance.
 6 How about Stephenville in terms of gas
 7 turbine performance? I understand there's
 8 some repairs to be done, planned, in early
 9 August? Is that right?
 10 MS. WILLIAMS:
 11 A. Correct. And Stephenville is—it sacrifices
 12 itself for Hardwoods.
 13 MR. O'BRIEN:
 14 Q. Yes.
 15 MS. WILLIAMS:
 16 A. We are generally using it to make sure that
 17 Hardwoods is in better performing condition.
 18 The need of Stephenville in its location and
 19 its importance to the island is not the same
 20 as Hardwoods. So, the group appropriately
 21 make the decision to use critical components
 22 from Stephenville to keep Hardwoods in
 23 better performance, and the performance of
 24 Hardwoods is good to date.
 25 MR. O'BRIEN:

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1 Q. Okay. Well, Stephenville right now is,
 2 what, at—is it offline or is it currently
 3 rated 25? What's the –
 4 MS. WILLIAMS:
 5 A. I think we've got one unit now in 25.
 6 MR. O'BRIEN:
 7 Q. Yes.
 8 MS. WILLIAMS:
 9 A. Yeah.
 10 MR. O'BRIEN:
 11 Q. And the repairs in terms of August, are they
 12 still on line or in—on schedule?
 13 MS. WILLIAMS:
 14 A. I haven't been told otherwise.
 15 MR. O'BRIEN:
 16 Q. Okay. And how about Hardwoods right now?
 17 What's the—where is Hardwoods?
 18 MS. WILLIAMS:
 19 A. Hardwoods as well, the end of July I think
 20 we've got a unit, one end that's got to come
 21 back out. We've got some work to do there.
 22 MR. O'BRIEN:
 23 Q. And what are the repairs necessary in
 24 Hardwoods?
 25 MS. WILLIAMS:

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1 A. The bellows I believe.
 2 MR. O'BRIEN:
 3 Q. Bellows?
 4 MS. WILLIAMS:
 5 A. Yeah.
 6 MR. O'BRIEN:
 7 Q. Yes, okay.
 8 MS. WILLIAMS:
 9 A. I'm trying to get the, yeah, the various
 10 specifics.
 11 MR. O'BRIEN:
 12 Q. I thought both had similar bellows issues,
 13 but I—they may not.
 14 MS. WILLIAMS:
 15 A. Yeah, I think we sacrificed again
 16 Stephenville, I think, to get Hardwoods
 17 back.
 18 MR. O'BRIEN:
 19 Q. Okay.
 20 MS. WILLIAMS:
 21 A. But I'd have to go back and double check if
 22 you want the exact detail.
 23 MR. O'BRIEN:
 24 Q. And I understand from Hydro's capital budget
 25 last year there was a requirement that you

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1 file a report looking at the long-term plans
 2 for each of these units?
 3 MS. WILLIAMS:
 4 A. Um-hm.
 5 MR. O'BRIEN:
 6 Q. Has that been done?
 7 MS. WILLIAMS:
 8 A. The report is done.
 9 MR. O'BRIEN:
 10 Q. Yes.
 11 MS. WILLIAMS:
 12 A. And it will be filed with the Board
 13 obviously within—this is the middle of July.
 14 The end of July in the capital budget. And
 15 in addition to, I think, to really
 16 understanding the possibilities for these
 17 two gas turbines, we have to consider those
 18 in conjunction with the reliability review
 19 that we're doing on the island this year
 20 that determines what is indeed required post
 21 Muskrat from a reliability and a planning
 22 perspective. So, some of the preliminary
 23 conclusions from the gas turbine review that
 24 has been completed is I think one of the
 25 ones that we've certainly been looking at

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1 the last couple of years if repowering is an
 2 option. And that has been determined to be
 3 not an option. It—basically if you wanted
 4 to repower it, it would—you'd have to
 5 replace so much that it just—you'd have to
 6 buy a whole brand new one. So, that's been
 7 ruled out. So, it was good to –
 8 MR. O'BRIEN:
 9 Q. It's not cost effective?
 10 MS. WILLIAMS:
 11 A. Correct, yeah. So, and on the Stephenville
 12 end, the Stephenville unit from a
 13 transmission planning perspective, there's
 14 really two gates you've got to think about.
 15 One is what's needed from a generation
 16 planning perspective, and one from a
 17 transmission planning perspective. And
 18 Stephenville from a transmission planning
 19 perspective would not be required. However,
 20 we'd have to put in a power transformer and
 21 breakers and switches at Bottom Brook which,
 22 you know, I think everyone would know that
 23 that would likely be much—a much cheaper
 24 solution than the ongoing –
 25 MR. O'BRIEN:

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1 Q. Yes.
 2 MS. WILLIAMS:
 3 A. You know, keeping a gas turbine going. And
 4 then, similar, at Hardwoods. So, I should
 5 have--sorry, I should have said this
 6 earlier, both units are needed until Muskrat
 7 interconnection. So, we need to keep them
 8 functioning as much as we possibly can until
 9 that time, and then, we'll determine what we
 10 need exactly from the reliability
 11 perspective. But from the transmission
 12 perspective, Stephenville, you'd have to put
 13 in a power transformer and a breaker. And
 14 at Hardwoods, that similar, we'll call it,
 15 transmission system investment, not
 16 necessarily say by 2021. For example, I
 17 think Oxen Pond would need a power
 18 transformer in 2026. So, there's a couple
 19 of staged things that would have to occur
 20 from a transmission perspective. Exactly
 21 what's needed on the island from a
 22 synchronous condensing or generation
 23 perspective with those two units removed is
 24 to be determined. And what we would look
 25 at, if something is needed on the system,

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1 we'll look at what the least cost solution
 2 could be.
 3 MR. O'BRIEN:
 4 Q. And have you done—like with this report
 5 that's going to be filed soon, have you done
 6 a cost benefit analysis for those particular
 7 units for replacement in that report?
 8 MS. WILLIAMS:
 9 A. Well, we –
 10 MR. O'BRIEN:
 11 Q. Repair versus replacement kind of thing or
 12 is that going to be part of the bigger
 13 reliability analysis?
 14 MS. WILLIAMS:
 15 A. It'll be part of the bigger review.
 16 MR. O'BRIEN:
 17 Q. Yes.
 18 MS. WILLIAMS:
 19 A. We do know that what will be contained in
 20 the capital budget is the capital required
 21 to keep the units functioning until 2021.
 22 MR. O'BRIEN:
 23 Q. Okay.
 24 MS. WILLIAMS:
 25 A. And what's going in the 2019 budget doesn't

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1 change, but again from repowering,
 2 reinvesting in those, I don't think
 3 refurbishing those would be required, but
 4 again, we really have to see the content and
 5 the conclusions of what's required on the
 6 system. Once we do our review, because that
 7 review could spit out, you know, here's a
 8 gap that you need to fill. And then
 9 obviously, you know, and as Liberty
 10 commented in their report, you really need
 11 to be doing consultation with the various
 12 parties.
 13 MR. O'BRIEN:
 14 Q. Yes.
 15 MS. WILLIAMS:
 16 A. And we might come forward and to really--to
 17 be really simplistic, say, "Here's a gap
 18 that the future system has," and then Hydro
 19 would say, "Okay, we've analyzed what that
 20 gap is if you compare ourselves to our
 21 neighbours."
 22 MR. O'BRIEN:
 23 Q. Yes.
 24 MS. WILLIAMS:
 25 A. And then, we'd say, "This is what it costs

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1 to fill that gap."
 2 MR. O'BRIEN:
 3 Q. Yes.
 4 MS. WILLIAMS:
 5 A. And then, we'll engage the parties. And if
 6 it's no cost, then obviously, we'll meet the
 7 gap. If it's a material cost, then it's
 8 going to be, you know, a very significant
 9 appropriate review for us to undertake. And
 10 you know, is it gas turbines on the island?
 11 Is it something different? Is it trying to
 12 procure off-island supply? It'll be a whole
 13 host of options that we need to look at.
 14 MR. O'BRIEN:
 15 Q. So, you're planning--just to follow-up on
 16 what you just said, so you would plan on
 17 providing parties, if you're going to engage
 18 them, with some cost benefit analysis that
 19 you've already done?
 20 MS. WILLIAMS:
 21 A. Correct, exactly.
 22 MR. O'BRIEN:
 23 Q. In order to get their thoughts on it?
 24 MS. WILLIAMS:
 25 A. Absolutely.

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1 MR. O'BRIEN:
 2 Q. How about the Holyrood CT, any issues
 3 experienced with that?
 4 MS. WILLIAMS:
 5 A. No, its reliability has been very good.
 6 Obviously, you know, when we very first had
 7 the unit in service, we definitely had a few
 8 bumps and bruises.
 9 MR. O'BRIEN:
 10 Q. Yes.
 11 MS. WILLIAMS:
 12 A. But it's a highly reliable unit right now.
 13 MR. O'BRIEN:
 14 Q. Okay. Any repairs contemplated on it this
 15 year?
 16 MS. WILLIAMS:
 17 A. In the capital budget for 2018, there was a
 18 project for, I guess, a fairly significant
 19 investment that was starts based
 20 essentially, and –
 21 MR. O'BRIEN:
 22 Q. Okay. So, that's the overhaul, the big
 23 overhaul that you have to do?
 24 MS. WILLIAMS:
 25 A. The big overhaul, correct. And I believe

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1 when we submitted for the approval of that
 2 in the 2018 budget, it would be, okay, we'll
 3 do the planning and the procurement and the
 4 engineering in the 2018. And we would
 5 advance and do the execution in 2019, but if
 6 the starts were such that we had to advance
 7 it, then we would talk with the Board about
 8 that. We would inform the Board.
 9 MR. O'BRIEN:
 10 Q. Right.
 11 MS. WILLIAMS:
 12 A. And as I understand it, that's being
 13 contemplated now to talk with the Board
 14 about that.
 15 MR. O'BRIEN:
 16 Q. So, are you –
 17 MS. WILLIAMS:
 18 A. Or submit that to the Board, sorry.
 19 MR. O'BRIEN:
 20 Q. Your starts have advanced to that extent?
 21 MS. WILLIAMS:
 22 A. Correct.
 23 MR. O'BRIEN:
 24 Q. That you're hitting that annual or that—
 25 sorry, that large overhaul that has to be

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1 done?
 2 (10:00 a.m.)
 3 MS. WILLIAMS:
 4 A. Yes, and it would certainly be related to
 5 the Holyrood availability that we
 6 experienced this winter, and before we had
 7 the Maritime Link ability to do the imports
 8 and the offsetting.
 9 MR. O'BRIEN:
 10 Q. And so, when you—and we got some information
 11 there on the record just in terms of what
 12 the capital cost of starting or an
 13 equivalent start might be for the CT, that's
 14 what that's based on? It's sort of the
 15 annual overhauls and that kind of thing?
 16 MS. WILLIAMS:
 17 A. Yeah.
 18 MR. O'BRIEN:
 19 Q. Right?
 20 MS. WILLIAMS:
 21 A. It's back calculated that you -
 22 MR. O'BRIEN:
 23 Q. It's back calculated from that?
 24 MS. WILLIAMS:
 25 A. Right.

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1 MR. O'BRIEN:
 2 Q. Okay. And are those capital--and I will get
 3 to this sort of a bit later, but do those
 4 capital costs enter into your thought
 5 process when you're deciding to run it?
 6 MS. WILLIAMS:
 7 A. Absolutely. So, the analysis that I've
 8 mentioned yesterday that we do, I mean we
 9 have on a day had the—what's been developed
 10 in Mr. LeBlanc's group is these tools now,
 11 these visual tools that help you look
 12 forward and see from a spinning perspective
 13 from a reserve perspective, when could you
 14 need non-conventional generation? When
 15 could you need your gas turbines? And so,
 16 when we see that, that's when we decide to
 17 go and speak with Energy Marketing and say,
 18 "Okay, we have a need here. If you could
 19 procure energy for us and capacity for us,
 20 you know, in the morning and the evening for
 21 the next two days, you know, four hours a
 22 day at both times a day, we would"—"Can you
 23 tell us what that price is?" And they would
 24 come back and say, "Here is the price." And
 25 we say, "Well, that's"—we run that through

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1 our little analysis, and if it comes out
 2 cheaper than the gas turbines, we say,
 3 "Let's procure that," and then we offset it.
 4 And as I mentioned, we've offset 15 starts
 5 this year with the gas turbine since the
 6 Maritime Link went into service.
 7 MR. O'BRIEN:
 8 Q. And so prior to that, prior to the Maritime
 9 Link going in service, would those types of
 10 capital costs have been, would operators be
 11 asked to consider those types of capital
 12 costs before running the generation?
 13 MS. WILLIAMS:
 14 A. I don't know that we –
 15 MR. O'BRIEN:
 16 Q. Was that part of your mindset kind of thing?
 17 MS. WILLIAMS:
 18 A. Right, I guess, you know, if we looked at
 19 the supply cost application that we had
 20 completed, we were dispatching in the least
 21 cost order, so we were only running gas
 22 turbines as a last resort, as our last
 23 option.
 24 MR. O'BRIEN:
 25 Q. Okay, so that's how it was built in.

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1 MS. WILLIAMS:
 2 A. That's how it's built in, yeah.
 3 MR. O'BRIEN:
 4 Q. And I think you answered this question, Mr.
 5 LeBlanc, just in terms of backup generation
 6 in the event that there's a bi-pole trip on
 7 the LIL, that's something that's going to be
 8 part of the reliability sort of assessment
 9 down the road, is that right, in terms of
 10 any contracts with NB Power or Nova Scotia
 11 Power, we only had the assistance contract
 12 right now.
 13 MR. LEBLANC:
 14 A. Yes. We have reserve assistance now, but we
 15 do want to get into reserve sharing if
 16 possible.
 17 MR. O'BRIEN:
 18 Q. And have you gotten into any discussions
 19 further in terms of reserve sharing with
 20 anyone other than Nova Scotia Power?
 21 MR. LEBLANC:
 22 A. Not at this stage because with reserve
 23 sharing you also need a firm transmission
 24 path and right now, there is a bottleneck
 25 from New Brunswick to Nova Scotia, so if we

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1 had reserve sharing, it would have to be
 2 with Nova Scotia Power at this point.
 3 MR. O'BRIEN:
 4 Q. It would have to be with Nova Scotia, okay.
 5 And in terms of transmission reliability,
 6 maybe I'll ask you about this, Mr. LeBlanc.
 7 I wonder if we could bring up Information 1
 8 and that would be page 10 of Information 1.
 9 Transmission Performance and this one is
 10 updated to include 2017 actuals and appears
 11 that the SAIDI there was much higher in 2017
 12 from 2016, can you account for that?
 13 MR. LEBLANC:
 14 A. Yes, I do have a list of outages that
 15 explain it. Now, if I can find them, but
 16 again, they were all outage related.
 17 MR. O'BRIEN:
 18 Q. Outage related, yes.
 19 MR. LEBLANC:
 20 A. So they were incidents that happened.
 21 MR. O'BRIEN:
 22 Q. I understood like 2016 you would anticipate
 23 to be higher because of other reasons, but
 24 2017 was outage related.
 25 MR. LEBLANC:

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1 A. Yeah. So I can read them to you if that's
 2 what you want.
 3 MR. O'BRIEN:
 4 Q. Yes, sure.
 5 MR. LEBLANC:
 6 A. So on January 24th, TL215 in Port aux Basques
 7 experienced an unplanned outage for 5 hours
 8 and 38 minutes, so that was a big
 9 contributor to it, and then on December 30th,
 10 there was an unplanned power outage of 1
 11 hour, 34 minutes and it was caused by a trip
 12 of TL214, or a winter storm in the area, so
 13 those were the big drivers in 2017 for T-
 14 SAIDI.
 15 MR. O'BRIEN:
 16 Q. And in terms of sort of regions, which
 17 regions would have been more driving this
 18 figure? That's an all regions figure, I
 19 guess.
 20 MR. LEBLANC:
 21 A. Yes, that's for it all. So again, the Port
 22 aux Basque area and the –
 23 MR. O'BRIEN:
 24 Q. They're the bigger drivers.
 25 MR. LEBLANC:

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1 A. Yeah.
 2 MR. O'BRIEN:
 3 Q. How do these figures compare to CEA
 4 averages?
 5 MR. LEBLANC:
 6 A. Again, not great, again in comparing it to
 7 CEA.
 8 MR. O'BRIEN:
 9 Q. Just explain to that to me, why?
 10 MR. LEBLANC:
 11 A. CEA just has one region that combines urban
 12 and rural and we're mainly a rural area, we
 13 have no underground transmission. We also
 14 have a low number of delivery points which
 15 is what T-SAIFI and T-SAIDI is based on.
 16 Again, if you have one long line with one
 17 station at the end and that line goes out,
 18 you have a resulting thing, but if you have
 19 the same length of line with 10 stations on
 20 it, you would divide by 10, so your
 21 reliability would be 10 times better if you
 22 have multiple stations on that line. So we
 23 have long lengths of line serving a small
 24 amount of stations. Again, so we have a lot
 25 of radio lines and that sets your T-SAIFI,

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1 T-SAIDI, makes it worse in that thing, but
 2 if you were in an urban area where you have
 3 a ring transmission line with multiple
 4 terminal stations off it, the same amount of
 5 outages per kilometer would result in much
 6 better reliability statistics.
 7 MR. O'BRIEN:
 8 Q. Okay, and your statistics there, so do you
 9 focus more on sort of your own targets and
 10 your own past sort of, I guess, successes,
 11 as opposed to CEA average?
 12 MR. LEBLANC:
 13 A. Yes, we create our own outage statistics and
 14 set them as our targets based on, again, we
 15 subject the planned outages, we look at the
 16 unplanned portion only and we improve on
 17 that number, so extract unplanned, improve
 18 it, then add on our plan to maintenance work
 19 for the upcoming year and that becomes our
 20 new target.
 21 MR. O'BRIEN:
 22 Q. And where are you now, just say in terms of
 23 unplanned versus where you were back in
 24 2012, 2011, that sort of thing?
 25 MR. LEBLANC:

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1 A. We are slowly improving. The worst of it
 2 was in 2014, but since 2014 to present our
 3 outage indices are improving, both in
 4 transmission and in distribution.
 5 MR. O'BRIEN:
 6 Q. And what are you doing to do that?
 7 MR. LEBLANC:
 8 A. Again, we have increased O&M, our CMs, PMs,
 9 we do inspections of our lines, we do
 10 helicopter patrols, we do infrared thermal
 11 vision, looking for hotspots, a frayed
 12 conductor, insulators that may be cracked or
 13 tracking and things like that, so again a
 14 bit more due diligence going in. We have
 15 the Winter Readiness Program where we
 16 identify our major elements, they all get
 17 inspected and looked at and any
 18 discrepancies or deficiencies found are
 19 corrected before the upcoming winter season.
 20 MR. O'BRIEN:
 21 Q. And those things are moving along better
 22 than they were, say, back in 2013, 2014?
 23 MR. LEBLANC:
 24 A. Yes, and again, reliability you just can't
 25 turn on a dime; it's a slow-moving beast,

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1 but we have rounded the corner and we are
 2 seeing an improvement. The trend is, again,
 3 I won't say trending downward, but an
 4 improvement.
 5 MR. O'BRIEN:
 6 Q. Do you anticipate further improvement going
 7 into the test years?
 8 MR. LEBLANC:
 9 A. Yes, we expect it to continue to improve.
 10 Again, we have done a lot of planned outages
 11 and planned maintenance which also affects
 12 your reliability.
 13 MR. O'BRIEN:
 14 Q. Affects your figures, yeah.
 15 MR. LEBLANC:
 16 A. So the more planned outages you have, the
 17 worse your reliability stats, but as we're
 18 seeing it improving and we correct the
 19 backlog of deficiencies on our system, then
 20 we can tone down on the amount of planned
 21 outages which will help reliability and
 22 because we've caught up and have gotten to
 23 the backlog of deficiencies, that will also
 24 improve our reliability stats.
 25 MR. O'BRIEN:

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1 Q. Okay. If we can move to the next page of
 2 this one, the distribution performance. In
 3 2017 I just saw distribution performance
 4 seems to be up from 2016 in terms of SAIDI.
 5 MR. LEBLANC:
 6 A. Again, the SAIDI was up slightly, but again,
 7 you can't look at a particular year, you
 8 have to look at the trends.
 9 MR. O'BRIEN:
 10 Q. Okay.
 11 MR. LEBLANC:
 12 A. Again, was 2017 a worse weather year? You
 13 don't know. Was there a type of equipment
 14 that we had problems with and we had to go
 15 in and do a bunch of planned outages to
 16 repair or replace that equipment? So there
 17 are a lot of factors and so, if you look at
 18 the overall trend in the moving averages, we
 19 are still trending downward or towards
 20 improvement in both SAIFI and SAIDI.
 21 MR. O'BRIEN:
 22 Q. Well if you look at the 2012, and I know we
 23 don't have anything prior to that, there
 24 seemed to be a trend upwards.
 25 MR. LEBLANC:

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1 A. Yeah, it was upward to—trending upwards to
 2 2014, then from 2014 to 2017 actual, we are
 3 trending downwards.
 4 MR. O'BRIEN:
 5 Q. Except for, well the '17 actual you are not.
 6 MR. LEBLANC:
 7 A. No, but the trend is still downwards.
 8 MR. O'BRIEN:
 9 Q. Do you anticipate say the test years to be
 10 lower?
 11 MR. LEBLANC:
 12 A. Yes, again, the same as the transmission, we
 13 expect it to continue to improve.
 14 MR. O'BRIEN:
 15 Q. And are you doing the same sorts of things
 16 there?
 17 MR. LEBLANC:
 18 A. Yes, again, the exact same things, we do
 19 inspections and when we decide our own and
 20 we look at our worse performing feeders and
 21 so that's how we prioritize our work, which
 22 ones need the most tender-loving care based
 23 on reliability stats and the outages, so all
 24 outages, and where they are, are tracked,
 25 that's put into a database and our

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1 reliability engineers examine that and they
 2 make recommendations on where we have to
 3 concentrate our efforts in terms of O&M.
 4 MR. O'BRIEN:
 5 Q. So just in terms of your O&M and that sort
 6 of thing, what are the big things that
 7 you're doing that you may not have been
 8 doing in 2012, '13, '14, that kind of area?
 9 Is there anything big that sort of jumps out
 10 at you as what you're doing now?
 11 MR. LEBLANC:
 12 A. Again, the biggest thing we're doing is
 13 inspections. We're inspecting our
 14 infrastructure, we're doing—we have a Wood
 15 Pole Management Program, so we inspect our
 16 wood poles and when we're there, we also
 17 look at the crossarms, insulators. Again,
 18 assessing the condition of all our
 19 infrastructure.
 20 MR. O'BRIEN:
 21 Q. I wonder if we could go to where we had—I
 22 wanted to talk about system performance as a
 23 whole and the end-user reliability
 24 performance index.
 25 MR. LEBLANC:

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1 A. Yes.
 2 MR. O'BRIEN:
 3 Q. In terms of how you look at that, what do
 4 you do when you look—I know that's a new
 5 index that Hydro uses now versus what was
 6 used before, something that's sort of
 7 created –
 8 MR. LEBLANC:
 9 A. No, it's not a replacement, it's an
 10 additional indices that we would look at.
 11 MR. O'BRIEN:
 12 Q. Okay, that's fair, and just in terms of how
 13 that was, the thought process in creating
 14 that additional index, I want to get an idea
 15 from you as to how you use that, the results
 16 of that, going forward for operational
 17 decisions.
 18 MR. LEBLANC:
 19 A. I wasn't here when it was developed, but
 20 what I understand is the bulk of the
 21 electricity consumers on the island are
 22 Newfoundland Power customers, and we were
 23 reporting our outage statistics on our
 24 customers only, and then we thought, well,
 25 we're affecting a lot more people than just

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1 our own customers if we have issues with our
 2 transmission system and our bulk delivery
 3 system, so we decided that we would look at
 4 that as well. What effect does Newfoundland
 5 Power have—or not Newfoundland Power, sorry,
 6 Newfoundland Hydro have on the electricity
 7 consumers on the island, and that's why that
 8 indice was created.
 9 MR. O'BRIEN:
 10 Q. Right, no, I understood that. And do you
 11 look at that regularly? I mean, is that
 12 something that you plan on looking at to
 13 gauge your operations?
 14 MR. LEBLANC:
 15 A. Again, it's looked at, we look at the four
 16 indices now. We look at T-SAIFI, T-SAIDI
 17 for Hydro, we look at SAFI and SAIDI for
 18 Hydro and we look at the end-consumer
 19 reliability indices as well, and all five of
 20 those are used in the assessment of where we
 21 concentrate our efforts in terms of O&M and
 22 what work we plan for the upcoming year.
 23 MR. O'BRIEN:
 24 Q. Okay. I just want to talk about, switch
 25 gears a little bit and talk about sort of

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1 standby generation. I understood from the
 2 evidence that one of the operational
 3 improvements that Hydro has implemented in
 4 recent years is to have daily status
 5 meetings in terms of generation. Who takes
 6 part in those meetings?
 7 (10:15 a.m.)
 8 MS. WILLIAMS:
 9 A. I'll call it all of our operational staff,
 10 so our general managers and others that
 11 report through to them and we have ECC
 12 representation as well, and I believe we
 13 would have communications' people,
 14 regulatory, to see if there's any sort of
 15 pending issues, they would also attend.
 16 MR. O'BRIEN:
 17 Q. Okay, and when do they happen?
 18 MS. WILLIAMS:
 19 A. First thing in the—well, 9:00, sort of when
 20 everyone gets in and does a bit of a system
 21 assessment if there's any risks or any
 22 concerns for discussion and it's 9 a.m.
 23 MR. O'BRIEN:
 24 Q. Okay, any VPs attend those?
 25 MS. WILLIAMS:

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1 A. I used to attend regularly, but now that
 2 we've got, I'll call it solid, really
 3 helpful general managers with us, I don't
 4 attend regularly anymore.
 5 MR. LEBLANC:
 6 A. I attended when I first came, but I may
 7 attend one every two months, you know, so
 8 it's just an ad hoc drop-in.
 9 MR. O'BRIEN:
 10 Q. Right. How about you, Mr. Gardiner?
 11 MR. GARDINER:
 12 A. That's the same thing, when they first
 13 started I attended all of them, and now I
 14 probably attend once a month, but I do
 15 review the morning reports every morning,
 16 first thing, we get the daily ups, we get
 17 the status updates probably around 6 a.m.,
 18 and we review those and if there's any
 19 concerns, I'd certainly would have a
 20 discussion.
 21 MR. O'BRIEN:
 22 Q. Okay.
 23 MS. WILLIAMS:
 24 A. Yes, and certainly if there's any condition
 25 in the system, everyone is there.

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1 MR. O'BRIEN:
 2 Q. Yeah, okay.
 3 MR. GARDINER:
 4 A. Yes, all hands on deck.
 5 MR. O'BRIEN:
 6 Q. So these 6 a.m. reports, these are, are they
 7 daily reserve forecast information, that
 8 kind of thing, included in those reports?
 9 MS. WILLIAMS:
 10 A. Correct.
 11 MR. O'BRIEN:
 12 Q. And is that for the Island and the Avalon?
 13 MS. WILLIAMS:
 14 A. Avalon has gone away now, if you want to
 15 call it that, the constraint has gone away
 16 with TL267. Unless we have maintenance that
 17 would occur in the corridor that could
 18 reinstate the Avalon constraint or if you
 19 have an issue that develops in that
 20 corridor, but generally that constraint has
 21 gone, so it's really an island review now.
 22 MR. O'BRIEN:
 23 Q. Island review now. So prior to 267 coming
 24 in, I guess you would have had Avalon
 25 forecast information as well?

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1 MS. WILLIAMS:
 2 A. Correct.
 3 MR. O'BRIEN:
 4 Q. Okay. And have you found these daily status
 5 meetings to have effect on reliability in
 6 the short term?
 7 MS. WILLIAMS:
 8 A. Absolutely.
 9 MR. O'BRIEN:
 10 Q. And how is that? Are you able to sort of
 11 give me any information on that? Where do
 12 you see that affect reliability?
 13 MS. WILLIAMS:
 14 A. I believe what it did was it brought a
 15 larger group of people to the same frame of
 16 reference with what the system condition was
 17 in the moment and if action was required or
 18 if there was something pending. If action
 19 was required, it allowed everyone to be
 20 understanding what the priorities were and
 21 could sort of move as one, as opposed to
 22 everyone gathering information in different
 23 fashions, in different formats.
 24 MR. O'BRIEN:
 25 Q. Okay, I do want to talk about, like I said,

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1 standby generation, so part of the
 2 application before us includes the balances
 3 and the energy supply cost variance deferral
 4 account, and I guess you'd agree with me
 5 that a large part of that is associated with
 6 the dispatches of standby generation, is
 7 that fair?
 8 MS. WILLIAMS:
 9 A. Correct.
 10 MR. O'BRIEN:
 11 Q. And we talked about the capital costs
 12 before. One of the things I wanted to talk
 13 to you about sort of on this point was your
 14 thought process over the last few years in
 15 exercising standby generation, so I just
 16 wanted to get, there's some questions I had
 17 to get straight in my mind as to how
 18 reserves work and that sort of thing, and we
 19 have the Liberty Consulting Group Report and
 20 I'll ask you a few questions on that and get
 21 your thoughts on that as well. Now, when it
 22 comes to Holyrood GT or gas turbine, for
 23 example, Liberty has indicated in their
 24 report that over the last few years it's run
 25 approximately nine times more than what was

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1 initially anticipated, is that a fair
 2 assessment, in that range?
 3 MS. WILLIAMS:
 4 A. It's definitely been more than what was
 5 anticipated but the, if you about it from a
 6 test year perspective, the system has
 7 changed and –
 8 MR. O'BRIEN:
 9 Q. No, I get that.
 10 MS. WILLIAMS:
 11 A. And the philosophy of expectations have
 12 changed since then.
 13 MR. O'BRIEN:
 14 Q. But I'm talking more now in looking at the
 15 deferral account, so part of this is sort of
 16 what's happened in the past and what's
 17 sought to be recovered, so over the last few
 18 years and I'll as you about sort of what the
 19 plan is in the future, but over the last few
 20 years just in terms of how long or how many
 21 times the Holyrood GT was run or CT was run,
 22 I understand that Liberty has looked at the
 23 figures and said it's somewhere in that
 24 range of nine times where you had initially
 25 thought.

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1 MS. WILLIAMS:
 2 A. It's run, there was obviously a series of
 3 triggers that the gas turbine would be run
 4 and until T20267 you had triggers, several
 5 triggers that would have required it. You
 6 had voltage consideration on the Avalon, you
 7 had transmission constraint itself, so the
 8 actual transmission line loadings themselves
 9 coming in through the corridor, and you had
 10 the spinning reserves on the Avalon, the
 11 spinning reserves on the Island. So you had
 12 all of these potential triggers that could
 13 have required gas turbine operation and so
 14 having perfect foresight, you know, I don't
 15 think is possible, and so therefore, that
 16 would have been a reason for any deviation,
 17 really, and certainly the other
 18 infrastructure issues that we would have
 19 had, say that developed say at Holyrood and
 20 even, say, at Bay D'Espoir, that could have
 21 triggered additional, so you know, you would
 22 expect it at certain levels of availability
 23 and that would give you an expectation of
 24 when it would operate, and then obviously in
 25 actuality what develops on any one day is

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1 the trigger for when it actually needs to
 2 operate.
 3 MR. O'BRIEN:
 4 Q. Okay, but can you take me back to sort of
 5 what, can you comment on what the initial
 6 thought process was for using the GT and
 7 sort of how often you were going to use it,
 8 and that would have been, I know you
 9 wouldn't have been the one necessarily
 10 making that decision, but can you comment on
 11 that? I understood it was about 500 hours a
 12 year was the initial plan.
 13 MS. WILLIAMS:
 14 A. I think so, yeah. Again, this would have
 15 been started, started construction in 2014.
 16 MR. O'BRIEN:
 17 Q. Right.
 18 MS. WILLIAMS:
 19 A. A lot of Hydro's actions and putting gas
 20 turbines on in advance of issues really
 21 developed after the March 2015 voltage or
 22 sort of frequency decay that we would have
 23 witnessed a fairly significant outage in
 24 March, and so prior to that time, it would
 25 have been anticipated that that would have

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1 been the dispatch of the gas turbine, so
 2 that was a material shift for us, and you
 3 know, you consider how the Avalon load has
 4 changed, again, unavailability of Holyrood
 5 has had its, you know, issues over the last
 6 couple of years, those things wouldn't have
 7 necessarily contemplated either. So, you
 8 know, really being conscious of
 9 interruptions for customers, that would have
 10 been a material shift for us.
 11 MR. O'BRIEN:
 12 Q. So when you said unavailability of Holyrood
 13 units, is that right, has that always been
 14 an issue though?
 15 MS. WILLIAMS:
 16 A. Yes, but I believe when we think about how
 17 we forecast the gas turbine usage, the
 18 parties are probably aware and recall that
 19 the long-term planning availability numbers
 20 that we would have used, say a few years ago
 21 for Holyrood would have been the lower
 22 numbers you will see, even let's say the
 23 (unintelligible) generation report, it's
 24 9.64 and the Bay D'Espoir units, or not Bay
 25 D'Espoir, the hydraulic units generally

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1 would have been .9. That was the long-term
 2 number that had been used for a long time.
 3 I suspect that when the planning was
 4 completed for what the amount of usage the
 5 gas turbines, sorry, the gas turbine would
 6 indeed be used, would have been reflective
 7 of those older numbers. We now go forward
 8 using the more updated numbers of about, I
 9 think it's 15 percent for Holyrood and the
 10 2.6 for hydraulic units, so that is going to
 11 be, go forward, a better reflection of what
 12 our needs are, and obviously go forward, the
 13 Avalon constraint has gone away, so instead
 14 of having to monitor four potential triggers
 15 for a gas turbine operation, really are just
 16 dealing with now just reserve, just spinning
 17 reserve as opposed to the Avalon voltage,
 18 the frequency concerns, the transmission
 19 corridor constraints, so it's an easier
 20 forecast process now.
 21 MR. O'BRIEN:
 22 Q. And that will affect your decision-making
 23 process for operating or having standby
 24 reserves, or will it?
 25 MS. WILLIAMS:

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1 A. As we continue to consult with the Board and
 2 the parties on what level of reliability
 3 they're interested in, that would be an
 4 input, so you know, today –
 5 MR. O'BRIEN:
 6 Q. There's just less issues to deal with.
 7 MS. WILLIAMS:
 8 A. Less issues to try to decide when is it
 9 going to have to trigger use of it, and
 10 again, I think the improved day four numbers
 11 will provide for more accurate forecasting
 12 go forward as well.
 13 MR. O'BRIEN:
 14 Q. Okay, and just one more question, it's kind
 15 of on the point of what was the initial sort
 16 of thought process. I understood when I
 17 asked or Mr. Haynes had mentioned there
 18 might have been a different permit required
 19 based on what the initial hourly usage or
 20 yearly assessment for usage was going to be
 21 versus what Holyrood CT ultimately became
 22 used for, is that something that you can
 23 comment on, and sort of what was that
 24 process?
 25 MS. WILLIAMS:

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1 A. I think it's accurate that the number of
 2 hours used obviously is different than what
 3 was initially contemplated, but I believe
 4 the certificate of approval doesn't restrict
 5 the amount of hours that's required.
 6 MR. O'BRIEN:
 7 Q. Okay.
 8 MS. WILLIAMS:
 9 A. It's just a set of instructions and
 10 directions that we have to do to meet from
 11 an environmental perspective.
 12 MR. O'BRIEN:
 13 Q. Okay, so you didn't have to get a different
 14 or a modified certificate of operation or
 15 anything like that?
 16 MS. WILLIAMS:
 17 A. No.
 18 MR. O'BRIEN:
 19 Q. Okay, so getting back sort of to the
 20 deferral account itself, and I guess you'd
 21 agree with me it's fair that when we're
 22 talking, we're talking about a fairly large
 23 amount of money over the last three years,
 24 2015, 2016, 2017. I think we're in the
 25 range of about 59 million associated with

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1 the energy supply cost variance account,
 2 that it would be appropriate for customers
 3 to want to know the cost benefit analysis of
 4 the usage of standby generation.
 5 MS. WILLIAMS:
 6 A. Correct.
 7 MR. O'BRIEN:
 8 Q. Over the last three years, say 2015, 2016,
 9 2017, have you been involved, yourself, with
 10 decision making on the operation of standby
 11 generation, or is it just since you became a
 12 VP?
 13 MS. WILLIAMS:
 14 A. On a daily dispatch?
 15 MR. O'BRIEN:
 16 Q. Yeah.
 17 MS. WILLIAMS:
 18 A. No, I mean, if the system requires it and
 19 the folks who monitor the system say we are
 20 going to dip into a point where we will be
 21 violating the criteria, then that's it. So
 22 I wouldn't intervene to say yes or no. It
 23 doesn't require any level of approval.
 24 MR. O'BRIEN:
 25 Q. Okay, so it's not your –

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1 MS. WILLIAMS:
 2 A. It's not approval of us, I mean, they're
 3 abiding by instructions that are well
 4 understood by us to be executed on a daily
 5 basis.
 6 MR. O'BRIEN:
 7 Q. Okay, all right. So Hydro brought an
 8 application back in the fall for the 2015,
 9 2016 balances and that was not approved by
 10 the Board, but it's now back for approval,
 11 along with 2017 as well.
 12 MS. WILLIAMS:
 13 A. Correct.
 14 MR. O'BRIEN:
 15 Q. And this has been looked at by Liberty.
 16 Have you reviewed Liberty's report?
 17 MS. WILLIAMS:
 18 A. I have.
 19 MR. O'BRIEN:
 20 Q. Okay. Now Liberty didn't ultimately
 21 determine the costs incurred were
 22 imprudently incurred, that's correct?
 23 MS. WILLIAMS:
 24 A. Correct.
 25 MR. O'BRIEN:

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1 Q. But there were a number of criticisms
 2 regarding Hydro's management practices and
 3 operation philosophy, is that fair?
 4 MS. WILLIAMS:
 5 A. That is correct. No, sorry, can you repeat
 6 that?
 7 MR. O'BRIEN:
 8 Q. There was a number of criticisms regarding
 9 Hydro's management practices and operation
 10 philosophy.
 11 MS. WILLIAMS:
 12 A. I don't know if I'd interpret they had a
 13 criticism of the operational philosophy. I
 14 would have interpreted that they said the
 15 way you operate is generally what you would
 16 expect to see in North America. It's not
 17 abnormal. I understood the criticism was –
 18 MR. O'BRIEN:
 19 Q. Okay, and that's the N1 contingency.
 20 MS. WILLIAMS:
 21 A. Right. The criticism I interpreted it to be
 22 is that we did not engage and consult with
 23 parties on what provision of this, what
 24 Hydro believed to be appropriate reliability
 25 operational philosophy, that we did not

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1 consult with the parties to say this is what
 2 this will cost, are you on board, that I
 3 interpreted it as the clearest message that
 4 we received.
 5 MR. O'BRIEN:
 6 Q. Okay, I'll ask you a bit about that then,
 7 and there's a number of recommendations that
 8 were made to Hydro, which I understand have
 9 been accepted?
 10 MS. WILLIAMS:
 11 A. Correct, we I think last Thursday put a
 12 response on file.
 13 MR. O'BRIEN:
 14 Q. There was a response filed last week, yeah.
 15 So I want to talk about some of those
 16 recommendations and some of those
 17 criticisms, I guess. Talking about the
 18 management of the deferral account itself, I
 19 noted in the report that Liberty suggested
 20 that it had some difficulty in analyzing
 21 management decisions based on the evidence
 22 that was on the record, and I think that was
 23 largely as a result of there being a number
 24 of different drivers into when you would
 25 decide to operate standby generation, is

<p style="text-align: right;">Page 101</p> <p>1 that fair? 2 (10:30 a.m.) 3 MS. WILLIAMS: 4 A. I think that would probably be fair. I 5 don't want to put words in Liberty's mouth, 6 but I believe that's generally it. 7 MR. O'BRIEN: 8 Q. And it's difficult to parse out sort of the 9 costs associated with each driver. 10 MS. WILLIAMS: 11 A. Right. 12 MR. O'BRIEN: 13 Q. Is that fair? 14 MS. WILLIAMS: 15 A. Again, I think that's Liberty's review, I 16 can't say for sure if that's exactly what 17 they would have said, but I think, yeah, 18 they said it was tough to read into the 19 data. 20 MR. O'BRIEN: 21 Q. Right, and I think that they had mentioned 22 the drivers, like you had talked about a 23 bunch of different sort of drivers, you're 24 talking about support of spinning reserve as 25 being one.</p>	<p style="text-align: right;">Page 103</p> <p>1 A. Right, spinning. Correct. 2 MR. O'BRIEN: 3 Q. There's other issues, planned outages that 4 would enter into your mind process or the 5 operator's process when you're operating 6 standby generation and unplanned outages and 7 even testing, all that sort of rolls up into 8 this total sort of package. 9 MS. WILLIAMS: 10 A. The total quantity. 11 MR. O'BRIEN: 12 Q. But there are overlapping drivers on a 13 number of occasions, is that fair? 14 MS. WILLIAMS: 15 A. Correct. 16 MR. O'BRIEN: 17 Q. And Liberty was, what I took to say, 18 critical of Hydro not, sort of, trying to 19 track stand-by generation to a lower detail 20 in terms of parsing out some of the costs 21 associated with each kind of driver. Is 22 that fair? 23 MS. WILLIAMS: 24 A. We will, obviously, have to find a tracking 25 and therefore reporting solution that works</p>
<p style="text-align: right;">Page 102</p> <p>1 MS. WILLIAMS: 2 A. Yes. 3 MR. O'BRIEN: 4 Q. Derating of units being an issue too that 5 might drive you to operate more standby 6 generation, some units being offline would 7 be other things you'd have to take into 8 account. 9 MS. WILLIAMS: 10 A. And I think, you know, I think obviously 11 Liberty will have a view and at one point we 12 accept because we accept the opinion and we 13 will have to adjust, but you know, if you 14 have a unit that's derated, you then have to 15 replace the reserve that that would have 16 provided, so you have a trigger, but it also 17 supplies the answer to the other issue as 18 well. 19 MR. O'BRIEN: 20 Q. I understand, yeah, and this is sort of the 21 thought process behind why you would look at 22 the nameplate versus the derating because 23 that unit is providing standing or spinning 24 reserve as well as providing production. 25 MS. WILLIAMS:</p>	<p style="text-align: right;">Page 104</p> <p>1 better, but again, like I referenced, when 2 you have on for one reason, it is also 3 satisfying the other reason. So, I've heard 4 Mr. Young use this expression, you can't 5 take the milk out of the tea. We can't 6 divorce everything. And so to say, you 7 know, do you allocate 50 percent of the 8 production that day to one of the reasons 9 even though, because it's supplying both of 10 the reasons? Again, I fully accept that 11 it's difficult to do, but that is a reality 12 for us, is that there are some things that 13 are inherently married and we can't divorce 14 them. 15 MR. O'BRIEN: 16 Q. And did you, at any point, decide or sort of 17 talk about how we could do that in order to 18 a cost benefit analysis? 19 MS. WILLIAMS: 20 A. No, because I don't know that we would have 21 fully grasped Liberty's perspective that 22 it's not helpful, the data that we have. I 23 guess, you know, we certainly want to be 24 helpful and we didn't create a set of data 25 that said, oh, this is great; this is going</p>

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1 to confuse everybody. It's the last thing
 2 we want. We want to make sure that we
 3 capture enough data that everyone can parse
 4 through, but obviously we weren't as
 5 successful as we would have liked and we
 6 have to find a better way forward.
 7 MR. O'BRIEN:
 8 Q. Okay. So, if you were going to—and I assume
 9 your management decisions in operating
 10 stand-by generation, you would have wanted
 11 to do so on a cost benefit basis, like I
 12 would imagine, is that fair?
 13 MS. WILLIAMS:
 14 A. It's our least cost dispatch and we don't
 15 want to start it up unless we absolutely
 16 have to. And the reason why the gas
 17 turbines or, in particular, let's call it
 18 Holyrood, gas turbine, is being used is
 19 because of, you know, Holyrood is at its end
 20 of life. It is experiencing issues. We
 21 have essentially had to treat it in that
 22 fashion. And, I mean, you have the
 23 constraint that previously existed; you have
 24 the load on the Avalon, you know. In order
 25 to function with the current system in the

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1 last couple of years, we really didn't have
 2 much choice but to dispatch the gas
 3 turbines. I think it's about 20 percent of
 4 our installed capacity. When you do have an
 5 issue and it's part of your reserve
 6 planning, you don't expect to never run.
 7 You expect to run it and I understand again,
 8 the magnitude is significant. You know,
 9 prior to the last few years, you know,
 10 Holyrood would have been used to help with
 11 spinning reserve and, you know, those costs
 12 would be flowing through the RSPs, so I
 13 think it's the magnitude of why we've had to
 14 run the gas turbines. The philosophy is not
 15 radically different than say, it would have
 16 been historically, it's that we have gone to
 17 a point in the last couple of years where
 18 we've had to use the gas turbine because of
 19 what was going on in the Avalon.
 20 MR. O'BRIEN:
 21 Q. Okay. And I guess my point is more—for your
 22 operational philosophy you want your
 23 operational philosophy to be cost effective.
 24 That's a fair statement, is it?
 25 MS. WILLIAMS:

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1 A. Absolutely.
 2 MR. O'BRIEN:
 3 Q. And so when you got to the point, say in
 4 March of 2015 and decided you were going to
 5 have to start operating the CT differently,
 6 was there any thought put to, okay, well as
 7 we go forward, we should be tracking why
 8 we're using it, for what reason, so we can
 9 look at what a cost efficient approach to
 10 operating standby generation might be.
 11 MS. WILLIAMS:
 12 A. I wasn't necessarily super close to that at
 13 the time. Obviously, from a review of that,
 14 the March outage and prudence, I would have
 15 been party to various conversations. And I
 16 remember Mr. Henderson saying, at one point,
 17 and I think he wanted—I don't know if he
 18 said it in a hearing or if he wanted it
 19 included, you know, this is going to be more
 20 costly. So, I don't know if, at the time,
 21 he might have done an analysis. I don't
 22 think we've done that because as Liberty
 23 commented on, the context that Hydro came
 24 through was, you know, we've got to get that
 25 reliability back. And so it was really—I'm

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1 not saying that you ignore costs, but we
 2 knew we had to do better on reliability and
 3 continued or, you know, a repeat of any of
 4 the outages we had seen will be intolerable.
 5 MR. O'BRIEN:
 6 Q. Okay, and in terms of tracking in the future
 7 then, in terms of trying to track drivers
 8 and certain costs associated with certain
 9 drivers, do you plan to try to do that, to
 10 consult with Liberty or to consult with
 11 anyone else to see how we might be able to
 12 do that in the future.
 13 MS. WILLIAMS:
 14 A. Yes, well Liberty has made a suggestion
 15 themselves as an appendix to the report.
 16 MR. O'BRIEN:
 17 Q. Yes, I saw that.
 18 MS. WILLIAMS:
 19 A. That we will look at that and see if that
 20 makes sense. And Liberty are coming to meet
 21 with the TTO team in a couple of weeks in
 22 August and we'll meet with them as well and
 23 we might be able to take a bit of time at
 24 the time to have a chat with them about
 25 that, to see what makes that most sense.

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1 But it is our intention to get a report and
 2 the reporting mechanism that makes sense,
 3 that people can understand the drivers and
 4 the background.
 5 MR. O'BRIEN:
 6 Q. Will you consult with stakeholders on that,
 7 is that your plan?
 8 MS. WILLIAMS:
 9 A. Sure, yeah, absolutely.
 10 MR. O'BRIEN:
 11 Q. Okay. And I understood, just in terms of
 12 your response last week, that Hydro had
 13 indicated that when it makes changes to its
 14 operational philosophy in the future that
 15 could materially affect costs, that you will
 16 seek stakeholder –
 17 MS. WILLIAMS:
 18 A. Which, you know, again their statement was
 19 exactly in line with what we were thinking
 20 about with regards to the reliability review
 21 that we're undertaking. You know, because
 22 we very much are cognizant that that could
 23 result, depending on what materializes, that
 24 could result in investment on the system in
 25 some kind of a change. And so we had

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1 already commenced planning for consultation.
 2 So, I was happy and not surprised to see
 3 that that was Liberty's recommendations. So
 4 we're happy to get in line where their
 5 thinking was because we were already headed
 6 down that path.
 7 MR. O'BRIEN:
 8 Q. And so when you're headed down that path, I
 9 guess, in the future, I guess you recognize
 10 it's important to provide cost estimates or
 11 least cost benefit analysis for stakeholders
 12 to –
 13 MS. WILLIAMS:
 14 A. Yes, as I mentioned earlier –
 15 MR. O'BRIEN:
 16 Q. - take part in those discussions.
 17 MS. WILLIAMS:
 18 A. Yes, the reliability review that we're going
 19 to present, you know, if it requires some
 20 level of investment, we'll have five, six,
 21 ten options.
 22 MR. O'BRIEN:
 23 Q. Okay.
 24 MS. WILLIAMS:
 25 A. And Hydro will have a recommendation, we

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1 can't come—and we are running the utility—we
 2 can't come with no recommendation and say,
 3 here, let's duke it out. We will come with
 4 a recommendation, but we're going to show
 5 the parties why we arrived at a
 6 recommendation and the costs and the
 7 benefits that would result from that.
 8 MR. O'BRIEN:
 9 Q. Okay. I mentioned earlier, I do want to
 10 just get an idea about the, sort of, the
 11 reliability standard that was implemented in
 12 2015, sort of, how things changed from March
 13 2015 going forward. And Liberty sort of
 14 mentions this in the report that there was
 15 an N-1 or single worse contingency standard
 16 in place at that time already, is that fair?
 17 MS. WILLIAMS:
 18 A. Yes.
 19 MR. O'BRIEN:
 20 Q. And what was that standard and how did it
 21 differ moving forward? What was the change?
 22 MS. WILLIAMS:
 23 A. You might venture into something that I
 24 would like to ask one of the parties out in
 25 the audience to come up and talk about. The

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1 exact –
 2 MR. O'BRIEN:
 3 Q. Is it Mr. Fagan?
 4 MS. WILLIAMS:
 5 A. No, it's not Mr. Fagan; it's somebody in Mr.
 6 LeBlanc's group, but you know, I think in
 7 the response back on the Liberty report we
 8 acknowledge that there is some clean up that
 9 we're going to do there. So, I don't know
 10 if Mr. LeBlanc would be able to comment on
 11 it, but I would not want to venture there.
 12 MR. LEBLANC:
 13 A. I believe the change was just for the
 14 Avalon. The N-1 was for the Island and then
 15 it changed that we also had to look at the
 16 Avalon almost as a separate system and treat
 17 it as a standalone from a reliability point
 18 of view.
 19 MR. O'BRIEN:
 20 Q. And I think that was one of the changes that
 21 Liberty did note. And there's two operating
 22 instructions obviously, for the Island and
 23 for the Avalon. The Avalon one was brought
 24 in later.
 25 MS. WILLIAMS:

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1 A. It's T096.
 2 MR. O'BRIEN:
 3 Q. I think one of the things that was raised
 4 and that may not have been clear was the
 5 concept of the N-1 generation having some,
 6 being all spinning reserve versus having the
 7 possibility of some of that being non-
 8 spinning reserve. And I wasn't clear on
 9 that and I didn't know if anybody could
 10 clarify that for me.
 11 MR. LEBLANC:
 12 A. Usually if a utility is interconnected on
 13 many fronts, the reliability criteria is
 14 loss of your single largest generator, it
 15 has to be able to be replaced within 10
 16 minutes, of which there is only a
 17 requirement for 25 percent to be spinning.
 18 The remaining 75 percent can be non-spinning
 19 based on performance. Now, if you miss the
 20 10 minute, that 25 percent of spinning can
 21 increase up to 100 percent based on your
 22 performance. So, unless you have a—and then
 23 it's really hard ratchet it back down. And
 24 again, you also have to, at the same time,
 25 for the loss of your second largest unit,

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1 you have to have to be able to replace 50
 2 percent of that within 30 minutes and that
 3 can be all non-spinning. However, since we—
 4 at that time we were an island, no
 5 interconnections, you can't lean on your
 6 neighbors; you can't have reserve sharing
 7 and things like that. So, the criteria is
 8 the amount of 10 minute reserve has to be
 9 100 spinning.
 10 MR. O'BRIEN:
 11 Q. And so in the prior situation, prior to
 12 2015, whether or not you could have non-
 13 spinning or spinning, you didn't have the
 14 option for non-spinning, is that –
 15 MR. LEBLANC:
 16 A. Again, I'm can't speak to how, what the
 17 reliability –
 18 MR. O'BRIEN:
 19 Q. Well, just following up on your comment.
 20 MR. LEBLANC:
 21 A. But again, and I'm not sure what we did pre
 22 there. I never looked into it. When I
 23 came, I was on a go forward basis
 24 unfortunately.
 25 MR. O'BRIEN:

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1 Q. Okay. And so going forward then, if I'm
 2 right then, so what we have is the N-1
 3 standard, N-1 contingency which is the
 4 largest unit that's on the system, 100
 5 percent spinning reserve going forward.
 6 MR. LEBLANC:
 7 A. Slight correction to that. N-1 refers to
 8 the loss of any element on your system –
 9 MR. O'BRIEN:
 10 Q. Yes.
 11 MR. LEBLANC:
 12 A. - not necessarily a generator. It can also
 13 be a transmission line.
 14 MR. O'BRIEN:
 15 Q. Okay.
 16 MR. LEBLANC:
 17 A. Reserves are based on the loss of your
 18 single largest generating unit online and
 19 your second largest generating unit online.
 20 MR. O'BRIEN:
 21 Q. Okay. So, that's the 70 percent—is it 70—
 22 well, the operating instruction says 70
 23 megawatts of additional spinning reserve.
 24 MR. LEBLANC:
 25 A. And again, that's, again for –

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1 MR. O'BRIEN:
 2 Q. Where does that come from?
 3 MR. LEBLANC:
 4 A. Interconnected utilities. So, again, that
 5 wasn't here. So, they put that in as a proxy
 6 for loss of the second largest unit.
 7 MR. O'BRIEN:
 8 Q. The second largest. Okay.
 9 MR. LEBLANC:
 10 A. Again, the rules are slightly different when
 11 you're an island and you're electrically an
 12 island as well. Now, once we move forward
 13 and the LIL is commissioned and Maritime
 14 Link and we're at full capacity in all
 15 those, we will be reviewing those
 16 reliability standards.
 17 MR. O'BRIEN:
 18 Q. So, from 2015 to the TL267 coming in, was
 19 there any change in or was it all spinning
 20 reserve? It was 170 spinning reserve plus
 21 the 70 extra which was the proxy for that,
 22 the loss of the second half.
 23 MS. WILLIAMS:
 24 A. Yes.
 25 MR. LEBLANC:

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1 A. And that 70 was non-spinning.
 2 MR. O'BRIEN:
 3 Q. Was non-spinning?
 4 MR. LEBLANC:
 5 A. Only the 170 was spinning.
 6 MR. O'BRIEN:
 7 Q. And what as the 70 non-spinning from?
 8 That's from any other generation unit to be
 9 brought on in 30 minutes?
 10 MR. LEBLANC:
 11 A. Yeah, that could meet the timeline. And
 12 that was one of the problems too. The
 13 Holyrood CT cannot start in 10 minutes.
 14 MR. O'BRIEN:
 15 Q. No, I understood that.
 16 MR. LEBLANC:
 17 A. So, for it count as—you have to start it in
 18 order to count the reserve.
 19 MR. O'BRIEN:
 20 Q. Now, I understood from the operating
 21 instructions that 70 was for spinning
 22 reserve for uncertainties, but am I wrong in
 23 that? That extra –
 24 MS. WILLIAMS:
 25 A. It is 170 spinning.

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1 MR. O'BRIEN:
 2 Q. 170 spinning, but I understood the extra 70
 3 was also to be spinning, but it's not?
 4 MS. WILLIAMS:
 5 A. No, it's 240 total reserve.
 6 MR. O'BRIEN:
 7 Q. 240 total, but the last 70 can be non-
 8 spinning.
 9 MS. WILLIAMS:
 10 A. Right.
 11 MR. O'BRIEN:
 12 Q. And that's what you've operated on since
 13 2015?
 14 MS. WILLIAMS:
 15 A. Yes.
 16 MR. O'BRIEN:
 17 Q. Okay. Well, take me through, sort of—I just
 18 want to bring up the operating instruction
 19 from—just to be clear to make sure that I'm
 20 not wrong on that. Maybe I'll come back to
 21 that. Okay, alright, so, Liberty had made
 22 some comments just in terms of, sort, of
 23 whether or not the operating instructions
 24 were clear or needed to be modified. What
 25 did you take from that? What issues did you

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1 think Liberty was raising at that –
 2 (10:45 a.m.)
 3 MS. WILLIAMS:
 4 A. Yes, so, as I mentioned, there's another
 5 gentleman who is probably in the room here
 6 that very close to, I think, that
 7 observation by Liberty and has acknowledged
 8 that we can tidy that up and I think that
 9 was a commitment in the report that we sent
 10 back, the filing that we sent back, that we
 11 are going to look for what those
 12 inconsistencies are and we're going to
 13 update that and send it forward. I would be
 14 afraid to comment on –
 15 MR. O'BRIEN:
 16 Q. On what they actually were.
 17 MS. WILLIAMS:
 18 A. Yes, exactly.
 19 MR. O'BRIEN:
 20 Q. Okay, that's fair. And in terms of looking
 21 at that, what's Hydro's plan? Is it to file
 22 a report, file a modified operating
 23 instruction or –
 24 MS. WILLIAMS:
 25 A. Yes, and I think that that was fairly well

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1 underway, so that won't be months. I mean,
 2 hopefully we'll see that within weeks.
 3 MR. O'BRIEN:
 4 Q. Okay. And in terms of the Avalon operating
 5 instruction and removing the restriction
 6 from the Avalon or sorry the TL267, removing
 7 the restriction from the Avalon, did that
 8 change the operating instructions once in,
 9 in terms of a reserve?
 10 MS. WILLIAMS:
 11 A. No, we, just on the island basis now, if I
 12 understand your question. It wouldn't have
 13 changed the reserve; it's still 240 for the
 14 Island. We were always having to satisfy
 15 the Avalon as well as the Island, so it
 16 doesn't change how we serve the Island.
 17 MR. O'BRIEN:
 18 Q. I understood the Island instruction had an
 19 additional 35 megawatt reserve required.
 20 MS. WILLIAMS:
 21 A. It might be in how something might be
 22 written. I would have to understand what
 23 you're looking at to make sure we're clear,
 24 but we operate with a 240 megawatt reserve.
 25 MR. O'BRIEN:

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1 Q. Okay. And that's for Island and for Avalon,
 2 it's all the same.
 3 MS. WILLIAMS:
 4 A. Well, Avalon is gone now, we don't analyze
 5 that anymore.
 6 MR. O'BRIEN:
 7 Q. Alright. So, before Avalon was gone though,
 8 was there a different operating or reserve
 9 requirement on the Avalon than the Island.
 10 MS. WILLIAMS:
 11 A. I'm trying to recall the exact megawatt
 12 number now. It might have been 240 as well;
 13 I'd have to go back and double check.
 14 MR. O'BRIEN:
 15 Q. Can you do that for me?
 16 (10:48 a.m.)
 17 MS. WILLIAMS:
 18 A. So, it's just the megawatt reserve that we
 19 were using from an Avalon perspective.
 20 MR. O'BRIEN:
 21 Q. Yes and I'm wondering if there was a
 22 different reserve, are these reserves sort
 23 of added together or how does that work?
 24 Can you have spinning reserve that's
 25 providing coverage, say, for Avalon and the

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1 Island or do you have to have a different
 2 generator doing that?
 3 MS. WILLIAMS:
 4 A. Okay, no, I don't know if you still need it
 5 or not, but the—you had to, sort of, get
 6 through both gates to make sure you were
 7 stable. So, if you had enough reserve on
 8 the Island, but you weren't getting through
 9 the gate on the Avalon, then you didn't have
 10 enough, you had to address the Avalon.
 11 MR. O'BRIEN:
 12 Q. Okay.
 13 MS. WILLIAMS:
 14 A. But if you had—when you had all your system
 15 dispatched and both gates were okay,
 16 checking both boxes, you were okay. It's
 17 not like you had to have double the amount
 18 and it was, you know, added additive. It
 19 was how you dispatched it, it satisfied both
 20 criteria.
 21 MR. O'BRIEN:
 22 Q. Okay, and when you dispatch during the day,
 23 you have the forecast in the morning and I
 24 take it, you also have forecasts for 6 days
 25 out or 7 days out as well. Is that fair?

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1 MS. WILLIAMS:
 2 A. Correct.
 3 MR. O'BRIEN:
 4 Q. And for the operators when they make
 5 operational decisions to dispatch standby
 6 generation, I guess that's done throughout
 7 the day based on where the load is. Is that
 8 accurate?
 9 MS. WILLIAMS:
 10 A. Yes, absolutely and it's done in least cost
 11 order at all times. And the instruction
 12 would indicate, you know, that it's least
 13 cost order. And the forecast, certainly,
 14 can vary throughout the day as well, things
 15 materialize, things don't materialize.
 16 MR. O'BRIEN:
 17 Q. Sure.
 18 MS. WILLIAMS:
 19 A. I think there's a RFI in the record where,
 20 you know, there's time it can as much as off
 21 by 100 megawatts which is a material
 22 difference and it's not—and sometimes
 23 industrial load can by the one that changes,
 24 but you know, cloud cover can have a very
 25 significant impact on what the material and

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1 load change is going to be throughout the
 2 day.
 3 MR. O'BRIEN:
 4 Q. And I presume there are times when you look
 5 back and you see that there are some standby
 6 generation that has been running that may
 7 not have been necessary because ultimately
 8 you didn't violate the reserve requirement.
 9 That must happen on occasion?
 10 MS. WILLIAMS:
 11 A. I think—when those things appear to occur,
 12 you have to consider the context in which
 13 they operate. So, for example, at Holyrood,
 14 if you have a forecast that requires the
 15 Holyrood gas turbine to be on and you put it
 16 on, say, in the morning and it continues on
 17 through the day, but you will need it say in
 18 the evening, you cannot shut that unit. It
 19 needs a certain period of time not running
 20 before it can actually be started back up
 21 again. So, while the reserves may look to
 22 be too rich in any moment, say well you
 23 should shut that thing down, you actually
 24 physically can't shut it down because when
 25 you need it the next time, you actually will

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1 not be able to start up the gas turbine.
 2 So, for every instance there's a reason why,
 3 you know, there's a reserve. And for
 4 example, if you also shut down the gas
 5 turbine, say if you had it on 40 megawatts
 6 and you are now drifting to—and that
 7 contributes 90 megawatts to spinning. If
 8 you are at 80 megawatts over your spinning
 9 reserve of 270, it looks again like it's
 10 rich. Well, you're above 170, you should
 11 shut that thing down. As soon as you shut
 12 it down, you're losing 90 megawatts of
 13 contribution of spinning reserve. So, you
 14 have to wait until the spinning gets to a
 15 certain point that when you removed that
 16 unit from service and you loss all that
 17 spinning contribution, you don't violate the
 18 plan that you had. So, an exact number at
 19 any point in time may not be the best
 20 reflection of what the impact is of shutting
 21 a unit down and the decision making.
 22 MR. O'BRIEN:
 23 Q. so, if you—and I know this is in hindsight,
 24 but if in hindsight you look back and there
 25 was more reserve on a system than was

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1 necessary at any given point, what sort of
 2 analysis do you do of those instances? Do
 3 look at whether or not there's a cost
 4 benefit analysis at that time and an
 5 operational decision analysis at that time?
 6 MS. WILLIAMS:
 7 A. If we identify a time that we need to, could
 8 have initially done 5, 10, 20 minutes early,
 9 obviously we're always looking to improve
 10 how we dispatch generally. And earlier in
 11 2018 we added, I'll call the better visual
 12 tools for the spinning and the online
 13 reserve. And they've been helpful in
 14 providing for the operators, more tools to
 15 see, when is everything on; is it drifting
 16 above that point. If I do take the gas
 17 turbine off now, do I violate that 170
 18 again, even though it looks like it's very
 19 rich, from a contribution perspective right
 20 now. We are also now pursuing additional
 21 tools, for example, audible alarms to help,
 22 you know, if there's a lot going on in the
 23 ECC at any point in time, we said we'll get
 24 an audible alarm that can work to help
 25 trigger, okay, yeah, some of the

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1 calculations going on in the background
 2 here. We think that you might have the
 3 opportunity to shut this down and that would
 4 require an additional interaction. So,
 5 we're always looking for ways to improve how
 6 we dispatch and when we take them on and
 7 when we take them off.
 8 MR. O'BRIEN:
 9 Q. So, those types of things, you brought that
 10 in early in 2018, the visual tools, that's
 11 the software, I guess, is it software based
 12 or –
 13 MS. WILLIAMS:
 14 A. Yes.
 15 MR. O'BRIEN:
 16 Q. And the alarms and that sort of thing should
 17 help in terms of where fuel costs go into
 18 the future, should help reduce them.
 19 MS. WILLIAMS:
 20 A. Yes, and I mean, certainly the biggest
 21 improvement into the future is going to be
 22 the availability of the Maritime Link and
 23 certainly Labrador/Island Link with regards
 24 to gas turbine usage in the future expect a
 25 significant shift. I think of the costs

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1 year to date in the supply cost balance in
 2 2018 something like 70 percent of it has
 3 been incurred prior to the Maritime Link in
 4 service. So, you know, that is a very clear
 5 indicator of the benefit of being
 6 interconnected and being able to offset the
 7 gas turbine starts.
 8 MR. O'BRIEN:
 9 Q. So, what you've got to date, 70 percent of
 10 that was prior to February.
 11 MS. WILLIAMS:
 12 A. Yes, well, I think throughout February as
 13 well because we did have –
 14 MR. O'BRIEN:
 15 Q. Testing.
 16 MS. WILLIAMS:
 17 A. - starts in February.
 18 MR. O'BRIEN:
 19 Q. Okay. I sort of touched on this before, the
 20 effect of TL267 when it came online, Mr.
 21 Haynes had touched on this as well in that
 22 it may have been effective in reducing some
 23 costs in standby generation requirements.
 24 Can you elaborate on that at all?
 25 MS. WILLIAMS:

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1 A. I think, inherently it would because of the
 2 other constraints that we mentioned. So,
 3 you know, when you have the transmission
 4 line corridor, so we would have had those
 5 constraints and certainly even in the
 6 summer, you know, when you get the
 7 additional—Mr. LeBlanc or Mr. Gardiner would
 8 be able to speak to that more, you know,
 9 when there’s more heating or the ability to
 10 dissipate the heat on the lines through the
 11 warmer period, you know, TL267 will have an
 12 impact, you know, from that constraint
 13 perspective as well as with the line
 14 loadings, but I don’t think it materializes
 15 as much as we would have liked in this past
 16 winter because of the Holyrood derations
 17 that we were witnessing. If we hadn’t had
 18 such a significant deratings this winter,
 19 the gas turbine usage may not have been as
 20 high.
 21 MR. O'BRIEN:
 22 Q. So, do you anticipate being ready with the
 23 Holyrood units in the fall for winter?
 24 MS. WILLIAMS:
 25 A. Yes.

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1 MR. O'BRIEN:
 2 Q. Q. I think you testified that they should
 3 be at around full capacity by the winter.
 4 MS. WILLIAMS:
 5 A. Yes, absolutely.
 6 MR. O'BRIEN:
 7 Q. Is that the expectation? So, do you
 8 anticipate that with that the TL267 will
 9 have effect on, sort of, how much standby
 10 generation will be necessary?
 11 MS. WILLIAMS:
 12 A. In addition to the Maritime Link and I
 13 believe we’re anticipating less than 10 more
 14 gigawatt hours from gas turbines to year
 15 end.
 16 MR. O'BRIEN:
 17 Q. So, there’s no way really for 2018 of
 18 calculating any benefit of the TL267 in
 19 terms of averting a standby generation
 20 because the Holyrood units were not –
 21 MS. WILLIAMS:
 22 A. Correct, and I don’t believe TL267 was
 23 justified on the basis of gas turbine usage
 24 anyway.
 25 MR. O'BRIEN:

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1 Q. Oh no, I get that.
 2 MS. WILLIAMS:
 3 A. But yes, yeah.
 4 MR. O'BRIEN:
 5 Q. It may have been a knock on effect.
 6 MS. WILLIAMS:
 7 A. Correct.
 8 MR. O'BRIEN:
 9 Q. And I guess one of the responses to the RFIs
 10 is that you couldn’t estimate that cost, but
 11 my question to you now is that there is not
 12 likely any benefit in 2018 as a result of
 13 Holyrood units be derated?
 14 MS. WILLIAMS:
 15 A. Not year to date. And you know, again,
 16 going through this winter, but again, you’ve
 17 got the additional supply sources now which
 18 will further complicate exactly what is the
 19 trigger for reduced gas turbine usage
 20 because we’re going to have several benefits
 21 in this pending season that is going to help
 22 curb gas turbine usage. So, it’s not just
 23 going to be TL267. It’s going to be several
 24 reasons that we’re able to use—to have less
 25 gas turbine usage.

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1 MR. O'BRIEN:
 2 Q. And where is the balance right now? What’s
 3 the, I guess, the deferral account balance
 4 of 2018?
 5 MS. WILLIAMS:
 6 A. I think it’s around 15 million. I’ll double
 7 check that. I had that question—yeah, about
 8 15 million year to date.
 9 MR. O'BRIEN:
 10 Q. And that’s with some Maritime Link purchases
 11 –
 12 MS. WILLIAMS:
 13 A. Correct, 70 percent of that number was
 14 incurred in January and February before we
 15 had the Maritime Link opportunities.
 16 MR. O'BRIEN:
 17 Q. Okay. Perhaps we can take a break.
 18 CHAIR:
 19 Q. You still have further questioning following
 20 the break?
 21 MR. O'BRIEN:
 22 Q. I think if we could break now, it would be
 23 good.
 24 CHAIR:
 25 Q. Okay.

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1 (BREAK – 11:00 A.M.)

2 (RESUME – 11:33 A.M.)

3 CHAIR:

4 Q. Back to you, Mr. O'Brien.

5 MR. O'BRIEN:

6 Q. Okay. We had discussed earlier this issue

7 of reserve and reserve on a system and I

8 just wanted to get my head back around this

9 and I had a chat with Mr. Young about this

10 as well. I had a look at the operating

11 instructions for the Avalon and for the

12 Island. They're on the record. And I can

13 bring them up if you like, it's NP-NLH-38,

14 attachment 1 and page 76, I think is the

15 Avalon Capability and Reserve System

16 Operating Instruction. Okay, and on that

17 one at page 2 of 5, there's an indication

18 there, under "Available Avalon Reserve,

19 impact of largest contingency plus minimum

20 reserve". And I understood the largest

21 contingency would be the 170 of spinning

22 reserve and plus minimum reserve, there's a

23 footnote there of five. It just says 35

24 megawatts. And I understand that's no

25 longer—is this operating instruction in

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1 place anymore?

2 MS. WILLIAMS:

3 A. No, that one would be, in theory, removed,

4 but again, as I mentioned, there will be

5 times, if per se, the maintenance is

6 complete and the corridor changes, we would

7 have to reconsider, say, some of these

8 things, but on a day-to-day basis, that's

9 gone.

10 MR. O'BRIEN:

11 Q. That's gone, okay. What was the 35

12 megawatts associated with? Was that

13 spinning reserve, non-spinning reserve?

14 MS. WILLIAMS:

15 A. That would be a sub component of the

16 spinning.

17 MR. O'BRIEN:

18 Q. Okay.

19 MS. WILLIAMS:

20 A. And the word "minimum" likely causes some

21 confusion. It's more, I think the word

22 critical for this room, might be the right

23 way to characterize it. And if we got to a

24 point where we had 35 megawatts, and this is

25 the Avalon, on the Avalon, below that point

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1 you would have difficulty regulating, you

2 know, voltage and frequency.

3 MR. O'BRIEN:

4 Q. Okay.

5 MS. WILLIAMS:

6 A. So, it's more of a critical versus a

7 minimum.

8 MR. O'BRIEN:

9 Q. Okay, alright.

10 MS. WILLIAMS:

11 A. Minimum, are minimum is the largest, 170

12 that we've been operating to.

13 MR. O'BRIEN:

14 Q. So, if you scroll back up again where it

15 just says "plus minimum reserve", you're

16 looking at the 170, but you have a critical

17 aspect of that that has to be there which is

18 the 35.

19 MS. WILLIAMS:

20 A. Correct.

21 MR. O'BRIEN:

22 Q. Okay. And if we go to page 82, that's the

23 start of the, what I understood to be the

24 Island one. Now, is this right?

25 MS. WILLIAMS:

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1 A. That's correct.

2 MR. O'BRIEN:

3 Q. Okay, so the Island one, so page 2 of that

4 talks about largest generating unit plus

5 minimum spinning reserve, under "Available

6 Reserve". Now, there's no footnote on the

7 spinning reserve there, but if you scroll to

8 the next page, page 3, there's a section C

9 that talks about maintaining spinning

10 reserve. "The ECC shall maintain sufficient

11 spinning reserve to cover performance

12 uncertainties in generating units,

13 especially wind and other variable

14 generation and unanticipated increases in

15 demands. The ECC will take appropriate

16 action to maintain a minimum spinning

17 reserve level equal to 70 megawatts". Now,

18 is that on top of the 170?

19 MS. WILLIAMS:

20 A. No.

21 MR. O'BRIEN:

22 Q. Or is that part of –

23 MS. WILLIAMS:

24 A. Again, that's more of the subset.

25 MR. O'BRIEN:

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1 Q. Okay.

2 MS. WILLIAMS:

3 A. That’s really a subset, so if you—from a

4 planning perspective, if you’re going to

5 keep your spinning reserve to be the largest

6 unit and then you want to maintain the

7 minimum, below which it becomes critical.

8 So, the word minimum there in underlined,

9 but it really is about criticality below

10 which at that point you have difficulty in

11 managing the frequency and the voltage.

12 MR. O'BRIEN:

13 Q. So, I understood from reading the evidence

14 that there was 240 reserve required and that

15 170 was the N1 contingency and that the 70

16 was for performance uncertainties to get you

17 to 240 as opposed to it being a component of

18 the 170.

19 MS. WILLIAMS:

20 A. I’m sorry, can you repeat?

21 MR. O'BRIEN:

22 Q. Okay. So, in the rate case there’s an

23 indication of 240 megawatts as your spinning

24 reserve. And I can probably bring you to

25 it, just bear with me. When I read it last

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1 night, it was 240 that indicated that it was

2 170 plus 70 and the exact words were “for

3 uncertainties in generating units” which to

4 me corresponds with the 70 here versus a

5 component.

6 MS. WILLIAMS:

7 A. I think they’re different 70s, if that makes

8 sense.

9 MR. O'BRIEN:

10 Q. Okay.

11 MS. WILLIAMS:

12 A. So, it’s the largest unit plus a buffer for

13 the uncertainties that would occur and then

14 we would say both forecasts would be, you

15 know, a component.

16 MR. O'BRIEN:

17 Q. Okay.

18 MS. WILLIAMS:

19 A. But of the 70 you see here, is a subset of

20 the 170. So, there just happens to be a

21 same quantity.

22 MR. O'BRIEN:

23 Q. Why would you describe it the same way as

24 for uncertainties in generating units?

25 MS. WILLIAMS:

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1 A. I think the first sentence is not

2 necessarily related to the second sentence.

3 And this might be also where Liberty was

4 perhaps finding some inconsistencies.

5 MR. O'BRIEN:

6 Q. And I’m wondering if that might be it.

7 Like, if we could pull up page 3.6 of the

8 case, just show you sort of what I’m—okay,

9 so under 3.32. Yes, there we go, okay,

10 scroll up a little bit more, here we go.

11 The third bullet there, “the maintenance of

12 spinning reserves equal to the capacity of

13 the largest online unit”—so that’s your 170—

14 “and an additional 70 megawatts of available

15 reserve to cover performance uncertainties”.

16 And that’s what we saw in the instruction,

17 “to cover performance uncertainties”.

18 MS. WILLIAMS:

19 A. Right, two separate sentences.

20 MR. O'BRIEN:

21 Q. I understood you to say something different

22 because it was half of the second largest.

23 MR. LEBLANC:

24 A. If you turn to PUB-046.

25 MR. O'BRIEN:

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1 Q. Okay.

2 MR. LEBLANC:

3 A. It explains it there.

4 MR. O'BRIEN:

5 Q. Okay.

6 MR. LEBLANC:

7 A. In our response. So, if you read starting

8 on line 11, it says, “for the current

9 system, this is equal to 170 megawatts when

10 units one or two at Holyrood is online and

11 154”—but—“the enables Hydro to position the

12 system and be able to restore customer

13 quickly in the event of a loss of the

14 largest generating unit. Hydro also

15 maintains an additional reserve, at least 70

16 megawatts”. And if you go down to footnote

17 1, it says, “this reserve is not necessarily

18 online, but is available for quick start in

19 the event of a contingency event”, which

20 means non-spinning.

21 MR. O'BRIEN:

22 Q. Okay, alright. So, I just wanted to be

23 clear that when we look at the operating

24 instructions in the standby generation

25 dispatches practices of Hydro for the last 3

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1 years, that 70 megawatts has not been
 2 considered spinning. It's been considered
 3 non-spinning.
 4 MS. WILLIAMS:
 5 A. Over and above the largest generating unit,
 6 non-spinning.
 7 MR. O'BRIEN:
 8 Q. So, that means you don't have to have it on,
 9 you just have to have it ready to go.
 10 MS. WILLIAMS:
 11 A. Correct.
 12 MR. O'BRIEN:
 13 Q. Okay. So, that doesn't affect fuel costs?
 14 MS. WILLIAMS:
 15 A. Correct.
 16 MR. LEBLANC:
 17 A. Now, I don't know if this happened, just—
 18 maybe I should keep my mouth shut, but
 19 anyway –
 20 MR. O'BRIEN:
 21 Q. Feel free to speak.
 22 MR. LEBLANC:
 23 A. If you cannot start that 70 megawatts quick
 24 start, then it would have to be online, if
 25 it doesn't meet the timeframes required.

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1 So, if, say, one or two of your quick start
 2 units was out for maintenance, it then may
 3 switch to spinning just because there's no
 4 other way to get it.
 5 MR. O'BRIEN:
 6 Q. So when you say if you can't start the 170,
 7 that's –
 8 MR. LEBLANC:
 9 A. No, not the 170, the 70.
 10 MR. O'BRIEN:
 11 Q. The 70, okay.
 12 MR. LEBLANC:
 13 A. Say you were relying on Hardwoods, for
 14 example, to do that and it's out for
 15 repairs, then you don't have another unit
 16 that can start short term, then you'd have
 17 to default to spinning reserves.
 18 MR. O'BRIEN:
 19 Q. Got it. And that depends on the
 20 availability of units and it's more
 21 exception than the rule.
 22 MR. LEBLANC:
 23 A. That's more an exception, more on
 24 availability. And again, we've never
 25 released a unit for maintenance if we knew

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1 we were going to need it for reserves. So
 2 this would be an unexpected outage or
 3 something like that.
 4 MR. O'BRIEN:
 5 Q. Okay, alright. I just wanted to get that
 6 clarified.
 7 MS. WILLIAMS:
 8 A. But again, I believe that the, what would
 9 appear to be confusion, in say the writing
 10 of the instructions, will be clarified and
 11 that will be refiled with the Board as well.
 12 MR. O'BRIEN:
 13 Q. Alright. Okay, so getting back to Liberty's
 14 report, one of the things that Liberty
 15 raises is the ability of the reliability
 16 standard to achieve its objective. So,
 17 Liberty made some observations about there
 18 being a minimal overall improvement in
 19 reliability. Is that fair?
 20 MS. WILLIAMS:
 21 A. I think they quantified it that way.
 22 MR. O'BRIEN:
 23 Q. Yeah. And I just wanted to get your
 24 thoughts on that. I think Liberty had
 25 indicated that the evidence suggests that

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1 the reliability standard could be said to
 2 reduce the recovery time from outages, but
 3 not prevent outages. Is that fair?
 4 MS. WILLIAMS:
 5 A. I'm not an electrical engineer, but you
 6 know, the discussions that I have had--I
 7 think NP-306, Caryn, if you wouldn't mind
 8 just opening that. We have tried to put
 9 Hydro's position forward that that is not
 10 just the only benefit, although we feel
 11 differently, but again, you know, we accept
 12 the findings, but you know, in that RFI, we
 13 did discuss that we think it's more than
 14 that five to ten minute perceived –
 15 MR. O'BRIEN:
 16 Q. I think it said six –
 17 MS. WILLIAMS:
 18 A. Correct—benefit. And so we run through in
 19 there, I mean, as Mr. LeBlanc mentioned, if,
 20 for example, it was during the day and we
 21 had an issue where the Holyrood gas turbine
 22 was not on, so if we did not have it on and
 23 spinning in advance of a contingency and
 24 again, it would only be on if it was the
 25 last option available and least cost

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1 dispatch order, and you had an issue develop
 2 during the day and you had the staff that
 3 normally worked there—they are generally a 8
 4 to 4 group, Monday to Friday—and you had an
 5 under frequency or sorry, trip of unit that
 6 caused an under frequency, you could get
 7 that in, say, thirty to forty minutes and so
 8 the next, if customers were off and we
 9 didn't have enough generation on line,
 10 enough spinning to restore everybody quickly
 11 in the five to ten minutes, as is noted, you
 12 would then have to wait for the Holyrood gas
 13 turbine to come on, so there would be people
 14 that would experience a longer outage, the
 15 thirty to forty minutes that comes on line;
 16 however, if that issue occurred after 4 p.m.
 17 or on the weekend, you know, you'd have to
 18 wait to get somebody in to do it, the checks
 19 that they have do in advance so you could
 20 be, you know, many hours extending from an
 21 outage, so you know, we have tried to put
 22 that on the record that that is our position
 23 that, you know, this is not just the only
 24 benefit, but you can't say that you avoided
 25 it because it didn't occur, right, so you

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1 can't really say that.
 2 MR. FITZGERALD:
 3 Q. Yeah.
 4 MS. WILLIAMS:
 5 A. You know, I think the other pieces had only
 6 units online, you also could have prevented
 7 a wider spread issue because having the
 8 units online, again, not electrical but this
 9 is what I've been told, and it makes sense
 10 to me, is having the units online prevents
 11 the rate of frequency decay when it does
 12 occur, and so you are likely offsetting a
 13 larger outage as opposed to if you had to
 14 wait for it to bring it online, so I really
 15 believe that it is more than just the five
 16 to ten minute reduction that was the benefit
 17 of operating in this matter.
 18 MR. FITZGERALD:
 19 Q. But you can't actually, like you say, you
 20 can't –
 21 MS. WILLIAMS:
 22 A. Can't measure it.
 23 MR. FITZGERALD:
 24 Q. Measure it. Did you consider tracking that
 25 kind of thing when the reliability standard

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1 sort of changed in March, did you consider
 2 looking at well how is this going to benefit
 3 us when we change, when we set the new
 4 standard?
 5 MS. WILLIAMS:
 6 A. I don't recall because I think when Hydro
 7 looked at changing to operating this way and
 8 dispatching in advance, it was understood
 9 that it generally was the way it would have
 10 been done with utilities, so to track that
 11 benefit for something that really is
 12 expected of you anyway, we didn't undertake
 13 to do that.
 14 MR. FITZGERALD:
 15 Q. Okay. And I know it was mentioned in the
 16 evidence that one of the other operational
 17 improvements that Hydro has implemented is
 18 to have operating—or have staffing of
 19 standby units in advance. Can you take me
 20 through sort of how that works?
 21 MS. WILLIAMS:
 22 A. So the chart, there's actually charts on,
 23 probably too difficult to explain it
 24 certainly for the transcript, but basically
 25 is again on a daily basis and a look-forward

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1 basis, if we create charts that there's
 2 triggers below which if we see a load
 3 forecast and a system condition that if we
 4 see it dip below at 170, when we are talking
 5 about conventional generation only, so our
 6 normal hydraulic units. Wind, we don't
 7 count until the day of, so if we see
 8 situations pending where we cannot meet our
 9 spinning reserve at quantities that dip
 10 below the 170, then we would decide to
 11 staff—or sorry, if they're going to dip
 12 close to we would decide to staff and then
 13 that allows us to be able to have people in
 14 place in the event of another, say,
 15 generation issue that could occur,
 16 transmission issue that could occur, but
 17 also with uncertainty in the actual load
 18 forecast, and again, I think I have another
 19 RFI, I can't recall the number, but it talks
 20 about the Nostradamus forecast and the
 21 errors that it can result in. I think there
 22 was a day last year, maybe April 1st, '17, we
 23 had almost a hundred megawatt difference in
 24 the forecast and that's pretty significant
 25 when you need to re-establish that, if you

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1 have to call somebody in and it's, you know,
 2 three hours or four hours before you can
 3 actually re-establish that reserve, so that
 4 it's under those reasons when we're watching
 5 the forecast to see if it's going to come
 6 close to, we can't meet it with our
 7 conventional generation and then we say,
 8 okay, it's appropriate for us to put staff
 9 in place.
 10 MR. FITZGERALD:
 11 Q. And I guess that's sort of a looking-forward
 12 approach in that you believe the load is
 13 going to hit a certain point, then you'll
 14 staff in advance. Do you take a
 15 retrospective analysis of that from a cost
 16 benefit perspective later on to sort of
 17 track this to say have we staffed too much
 18 or too many times, and is this operational
 19 loss working out for customers?
 20 MS. WILLIAMS:
 21 A. I mean, again, the messages that we receive,
 22 you know, quite clearly is that you need to
 23 be more cognizant now of that balance, so we
 24 will be examining that go forward.
 25 MR. FITZGERALD:

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1 Q. And I just wanted to get your comments on
 2 some of Liberty's comments about, in the
 3 report they talk about prudence and whether
 4 or not the costs in this deferral account
 5 were imprudently incurred and we mentioned
 6 earlier that that was not the conclusion,
 7 but they did make some observations which
 8 ran counter, in their mind, to the prudent
 9 standard and I wanted to get some of your
 10 comments on that, one of which was that
 11 Hydro failed to consider the cost at the
 12 time they implemented the reliability
 13 standard and that essentially it appeared to
 14 be an improvements at any cost approach, do
 15 you have any comment on whether that was the
 16 case or whether that's reasonable?
 17 MS. WILLIAMS:
 18 A. I mentioned earlier about Mr. Henderson had
 19 testimony at the time, I think it was
 20 testimony it was in a filing to do with
 21 prudence, actually I think it was the
 22 December 22nd filing of the, maybe phase one,
 23 I'm trying to recall exactly the filing, but
 24 I believe the date was December 22nd, is that
 25 this will be costly, so there was definitely

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1 an understanding of operating this way is
 2 going to cost money, but, you know, it had
 3 been the assimilation of a lot of input and
 4 interpretation by Hydro, again I acknowledge
 5 that we didn't go out and ask parties, this
 6 is how we're going to operate, are you on
 7 board with how we're going to do this, I
 8 acknowledge that, but it was very clear that
 9 that it was an understanding it is going to
 10 be a costly way to operate but really felt
 11 that we were assimilating input and looking
 12 at historically where we had come from, that
 13 this is where we need to go to go forward,
 14 so –
 15 MR. FITZGERALD:
 16 Q. So would it be fair to characterize the
 17 approach as an improvement at any cost
 18 approach, or did you consider costs at the
 19 time?
 20 MS. WILLIAMS:
 21 A. Again, I don't think nobody would have had
 22 improvement at any cost, you know, damn the
 23 torpedoes, do whatever it takes to keep the
 24 lights on. If that was the case, you'd
 25 have, you know, a lot more investment and

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1 that going on, which was really an alignment
 2 of how we were operating to what was
 3 expected.
 4 MR. FITZGERALD:
 5 Q. So when Liberty says that Hydro's failure to
 6 undertake a cost benefit analysis is a
 7 serious omission, do you have any comment on
 8 that?
 9 MS. WILLIAMS:
 10 A. We received the input and we will undertake
 11 to do that, go forward with any material
 12 change, and I think that is Liberty's
 13 perspective and obviously we'll await the
 14 Board's ultimate decision on their view. I
 15 think they also certainly said, you know, in
 16 their opinion that even if you had gone,
 17 they believe the outcome would have been the
 18 same and I'm not suggesting at all that that
 19 means Hydro thinks it doesn't need to get
 20 input, that's not the case at all, but it
 21 just supports the fact that I think Hydro
 22 thought the approach that it was taking from
 23 a management of the system perspective was
 24 the appropriate approach.
 25 MR. FITZGERALD:

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1 Q. And Liberty suggests that management's
 2 actions indicate they're either unaware of
 3 the magnitude of costs associated with it or
 4 they were insensitive to costs, which were
 5 kind of strong words and I wanted to get
 6 your comment on that.
 7 MS. WILLIAMS:
 8 A. Right, like I said, I don't think it's
 9 helpful for Hydro to debate that. We take
 10 Liberty's input seriously and we certainly
 11 take, you know, obviously they're a useful
 12 consultant for the Board and we think it's
 13 appropriate we take the input, but I
 14 struggle with that characterization because
 15 there is no way that anybody at Hydro is
 16 insensitive to the costs that are being
 17 incurred on the system and we're very
 18 conscious of the pending costs that are
 19 coming, and you know, doing everything we
 20 can to mitigate expenses incurred.
 21 MR. O'BRIEN:
 22 Q. At any point sort of from 2015 forward did
 23 you come to a realization in your role that
 24 costs, supply costs, were going to be
 25 escalating as a result of this reliability

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1 standard and it's something that we should
 2 get input from customers?
 3 MS. WILLIAMS:
 4 A. I think we know that the system itself was
 5 changing, so this was a short duration issue
 6 that was occurring, and that, you know, the
 7 same thing if you think about what TL267 can
 8 provide to us, the Avalon constraint
 9 disappearing, there would have been a –
 10 generally you would have expected a shift,
 11 anyway. So, no, I don't think we would have
 12 needed to reevaluate it and then reestablish
 13 and have that communication to change it
 14 associated with the costs being incurred
 15 because the costs would have been changing
 16 coming with the system changes as is.
 17 MR. O'BRIEN:
 18 Q. And let me ask you just sort of back on the
 19 TL267, when you made the decision to move
 20 that forward, is that something that you
 21 were cognizant of, that possibly having an
 22 assistance on standby generation usage and
 23 bringing down costs in this account? I know
 24 it wasn't put forward on that, but -
 25 MS. WILLIAMS:

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1 A. Yeah, I don't recall specifically – again it
 2 wasn't justified on that basis.
 3 MR. O'BRIEN:
 4 Q. No.
 5 MS. WILLIAMS:
 6 A. Was that something that everyone kind of
 7 said "this will likely help us as well", I
 8 expect that was the case, but the decision
 9 to advance, it wasn't the driver.
 10 MR. O'BRIEN:
 11 Q. Didn't have that in your thought process?
 12 MR. GARDINER:
 13 A. No.
 14 MR. O'BRIEN:
 15 Q. No, okay, and has Hydro decided to
 16 reconsider its spinning reserve requirements
 17 as a result of sort of the outcome and
 18 seeing the large volumes in the deferral
 19 account? Is that something that's on your
 20 mind?
 21 MS. WILLIAMS:
 22 A. Not in the moment because again, you know,
 23 we feel we are, and Liberty, I think, has
 24 agreed, that how you're operating is
 25 generally how a utility would operate, but

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1 again I – this year we've already commenced
 2 a consultation with customers, and as part
 3 of those conversations we are going to be
 4 asking for input from customers, and the
 5 industrial customers from Newfoundland
 6 Power, and from the Board, and from, you
 7 know, I'll call it customers in their homes,
 8 ask for that input, and that's going on now
 9 and it'll all be incorporated into November.
 10 So we have a very short period of time to
 11 add on a second parallel similar outcome
 12 review. I don't know that it's really
 13 helpful. It would probably just slow down
 14 the review that we're ongoing, but we are
 15 very much looking for input on costs and
 16 what that translates to with regards to
 17 reliability.
 18 MR. O'BRIEN:
 19 Q. So in terms of, say, specifically the
 20 reserve requirements, would you be looking
 21 at providing some cost benefit analysis to
 22 customers as to, look, if we're going to
 23 monitor – if we're going to amend our
 24 reserve requirements, here's what the cost
 25 might be, here's the risk benefit analysis

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1 that you can look at?

2 MS. WILLIAMS:

3 A. I think how we're framing up how we're going

4 to engage the various parties is going to be

5 different for every party because,

6 obviously, the parties in this room are very

7 savvy and understand the kinds of things

8 that we're talking about, but when we start

9 to engage customers, we're going to be

10 working with Newfoundland Power to decide

11 how is it we engage with customers because

12 they won't be able to interpret the

13 information the same way. You know,

14 ideally, you'll be able to say would you

15 like to pay an extra \$2.00 on your bill for

16 the rest of your life, would you accept the

17 risk of an outage once every five years

18 instead of one every 20 years. So, you

19 know, we really have to think about how do

20 we get useful input from the customers,

21 because again the people in this room

22 understand when we talk about reliability

23 benefits, so it's going to be a mix of how

24 we gather that input and how we incorporate

25 that into our review.

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1 MR. O'BRIEN:

2 Q. But, I guess, you'd agree with me that that

3 kind of analysis is necessary for customers

4 to make an informed decision?

5 MS. WILLIAMS:

6 A. Absolutely.

7 MR. O'BRIEN:

8 Q. They got to know what the costs are versus

9 the reliability; if you're going to give up

10 some sort of reliability, what the benefit

11 would be.

12 MS. WILLIAMS:

13 A. Right, and I would caution the use of

14 "customers making that decision", because

15 there might be – you know, I think it's

16 going to be the Board's decision what the

17 ultimate investment is going to be.

18 MR. O'BRIEN:

19 Q. Very well.

20 MS. WILLIAMS

21 A. So I'd prefer to characterize it as input.

22 MR. O'BRIEN:

23 Q. Input, sure, stakeholder input on that sort

24 of thing?

25 MS. WILLIAMS:

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1 A. Yes, yeah.

2 MR. O'BRIEN:

3 Q. And Liberty talked about the possibility of

4 the need to tilt the cost versus reliability

5 approach, and, I guess, that's what we're

6 talking about now, that's kind of where you

7 see Hydro going forward is looking at that?

8 MS. WILLIAMS:

9 A. Right, we were very pleased to see that they

10 were opening – sorry, put that conversation

11 on the table because that's where our heads

12 have been this year.

13 MR. O'BRIEN:

14 Q. Now one of the other comments Liberty made

15 in terms of a – and, I guess, they phrased

16 it as a second kind of counter-availing

17 prudence factor, I think, is what they

18 called it, was that there is a suggestion

19 that Hydro continues to fail to consider

20 costs when operating standby generation

21 within its reliability. What comment would

22 you have on that?

23 MS. WILLIAMS:

24 A. I had difficulty with that one too, and I

25 think about, you know, the decision making

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1 that we look at, you know, every week and

2 every day on how can we choose the absolute

3 least cost solutions to provide for the

4 reliability standards that we're executing,

5 and as I mentioned, it is contained in a

6 confidential R5, near term generation

7 adequacy, I think, is PUB-4. It does talk

8 about the savings that we've been able to

9 realize year to date, and, you know, that is

10 something that we are always looking at. So

11 that I had a bit of difficulty with, but

12 Liberty – again would they agree, you know,

13 with my characterization that I think we are

14 very conscious of it and we are still doing

15 our best not to dispatch – sorry, to provide

16 for the other alternatives to dispatch.

17 They may not have access or may not have had

18 access in that proceeding as they were

19 looking at this one, but we are very

20 conscious of it and finding ways to offset

21 that gas turbine operation.

22 MR. O'BRIEN:

23 Q. And how do you sort of reconcile that with

24 sort of where, I guess, the deferral account

25 is to date, this year? I mean, you had

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1 indicated earlier that it's a large figure
 2 this year, and, I guess, from what I can
 3 understand, it's probably larger than any of
 4 the other years.
 5 MS. WILLIAMS:
 6 A. I don't think so. I think we're estimating
 7 8 million at the end of the year.
 8 MR. O'BRIEN:
 9 Q. I thought you said 15 million.
 10 MS. WILLIAMS:
 11 A. Sorry, 18 million.
 12 MR. O'BRIEN:
 13 Q. 18 million.
 14 MS. WILLIAMS:
 15 A. 15 year to date, and 70 percent of that was
 16 incurred in the first two months before we
 17 had the opportunity to go with least cost
 18 off island supply. So, you know, as soon as
 19 the potential developed, we started availing
 20 of it, so I don't fully agree that we're not
 21 conscious of how we're dispatching because
 22 we are indeed looking for the least cost
 23 dispatch opportunities.
 24 (12:00 p.m.)
 25 MR. O'BRIEN:

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1 Q. I wonder if we could get an Undertaking to
 2 produce the account balance as of the end of
 3 Q2, I guess.
 4 MS. WILLIAMS:
 5 A. Sure.
 6 MR. O'BRIEN:
 7 Q. Okay, thanks.
 8 MS. GLYNN:
 9 Q. Noted on the record.
 10 MR. O'BRIEN:
 11 Q. Liberty recommended that Hydro re-examine
 12 its approach to balancing cost and
 13 reliability, and we talked a fair bit about
 14 that. I wondering if there's any plans -
 15 apart from, I guess, the filing of a
 16 reliability focus sort of long term down the
 17 road reliability approach, are there any
 18 plans early on to have discussions with
 19 stakeholders before that happens?
 20 MS. WILLIAMS:
 21 A. Right, yeah. So I think the stakeholder
 22 consultation is to gather input on what does
 23 reliability costs look like to you. That is
 24 an ultimate that we are intending. That
 25 will not inform just the reliability review.

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1 We're hoping that that will inform this
 2 conversation as well, and any other pending
 3 conversations. I think we mentioned in our
 4 reply that, you know, we would certainly
 5 engage parties if there was another material
 6 change that we were undertaking that could
 7 result in increased costs, but it is
 8 intended that this set of information will
 9 be a springboard over which we could use to
 10 inform generally. So to us, it's serving
 11 dual purposes as to provide some insight
 12 into this as well as insight into the
 13 reliability review. Because as we will
 14 engage the various parties on the
 15 reliability review, we don't yet have the
 16 solution, so we have to kind of get some
 17 indicators in advance, what does reliability
 18 look like to you, at what cost can it come,
 19 and that will then inform some of the
 20 solutions that you might put forward.
 21 MR. O'BRIEN:
 22 Q. Okay, and in terms of providing better cost
 23 estimates into the future, I guess, annual
 24 and maybe quarterly, how do you intend to do
 25 that and how to track costs, what's the plan

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1 for letting customers know sort of what to
 2 expect?
 3 MS. WILLIAMS:
 4 A. I think we've suggested and, I guess, it
 5 would be up to the Board if it's acceptable
 6 to them, at least on a year to date basis.
 7 We've suggested we could include, say,
 8 specifically the supply cost balances
 9 quarterly, and if that's acceptable, then
 10 we'll certainly do that, and if the Board
 11 prefers it in a different format on a more
 12 frequent format, we could certainly adjust
 13 accordingly or a separate report. We
 14 thought that from an efficiency perspective,
 15 that would be an appropriate place to
 16 include those costs.
 17 MR. O'BRIEN:
 18 Q. And would you look at including information
 19 as to what's driving those costs or what
 20 drove those costs?
 21 MS. WILLIAMS:
 22 A. Absolutely, yeah.
 23 MR. O'BRIEN:
 24 Q. And based on, I guess - you've mentioned
 25 earlier that Liberty had provided some

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1 information in the appendix of that report
 2 as to how to sort of try to separate out
 3 costs. Do you intend to provide some cost
 4 benefit, or, I guess, cost that is
 5 attributed to each kind of driver in those
 6 reports?
 7 MS. WILLIAMS:
 8 A. We will certainly look at what they've
 9 suggested and they were quite clear. They
 10 said, listen, this is an option, don't feel
 11 you have to do this if you need to do
 12 something differently. So we will look at
 13 that, and then if it seems to make sense
 14 with what we are currently doing, then we
 15 can adopt that if it makes sense to us, and
 16 then as we present it to the Board, if it
 17 makes sense to the Board, this feels
 18 correct, then we can certainly use that one,
 19 and if it doesn't, then we'll look for
 20 alternative solutions.
 21 MR. O'BRIEN:
 22 Q. Okay. I just wanted to touch briefly, and
 23 we did this yesterday, on the gas turbine
 24 and diesel production for the test years. I
 25 wonder can we bring up Information 1, Page

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1 35. It's the Schedule 3-V, I think. We
 2 just had a quick look at this yesterday. In
 3 terms of the island interconnected system
 4 and gas turbine diesel production, the
 5 fourth line there, the actual production in
 6 gigawatt hours was 56 for 2017, and the test
 7 year for 2018 is 41.1, and 2019 is 41.1.
 8 For 2018 now, do you have a handle on what
 9 the actual production is to date?
 10 MS. WILLIAMS:
 11 A. I think it's around 46.
 12 MR. O'BRIEN:
 13 Q. Around 46, and where do you expect it to be
 14 by the end of the year?
 15 MS. WILLIAMS:
 16 A. Low 50s to mid 50s.
 17 MR. O'BRIEN:
 18 Q. Okay. For 2019, do you expect it to change?
 19 MS. WILLIAMS:
 20 A. Yes, and some of this will be updated in the
 21 evidence that's going to get filed this
 22 week. I believe that number is just under
 23 30 for 2019 in the new evidence.
 24 MR. O'BRIEN:
 25 Q. Yeah, I would expect that to go down.

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1 MS. WILLIAMS:
 2 A. Yeah.
 3 MR. O'BRIEN:
 4 Q. Okay, all right. Now that 2018 and 2019
 5 test year at 41.1, that doesn't take into
 6 account any reduction of production due to
 7 TL 267, does it?
 8 MS. WILLIAMS:
 9 A. No. Again I think I mentioned earlier, it
 10 wasn't really forecasted in, the forecast of
 11 TL 267 impact.
 12 MR. O'BRIEN:
 13 Q. It's difficult to do that, break that up.
 14 MS. WILLIAMS:
 15 A. Yes.
 16 MR. O'BRIEN:
 17 Q. Okay, the last topic I had, I was going to
 18 ask you, Mr. Gardiner, about just the
 19 capital program and capital expenditures,
 20 that sort of thing.
 21 MR. GARDINER:
 22 A. Okay.
 23 MR. O'BRIEN:
 24 Q. I wonder if we could bring up 3.42 of the
 25 evidence, page 3.42, and lines 11 to 15

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1 there. So Hydro was forecasting in 2017 to
 2 spend approximately 370 million, including
 3 over 167 on the transmission infrastructure.
 4 Were the actuals around that, do you know?
 5 MR. GARDINER:
 6 A. I believe so.
 7 MR. O'BRIEN:
 8 Q. Yeah, okay.
 9 MR. GARDINER:
 10 A. I know that – yeah, I believe so. That's
 11 subject to check.
 12 MR. O'BRIEN:
 13 Q. And in terms of capital expenditures and
 14 carryovers -
 15 MR. GARDINER:
 16 A. Yes.
 17 MR. O'BRIEN:
 18 Q. Over the last – in the last GRA, there was
 19 some concern raised by Newfoundland Power
 20 about carryovers and a variance between
 21 budget and actual expenditures.
 22 MR. GARDINER:
 23 A. Yes.
 24 MR. O'BRIEN:
 25 Q. And there's a fair – from 2015 to 2016, the

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1 evidence shows there's sort of a 59 percent
 2 variance in 2015, 41 percent in 2016, but it
 3 was right back down to, I think, .1 in 2017.
 4 MR. GARDINER:
 5 A. 2017, correct.
 6 MR. O'BRIEN:
 7 Q. And I'm assuming that's from bringing
 8 forward the TL267?
 9 MR. GARDINER:
 10 A. Correct. If we could bring up -
 11 MR. O'BRIEN:
 12 Q. And sure, if you want to -
 13 MR. GARDINER:
 14 A. - page 106, I believe, of the - it would be
 15 page 106 of the Information 1, I believe, is
 16 it? Page 52.
 17 MR. O'BRIEN:
 18 Q. Page 52, you got it.
 19 MR. GARDINER:
 20 A. Yeah.
 21 MR. O'BRIEN:
 22 Q. Okay.
 23 MR. GARDINER:
 24 A. I believe those are the references that you
 25 talked about with Mr. Haynes.

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1 MR. O'BRIEN:
 2 Q. Yeah.
 3 MR. GARDINER:
 4 A. I think it's 106 in the document, page 52 of
 5 the Variance Report maybe.
 6 MR. O'BRIEN:
 7 Q. Yeah, just bring up page -
 8 MR. GARDINER:
 9 A. December 31st, 2017.
 10 MS. MASSIE:
 11 Q. Sorry, can you repeat what you're looking
 12 for?
 13 MR. GARDINER:
 14 A. It's the -
 15 MR. O'BRIEN:
 16 Q. It's the attached capital expenditure. So,
 17 there's an attachment to this document, I
 18 think.
 19 MR. GARDINER:
 20 A. Yes.
 21 MR. O'BRIEN:
 22 Q. So, Information 1, but there's also an
 23 attachment to that.
 24 MR. GARDINER:
 25 A. Yes.

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1 MR. O'BRIEN:
 2 Q. There you go.
 3 MR. GARDINER:
 4 A. Yes.
 5 MR. O'BRIEN:
 6 Q. Yeah, so it's page 52 of that document.
 7 MR. GARDINER:
 8 A. Actually, it's page 106 in the document page
 9 52 in the report.
 10 MR. O'BRIEN:
 11 Q. Yeah, there's a summary, I think, there.
 12 MR. GARDINER:
 13 A. There is.
 14 MR. O'BRIEN:
 15 Q. Here we go.
 16 MR. GARDINER:
 17 A. Thank you.
 18 MR. O'BRIEN:
 19 Q. Okay. Yeah, so we see the variances year
 20 over year and there's significant variances
 21 there in '15 and '16 and even '13 and '14.
 22 MR. GARDINER:
 23 A. Yeah.
 24 MR. O'BRIEN:
 25 Q. Normally, I guess you'd agree with me, that

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1 anything over ten percent is something you'd
 2 want to take a good look at?
 3 MR. GARDINER:
 4 A. Absolutely. Our targets, our capital metric
 5 target is a ten percent variance.
 6 MR. O'BRIEN:
 7 Q. Yeah.
 8 MR. GARDINER:
 9 A. That's correct. And we did look at that and
 10 I mean, I can certainly speak to '15, '16
 11 and '17.
 12 MR. O'BRIEN:
 13 Q. If you can, please.
 14 MR. GARDINER:
 15 A. I would, yeah. If you could bring up in
 16 Exhibit 6, page 18 in Table 1, I'm going to
 17 refer to the Lab West project that was
 18 approved and perhaps it would be efficient
 19 if we - in the table, it shows 163 million
 20 dollar variance and the variance report is
 21 41.
 22 MR. O'BRIEN:
 23 Q. So, there's a big difference in that one.
 24 MR. GARDINER:
 25 A. Okay. Page - probably page 32. Variance

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1 41. Variance 41, I think you went – maybe
 2 went by. No, page -
 3 MR. O'BRIEN:
 4 Q. There you go. That's it. 2015 variance
 5 there.
 6 MR. GARDINER:
 7 A. Okay. That's the 2015 variance. But if you
 8 look at – I'm looking for the variance
 9 itself for Lab West. It should be on page
 10 32 of variance No. 41. Caryn, if you just
 11 go up, I believe. Just go down. Keep
 12 going. There you go. So there, the Lab
 13 West 2014 construction was a variance of 162
 14 and that was due to the suspension of the
 15 work.
 16 MR. O'BRIEN:
 17 Q. Right.
 18 MR. GARDINER:
 19 A. For Lab West. So, if we go back to the 59
 20 percent variance, if we were to take the 59
 21 – that 163 million dollars out of the
 22 budget.
 23 MR. O'BRIEN:
 24 Q. Yeah.
 25 MR. GARDINER:

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1 A. Because we weren't going to do the work
 2 until we had word from Alderon to move on in
 3 terms of financing, that would put our
 4 variance at minus – or at 15.9 percent
 5 actually.
 6 MR. O'BRIEN:
 7 Q. Okay.
 8 MR. GARDINER:
 9 A. So, the other thing that was going on – and
 10 that's also affecting 2016 too, Mr. O'Brien.
 11 MR. O'BRIEN:
 12 Q. Is it? Okay.
 13 MR. GARDINER:
 14 A. We can go to that variance as well in 2016.
 15 But also, what was happening is the – as you
 16 mentioned, in 2016, we did have TL267 that
 17 was ongoing and we did change the cash flow
 18 quite a bit in that project as well. So, in
 19 – if you go to page – just subject to check,
 20 if you like, there's a 19 million dollar
 21 carryover that we brought forward as well
 22 into '16.
 23 MR. O'BRIEN:
 24 Q. Okay.
 25 MR. GARDINER:

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1 A. So, if you look at that -
 2 MR. O'BRIEN:
 3 Q. Some of it's in '16 and some of it's in '17?
 4 MR. GARDINER:
 5 A. Right. So, if you take that variance, if
 6 you brought that forward, something that
 7 wasn't planned for, our variance would be
 8 less than ten percent, just based on those
 9 two movements of those monies.
 10 MR. O'BRIEN:
 11 Q. Were anything – were any items moved ahead
 12 like to 2018?
 13 MR. GARDINER:
 14 A. Not in 2015 or '16.
 15 MR. O'BRIEN:
 16 Q. Okay. All right. And 2017?
 17 MR. GARDINER:
 18 A. In 2017, there were.
 19 MR. O'BRIEN:
 20 Q. Yeah.
 21 MR. GARDINER:
 22 A. There were a number – and we can talk about
 23 – if we just follow through, if you look -
 24 MR. O'BRIEN:
 25 Q. I think there was 38 million or something.

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1 MR. GARDINER:
 2 A. That was carried back, yes, that's correct.
 3 MR. O'BRIEN:
 4 Q. Yeah.
 5 MR. GARDINER:
 6 A. If you look at 2016, just to tell the story,
 7 we had a minus 41 percent. It's a bit of an
 8 improvement, but still nothing to brag
 9 about.
 10 MR. O'BRIEN:
 11 Q. No.
 12 MR. GARDINER:
 13 A. If you look at the variance again, it's the
 14 same variance actually for Lab West. There
 15 was 128 million dollars that year that was
 16 on our books as a budget that we carried and
 17 it's been reported in the total budget for
 18 2016. But if you take that money out -
 19 MR. O'BRIEN:
 20 Q. Yeah.
 21 MR. GARDINER:
 22 A. - and go to what our budget would have been
 23 without Lab West, it would be – once again,
 24 it would be about eight percent of the
 25 variance.

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1 MR. O'BRIEN:
 2 Q. So, you'd be within your ten percent in
 3 2016?
 4 MR. GARDINER:
 5 A. We would be within our ten percent, yeah,
 6 which is what our target is, as you say.
 7 MR. O'BRIEN:
 8 Q. Yeah, and with the TL267 coming in in 2017,
 9 a bit early from 2018, that creates a bit of
 10 an anomaly though in your -
 11 MR. GARDINER:
 12 A. It does.
 13 MR. O'BRIEN:
 14 Q. - in your 2018 year.
 15 MR. GARDINER:
 16 A. Absolutely.
 17 MR. O'BRIEN:
 18 Q. Sorry, 2017 year. Is that fair?
 19 MR. GARDINER:
 20 A. That's correct. So, as you mentioned
 21 previously and indeed what's up on the
 22 screen there now, it necessitated moving 38
 23 million dollars back.
 24 MR. O'BRIEN:
 25 Q. Right.

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1 MR. GARDINER:
 2 A. So, we accelerated the in-service date.
 3 Originally, we did put it in service on
 4 December 6th, 2017, which was good, but
 5 however, if you just read down – if you just
 6 move down a little bit, please. Okay. The
 7 largest contributors in the under spend in
 8 '17 were from a number of projects. And if
 9 you look at variance 28, variance 29 and
 10 variance 38, they were three variances that
 11 we consciously moved forward because of the
 12 work that we had to do. For example, in the
 13 terminal station refurbishment, we deferred.
 14 We looked at it. We did a de-risk and some
 15 of the terminal station refurbishment that
 16 we were doing in Sunnyside, as well as Bay
 17 D'Espoir and in Western Avalon, we deferred
 18 for two reasons. One is that we had this
 19 work that we had not planned on doing and
 20 the other one was around risk. As we've
 21 talked about, the TL267 line brought a third
 22 line in from the bay. So, we would have to
 23 take the other two lines, 202 and 206, out
 24 to do the work in Bay D'Espoir, as well in
 25 Sunnyside. So, we looked at it. We felt –

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1 we talked to System Operation as to what
 2 would the best thing to do. It was good
 3 because we wanted to take the resources to
 4 make sure we got 267 done, but also from an
 5 operations point of view, we were able to do
 6 that work and we'll be doing that work this
 7 year and be able to take TL202 or TL206 out
 8 and still have the benefit of having the two
 9 circuits that come in from Bay D'Espoir.
 10 So, it de-risks the work somewhat.
 11 MR. O'BRIEN:
 12 Q. Right.
 13 MR. GARDINER:
 14 A. So, if you take those ones and the other two
 15 that were – two major ones was the first
 16 one, variance 12. Just for clarity, the
 17 projects that impacted to the acceleration
 18 of 267 were those three and there was a
 19 couple of others.
 20 MR. O'BRIEN:
 21 Q. Couple others down there.
 22 MR. GARDINER:
 23 A. There was some fire protection in Bay
 24 D'Espoir and there was some anchors that we
 25 were planning to do on 202 and 206.

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1 MR. O'BRIEN:
 2 Q. Yeah.
 3 MR. GARDINER:
 4 A. And if you add those all up, that's a 17
 5 million dollar shift -
 6 MR. O'BRIEN:
 7 Q. Yeah.
 8 (12:15 p.m.)
 9 MR. GARDINER:
 10 A. - that we made consciously to do that. The
 11 other projects that are there, variance 12,
 12 site facilities, that's a new site facility
 13 that we're putting in Bay D'Espoir and that
 14 was a three million dollar carryover, and
 15 what happened there was quite often with the
 16 material delivery – this was a three-year
 17 project. The material was supposed to be
 18 delivered in November. However, there was
 19 some delays and various things and we didn't
 20 get the material until January/February of
 21 this year.
 22 MR. O'BRIEN:
 23 Q. Right.
 24 MR. GARDINER:
 25 A. Now, that project will still be completed on

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1 time and it will be on budget. That's what
 2 I've been told and that's what we've been
 3 tracking to. The other variance that we did
 4 mention there is 65 and Ms. Williams talked
 5 about the work that we were doing around the
 6 penstock and then, when we did the work, we
 7 put a supplemental into the Board for nine
 8 million dollars and that, the basis for that
 9 supplemental to do the penstock was based on
 10 the work that we saw that we did in penstock
 11 one previously in September.
 12 MR. O'BRIEN:
 13 Q. Um-hm.
 14 MR. GARDINER:
 15 A. So, we came up with a – we didn't know what
 16 we were going to find, so our best estimate
 17 was that we would look at it based on what
 18 happened in penstock one, and when we got
 19 into penstock two, to our good fortune, is
 20 that there was a lot of welding
 21 refurbishment that we didn't have to do.
 22 MR. O'BRIEN:
 23 Q. Okay.
 24 MR. GARDINER:
 25 A. We did over 2,000 feet in penstock one and

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1 we did about 1400 feet in penstock two. So,
 2 that resulted in a savings or a non-spend of
 3 about 5.5 million dollars. So, if you do
 4 the math on that, if you take the projects
 5 that we – because we did the math. If you
 6 take the projects -
 7 MR. O'BRIEN:
 8 Q. I expected you would have, Mr. Gardiner.
 9 MR. GARDINER:
 10 A. Yeah. If you did the projects based on the
 11 movement of TL267, it would give us a
 12 variance of 13 percent.
 13 MR. O'BRIEN:
 14 Q. Yeah.
 15 MR. GARDINER:
 16 A. And if you take the other two major projects
 17 out, we would be at seven percent, less than
 18 ten, seven percent.
 19 MR. O'BRIEN:
 20 Q. Okay.
 21 MR. GARDINER:
 22 A. And that – so the 38 million dollars came
 23 back from '18 back to '17.
 24 MR. O'BRIEN:
 25 Q. Right.

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1 MR. GARDINER:
 2 A. And to your point, that would have -
 3 MR. O'BRIEN:
 4 Q. Some move -
 5 MR. GARDINER:
 6 A. Yeah.
 7 MR. O'BRIEN:
 8 Q. Be a bit of an anomaly because some moved
 9 forward too?
 10 MR. GARDINER:
 11 A. Yes, right, and like I said, those were
 12 consciously moved.
 13 MR. O'BRIEN:
 14 Q. Yeah.
 15 MR. GARDINER:
 16 A. For two reasons. One was the main reason I
 17 believe is to de-risk the work.
 18 MR. O'BRIEN:
 19 Q. Yeah.
 20 MR. GARDINER:
 21 A. We didn't want to be working on a third
 22 circuit that was coming in and being in Bay
 23 D'Espoir and Western Avalon doing work and
 24 then taking out our primary station of
 25 Sunnyside with the other two lines that are

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1 coming in there. For the sake of one year,
 2 we felt that that was the right thing to do
 3 from a reliability point of view, and also,
 4 you know, there's a number of resources that
 5 we wanted to – as I said yesterday about
 6 working on our own, having our own people
 7 work on our work, and I felt that that would
 8 give us the ability then to take some of
 9 these resources and put them on 267 and then
 10 they can do the work on the other work this
 11 year.
 12 MR. O'BRIEN:
 13 Q. Right.
 14 MR. GARDINER:
 15 A. So, that's the analysis that we did.
 16 MR. O'BRIEN:
 17 Q. Okay. So, from an overall picture then, I
 18 gather from the 2015 and 2016, there's a
 19 huge – there's a reason for the huge
 20 difference?
 21 MR. GARDINER:
 22 A. Yes.
 23 MR. O'BRIEN:
 24 Q. Or huge variance, and it's associated really
 25 with the one project that had to be -

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1 MR. GARDINER:
 2 A. Well, really three projects in terms of –
 3 when you talk about the Lab – the non-
 4 project, Lab West.
 5 MR. O'BRIEN:
 6 Q. The non-one, yes.
 7 MR. GARDINER:
 8 A. Right. The 267.
 9 MR. O'BRIEN:
 10 Q. Yeah.
 11 MR. GARDINER:
 12 A. And then also TL266 which was the other –
 13 the sister line that we're building in from
 14 Soldier's Pond, we did take resources from
 15 there and put them on TL267 to make sure
 16 that we captured the – make sure we made the
 17 date, the 2017 date.
 18 MR. O'BRIEN:
 19 Q. So, when we look at sort of the variance
 20 over time -
 21 MR. GARDINER:
 22 A. Yeah.
 23 MR. O'BRIEN:
 24 Q. - and we've got sort of – we've got capital
 25 budget and expenditures here in Table 17.

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1 So, apart from the one year 2011 where it
 2 was under the ten percent, every year up to
 3 2015, it was over ten and the 2015 and '16
 4 with a big contribution from the non-
 5 project, I guess, I can understand that
 6 affecting those two figures. I'm just
 7 wondering, so going forward, with your
 8 comment earlier about ten percent being -
 9 MR. GARDINER:
 10 A. It is our target, that's correct.
 11 MR. O'BRIEN:
 12 Q. - your target, have you made a conscious
 13 effort, say since the last GRA, to focus on
 14 keeping that as your target?
 15 MR. GARDINER:
 16 A. Yes, we have.
 17 MR. O'BRIEN:
 18 Q. Have you made any changes with your
 19 department?
 20 MR. GARDINER:
 21 A. Yes, we have.
 22 MR. O'BRIEN:
 23 Q. Can you tell us about that?
 24 MR. GARDINER:
 25 A. I will, yes.

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1 MR. O'BRIEN:
 2 Q. Yeah.
 3 MR. GARDINER:
 4 A. First of all, we have a more robust project
 5 execution group that we started. They're
 6 dedicated to carrying out the work. So,
 7 that's from a project execution point of
 8 view. But also, one of the things that
 9 we've done in our estimating, to the get the
 10 estimates better going forward, is that we
 11 have increased front-end engineering that we
 12 do. We require site visits by our team.
 13 MR. O'BRIEN:
 14 Q. Okay.
 15 MR. GARDINER:
 16 A. And we talked about travel yesterday, about
 17 being cut or whatever. I mean, that's part
 18 of it, but we were able to manage it and you
 19 coordinate with the teams that are out in
 20 operations. We also keep now, in the last
 21 two years, lessons learned database.
 22 MR. O'BRIEN:
 23 Q. Okay.
 24 MR. GARDINER:
 25 A. So, every time we complete a project, the

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1 project team gets together with the
 2 estimators and the engineers and they
 3 discuss what went right and what went wrong
 4 and there's a report that comes out of that
 5 and we take those lessons learned and we
 6 move them forward.
 7 MR. O'BRIEN:
 8 Q. And is that something you just started sort
 9 of in the last couple of years?
 10 MR. GARDINER:
 11 A. It's something, I guess, that was done, Mr.
 12 O'Brien, on an ad-hoc basis.
 13 MR. O'BRIEN:
 14 Q. Okay.
 15 MR. GARDINER:
 16 A. And some project managers would do it. Some
 17 discipline leads would do it. But, since
 18 I've been there now, and you know, this is a
 19 – there's an electronic database. It's on
 20 the Share Point and we – it's mandatory now.
 21 It has to be signed off by the project
 22 manager and part of the estimate template
 23 that we use now is that you have to review
 24 that. You have to show – the estimator has
 25 to show that he has reviewed or she, in a

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<p>1 lot of cases, has reviewed the previous work 2 that was done, particularly if it's similar 3 work, you know. The other thing is that we 4 have some programs now that we put in for – 5 we talked about the terminal station 6 refurbishment, modernization, so similar 7 work. So, we're packaging it up and we're 8 learning and we're going forward looking at 9 multi-year projects as well and delivery of 10 materials. And the other thing that we do – 11 and as I say, some of these things, we were 12 doing, but probably weren't doing as – in 13 every job – is that we do require, as part 14 of our estimating, we do look for actual 15 prices and we just don't use store prices. 16 Sometimes what would happen is we would use 17 our store prices that we have, but yet, when 18 you have a large quantity, you won't be able 19 to take it out of our storage. You have to 20 go to tender and sometimes there's 21 fluctuations. 22 MR. O'BRIEN: 23 Q. In your price. 24 MR. GARDINER: 25 A. In that, right. So, those are some of the</p>	<p>1 panel. 2 MS. WILLIAMS: 3 A. Good afternoon. 4 MR. GARDINER: 5 A. Good afternoon. 6 MR. FITZGERALD: 7 Q. Appreciate your stamina. 8 MR. LEBLANC: 9 A. Thank you. 10 MR. FITZGERALD: 11 Q. Mr. O'Brien was taking you through the 12 completion of the TL267. 13 MR. GARDINER: 14 A. Yes. 15 MR. FITZGERALD: 16 Q. And you were talking about the capital 17 costs, but the O&M in relation to that going 18 forward, are they significant? Do we have 19 that on the record as to - 20 MR. GARDINER: 21 A. No, I don't see it as being significant. I 22 mean, it's 188 kilometres of line. We have, 23 I think, 2600 kilometres of transmission 24 line right now. It's a standard design, 230 25 design. So, it's 230kV transmission line</p>
<p>Page 190</p> <p>1 things that we've done in our estimating so 2 that we – you know, had we not had these 3 anomalies, we would do – and our target is 4 ten percent, plus or minus ten percent. 5 MR. O'BRIEN: 6 Q. Okay. 7 MR. GARDINER: 8 A. And our completion rate, since I was looking 9 at those things, our completion rates in 10 each of those years, '15, '16 and '17, was 11 in excess of 90 percent. We put those 12 assets into service. 13 MR. O'BRIEN: 14 Q. Okay. 15 MR. GARDINER: 16 A. So, those are the types of things that we 17 were doing and that we'll be doing, we'll 18 continue to do. 19 MR. O'BRIEN: 20 Q. Okay. I don't have any further questions 21 for this panel. 22 CHAIR: 23 Q. Thank you, Mr. O'Brien. Mr. Fitzgerald. 24 MR. FITZGERALD: 25 Q. Thank you, Madam Chair. Good afternoon,</p>	<p>Page 192</p> <p>1 that our crews can work on, as well as the 2 equipment in the station. So, I'm not aware 3 that we've increased our O&M, Mr. 4 Fitzgerald. 5 MR. FITZGERALD: 6 Q. Is it part of the revenue – well, it's going 7 to be part of the revenue requirement next 8 year. 9 MR. GARDINER: 10 A. Yes. 11 MR. FITZGERALD: 12 Q. But, do we have that number, what it's going 13 to be? 14 MR. GARDINER: 15 A. I don't. 16 MR. FITZGERALD: 17 Q. Can we get that number? 18 MR. GARDINER: 19 A. I would think so. 20 MR. FITZGERALD: 21 Q. So, an undertaking for - 22 MR. GARDINER: 23 A. I know what the final costs will be, but I'm 24 not sure if that answers your question. 25 It's 294 million dollars with the budget and</p>

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1 we plan to be – right now, we’re tracking to

2 that number. So, is that – now, the revenue

3 requirement may be different. I’m not able

4 to speak to that.

5 MR. FITZGERALD:

6 Q. Yeah, I was referring though to the O&M

7 costs.

8 MR. GARDINER:

9 A. Oh, the O&M costs, okay, sorry.

10 MR. LEBLANC:

11 A. Again, the O&M for 267 would not be

12 separated out. It would be lumped in with

13 the O&M for all our transmission and

14 distribution assets.

15 MR. GARDINER:

16 A. Oh, sorry.

17 MR. FITZGERALD:

18 Q. Okay.

19 MR. YOUNG:

20 Q. So, I’m assuming there’s no undertaking?

21 MR. FITZGERALD:

22 Q. No.

23 MR. YOUNG:

24 Q. Okay.

25 MR. GARDINER:

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1 A. Okay. Sorry, I didn’t understand your

2 question, but yes, right. I mean, one thing

3 that would happen, like if you were flying

4 that line, there’s two lines in that

5 corridor now. So, the person would be

6 flying that line; he would look at the three

7 lines versus the two lines.

8 MR. FITZGERALD:

9 Q. Understand. Just want to turn now to the

10 LIL and the LTA and because we were happy to

11 hear this morning that for the 2018 cost has

12 now been reduced to eight million dollars.

13 MR. LEBLANC:

14 A. That’s correct.

15 MR. FITZGERALD:

16 Q. And I guess that’s because of the delay in

17 it coming into service.

18 MR. LEBLANC:

19 A. Correct.

20 MR. FITZGERALD:

21 Q. But nevertheless, it’s a savings.

22 MR. LEBLANC:

23 A. And we’ll take it.

24 MR. FITZGERALD:

25 Q. Yeah, sure. And it’s – but it’s still 52.9

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1 million in 2019, correct?

2 MR. LEBLANC:

3 A. We did have a slight update. In doing part

4 of the due diligence with Nalcor, we found a

5 double counting of a few people and one item

6 to be – not counted, but shouldn’t have been

7 in there, so the revised number is 51.3

8 million. However, as I said this morning,

9 Nalcor are updating their 2019 budgets and

10 they expect to have that available by the

11 end of August.

12 MR. FITZGERALD:

13 Q. Okay. So, I guess the question we have –

14 and it’s come up before – is what

15 methodology does – is Hydro going to employ

16 to vet these costs? You know, you’ll be

17 presented with a bill.

18 MR. LEBLANC:

19 A. Yes.

20 MR. FITZGERALD:

21 Q. And I understood from Mr. Haynes, his

22 evidence, that there wouldn’t be resistance

23 per se, but there would be – they would be

24 challenged if they didn’t reflect least – or

25 you know, what appear reasonable. Is that

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1 just a general concept or is there – are you

2 prepared at this point to deal with the

3 amounts that are coming forward?

4 MR. LEBLANC:

5 A. Again, the amounts were presented to us. We

6 weren’t involved in their preparation,

7 Nalcor, and they developed from mid in-

8 house. They also hired a consultant to

9 assist them, TransGrid Solutions, TGS. And

10 again, they did, as I’ve been told, they’ve

11 done the due diligence. They’ve compared

12 the systems to other DC systems to come up

13 with the O&M amounts. And again, when these

14 budgets were prepared, it was still early

15 on. They didn’t have infrastructure in

16 place, but now, as I’ve been told by Nalcor

17 that a lot of the facilities are on the

18 ground, power is flowing through them. So,

19 they feel a bit more comfortable with it.

20 And so, they are taking an O&M review of

21 their costs and again, that will be

22 available by the end of August of this year.

23 MR. FITZGERALD:

24 Q. Right. But as I understood from Mr. Haynes,

25 and I won’t take you to his testimony – we

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1 can go there, but he said that, you know,
 2 “we’re accountable”. That is Hydro is
 3 accountable for these charges. And I
 4 believe he used the words “I don’t think
 5 that we could actually go back and refuse
 6 the amount that’s presented to Hydro.” Do
 7 you agree with that?
 8 MR. LEBLANC:
 9 A. Yeah, I think we are responsible for the
 10 costs.
 11 MR. FITZGERALD:
 12 Q. Okay. So, Hydro has no leverage whatsoever
 13 to oppose the costs?
 14 MR. LEBLANC:
 15 A. If we feel that the costs are unreasonable,
 16 we will object to the costs and ask for an
 17 explanation on why the costs are that level
 18 and ask for the background and how they came
 19 about it and they’ll have to show their due
 20 diligence and be subject to audit of those
 21 costs.
 22 MR. FITZGERALD:
 23 Q. Audit by whom?
 24 MR. LEBLANC:
 25 A. We would want to see their books and “okay,

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1 how did you come up with that? Why did you
 2 do that?” So, we are going to question them
 3 on the costs if we deem them unreasonable.
 4 MR. FITZGERALD:
 5 Q. Do you have the ultimate option to refuse to
 6 pay?
 7 MR. LEBLANC:
 8 A. I do not believe so.
 9 MR. FITZGERALD:
 10 Q. Okay. So, is there any private law remedy?
 11 Like if say a third party contractor came to
 12 you and gave you an unreasonable bill and
 13 say “no, we’re not paying that one”. Do
 14 you have the option – they’re your parent, I
 15 understand – to say “well, we’ll settle this
 16 somewhere else. We’re not going to pay
 17 this”? Has that been a consideration at all
 18 as a possible pushback?
 19 MR. LEBLANC:
 20 A. Okay. You mean outside my realm. That
 21 becomes to the legal applicability of that.
 22 MR. FITZGERALD:
 23 Q. Okay, so -
 24 MR. LEBLANC:
 25 A. I’d have to defer that.

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1 MR. FITZGERALD:
 2 Q. Okay, fair enough. So, right now, the
 3 remedy, if you will, for an overcharge, if
 4 there is one, in your estimation, is audit?
 5 MR. LEBLANC:
 6 A. Well, it may not be an overcharge, because I
 7 don’t think there would be an overcharge. I
 8 think if they do submit an invoice to us,
 9 that work was probably done. It’s – if we
 10 deem if that was warranted may be a better
 11 way of putting it, as opposed to an
 12 overcharge.
 13 MR. FITZGERALD:
 14 Q. Well, I guess, yeah, we’re using different
 15 language here, but from your experience as a
 16 system person, if a Nalcor contract is
 17 presented to you and you say “well, that
 18 could have been sourced different”, just
 19 from your own auditing in-house expertise,
 20 if you will, you would have – you would be
 21 able to do the audit yourself, I would
 22 think.
 23 (12:30 p.m.)
 24 MR. LEBLANC:
 25 A. Again, we are going to question them and

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1 we’ll – and I’ve been told that they will
 2 explain their charges and the rationale
 3 behind it. So, if we deem them in the
 4 future that they are unreasonable or they
 5 seem unreasonable to us, we will question
 6 them on it.
 7 MR. FITZGERALD:
 8 Q. Right, and not to belabour the point, but
 9 you can question them on it, but you have no
 10 ability to resist payment?
 11 MR. LEBLANC:
 12 A. I believe we have the obligation to pay.
 13 MR. FITZGERALD:
 14 Q. Okay. That’s, of course, if those charges
 15 are legally able to be recovered. That’s
 16 another issue. I won’t ask you about that.
 17 I just want to talk a little bit about the
 18 NLSO which is a new animal, to put it that
 19 way, it appears to me.
 20 MR. LEBLANC:
 21 A. It’s an extension of the existing Energy
 22 Control Center.
 23 MR. FITZGERALD:
 24 Q. Right. So, what we’re trying to understand,
 25 I guess, is is it an independent body of

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1 Hydro and/or Nalcor?
 2 MR. LEBLANC:
 3 A. It is a department of Hydro.
 4 MR. FITZGERALD:
 5 Q. It is a department of Hydro?
 6 MR. LEBLANC:
 7 A. Department, yeah.
 8 MR. FITZGERALD:
 9 Q. And is that the future of the NLSO? Is it
 10 going to stay that way?
 11 MR. LEBLANC:
 12 A. Yes, it is. Now, there are a bit more
 13 security around it. We have code of
 14 conduct. Their facility is within the Hydro
 15 building, a different security level, so not
 16 everyone has access to it unless they have
 17 to have access to it. So, it is a
 18 restricted area and the employees of the
 19 NLSO do have to sign a code of conduct, so
 20 there's certain information they can't
 21 release, even within Hydro.
 22 MR. FITZGERALD:
 23 Q. Okay. But Nalcor would have access, would
 24 they?
 25 MR. LEBLANC:

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1 A. No.
 2 MR. FITZGERALD:
 3 Q. No? Okay. But, I guess, it's – okay. So,
 4 the NLSO is a department of Hydro, which is
 5 a subsidiary of Nalcor?
 6 MR. LEBLANC:
 7 A. Correct.
 8 MR. FITZGERALD:
 9 Q. So, any information that the NLSO has would
 10 be able to be accessed by Nalcor?
 11 MR. LEBLANC:
 12 A. No.
 13 MR. FITZGERALD:
 14 Q. No?
 15 MR. LEBLANC:
 16 A. It depends what information it is. If it's
 17 sensitive information that could result in
 18 deemed giving a transmission customer or a
 19 marketer or an outside agency a competitive
 20 advantage over someone else, that
 21 information is restricted and will not be
 22 shared internally even with Nalcor.
 23 MR. FITZGERALD:
 24 Q. Okay.
 25 MR. LEBLANC:

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1 A. And the way we do disseminate that
 2 information, if it needs to be, there is
 3 open access same time information system, NO
 4 ASSIS, and that's the venue for
 5 disseminating that type of information and
 6 everyone has access to that and it's posted
 7 there and everyone gets access at the same
 8 time.
 9 MR. FITZGERALD:
 10 Q. Okay.
 11 MR. LEBLANC:
 12 A. Again, it's not giving them the information.
 13 It's not giving them the information in
 14 advance of others.
 15 MR. FITZGERALD:
 16 Q. Okay. So, the NLSO is a new entity at
 17 least, or a new department, and its role is
 18 going to be the long term planning, I guess,
 19 for the province's system. Is that one of
 20 the -
 21 MR. LEBLANC:
 22 A. They do the transmission planning for the
 23 system. Ms. Williams' department does the
 24 generation planning.
 25 MR. FITZGERALD:

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1 Q. Okay.
 2 MR. LEBLANC:
 3 A. And another entity outside of NLSO does the
 4 distribution planning.
 5 MR. FITZGERALD:
 6 Q. Okay. So, it's not independent per se from
 7 Hydro?
 8 MR. LEBLANC:
 9 A. In certain information it is independent
 10 from Hydro. It doesn't share all the
 11 information with Hydro because Hydro can get
 12 a competitive advantage if there was a fully
 13 active electricity market or for exports or
 14 imports. So, they can't show favouritism to
 15 Hydro itself. So, in that respect, they
 16 treat Hydro the same as they'd treat any
 17 other transmission customer. No better, no
 18 worse. Give them the information at the
 19 same time. They don't discriminate. They
 20 charge the same rates to Hydro as an outside
 21 entity who may want transmission service.
 22 So, in that respect, they do act
 23 independently of Hydro.
 24 MR. FITZGERALD:
 25 Q. Is that the long term? It's going to be -

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1 MR. LEBLANC:
 2 A. Yes, that's the long term model that is in
 3 place.
 4 MR. FITZGERALD:
 5 Q. Okay. So, if there is an outage on the
 6 system going forward, is it the NLSO who's
 7 responsible or is it Hydro's responsibility?
 8 MR. LEBLANC:
 9 A. Again, the outage, it's still Hydro that's
 10 responsible. If it's their transmission
 11 system, they have to initiate the repairs
 12 and they have to notify their customer and
 13 do the outage notification. So, that would
 14 remain a Hydro responsibility.
 15 MR. FITZGERALD:
 16 Q. Could you envision a conflict of a situation
 17 say where -- we have the Maritime Link now
 18 in service and Nalcor wants to sell power
 19 over that link and the NLSO, of course is --
 20 or should be more concerned, I would think,
 21 about reliability on the island. Would
 22 there ever be a conflict in the NLSO in a
 23 situation like that as to who's the boss,
 24 who gets priority?
 25 MR. LEBLANC:

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1 A. No. If Nalcor or any transmission customer,
 2 including Hydro, wanted to sell say to Nova
 3 Scotia over the Maritime Link, they'd have
 4 to put a request in to see if there is
 5 available transmission to do it. And the
 6 NLSO will review that request. They'll look
 7 at the current system conditions and if that
 8 request can be granted without reducing the
 9 reliability of the existing system, it will
 10 be granted. And the transmission is
 11 available.
 12 MR. FITZGERALD:
 13 Q. So that, I guess, again looking at the
 14 corporate structure, so the NLSO is still a
 15 department of a subsidiary of the parent who
 16 has made a call or who'd prefer a decision
 17 made one way or the other?
 18 MR. LEBLANC:
 19 A. Well, if it puts the system in jeopardy in
 20 this case, if this is what you're driving
 21 at, the request would be denied. It would
 22 only be approved if it does not have a
 23 detrimental effect on the reliability of the
 24 island system or the Newfoundland and
 25 Labrador system, and that there is available

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1 transmission to do it.
 2 MR. FITZGERALD:
 3 Q. Okay. And that call is being made by the
 4 management of the NLSO?
 5 MR. LEBLANC:
 6 A. Yes. Again, they do system studies. It may
 7 require load-flows, whatever analysis is
 8 needed to be done. If it's a short term,
 9 it's shorter-term event. If it's a long
 10 term request, a system impact studies will
 11 have to be performed to see if it is
 12 available or possible to grant that request.
 13 MR. FITZGERALD:
 14 Q. Would you allow though that there could be,
 15 in a situation of the closeness, that you
 16 know, there's almost an irresistible
 17 inference that, you know, one might favour
 18 one over another, you know?
 19 MR. LEBLANC:
 20 A. Again, it's a first-come-first-served with
 21 regard to transmission availability, so,
 22 whoever is first in the queue. All requests
 23 are time stamped when they're received, and
 24 they're dealt with in order. And again, the
 25 pricing the same for everybody, and everyone

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1 is treated equally, and no preference is
 2 given to anyone including Hydro or Nalcor
 3 affiliates.
 4 MR. FITZGERALD:
 5 Q. Yes. No, theoretically I agree. That
 6 sounds like a good system, but you know, the
 7 human nature being what it is, if one
 8 particular manager is making a decision that
 9 perhaps offends Nalcor management, you know,
 10 you have to wonder about the pressure on
 11 that particular individual or that
 12 management team as to making the right
 13 decision or making the political decision or
 14 making the survival decision.
 15 MR. LEBLANC:
 16 A. Anything is possible. You can also bribe a
 17 police officer if you're caught for
 18 speeding, but it's set up that there is no
 19 preference, preferential treatment, to
 20 Nalcor affiliates. Everyone is treated
 21 equally. It's on a first-come-first-served
 22 basis, and it's only approved if it does not
 23 have a detrimental effect to the system and
 24 the transmission is available.
 25 MR. FITZGERALD:

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1 Q. Okay. Do you think that would be any
 2 advantage at all to having an independent
 3 NLSO?
 4 MR. LEBLANC:
 5 A. Again, you—there's increased costs to do
 6 that because you then have to have your own
 7 IT department. You'd have to have your own
 8 HR department. You'd have to have your own
 9 payroll department or farm-outs. So, there
 10 are efficiencies with having it in house.
 11 And this model is used throughout North
 12 America. It's probably the prevalent method
 13 used and there are not issues, and there is
 14 also a complaint mechanism if someone feels
 15 that they've been unfairly treated.
 16 MR. FITZGERALD:
 17 Q. Okay, I was going to ask you that. In your
 18 experience then—so, I think when you
 19 indicated where you had been in the past,
 20 you were in New England as well or did I
 21 hear that correctly or was it Maine?
 22 MR. LEBLANC:
 23 A. I dealt with New England, but I did not work
 24 in New England. I worked in upstate New
 25 York and dealt with -

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1 MR. FITZGERALD:
 2 Q. Upstate New York it was. Okay, I misheard.
 3 And -
 4 MR. LEBLANC:
 5 A. Open access there.
 6 MR. FITZGERALD:
 7 Q. Right. And also, in PEI and New Brunswick I
 8 think?
 9 MR. LEBLANC:
 10 A. PEI and New Brunswick.
 11 MR. FITZGERALD:
 12 Q. And so -
 13 MR. LEBLANC:
 14 A. And a bit in Nova Scotia.
 15 MR. FITZGERALD:
 16 Q. And so, in all of those jurisdictions, it's
 17 the same set up? The -
 18 MR. LEBLANC:
 19 A. It's the same model, except initially when
 20 New Brunswick Power, they unbundled in the
 21 early 2000s and at that point the system
 22 operator became a separate entity
 23 completely. And after seven or eight years,
 24 they realized that the costs were
 25 prohibitive and they re-amalgamated and

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1 reintegrated the system operator within New
 2 Brunswick Power.
 3 MR. FITZGERALD:
 4 Q. Okay. I just want to talk a bit about the
 5 open access tariff, if you can educate me on
 6 this.
 7 MR. LEBLANC:
 8 A. Okay.
 9 MR. FITZGERALD:
 10 Q. First of all, I understand that by the Order
 11 in Council that the Board granted earlier
 12 this year, P Number 3, the Board has
 13 approved the tariff on an interim basis?
 14 MR. LEBLANC:
 15 A. That's correct.
 16 MR. FITZGERALD:
 17 Q. And can you—what is the rationale—firstly,
 18 you know, what criteria or why did you feel
 19 compelled, or Hydro, to be a member of this
 20 open access regime, if you will?
 21 MR. LEBLANC:
 22 A. Usually the way open access started in the
 23 United States and to make sure that—and they
 24 wanted deregulation in the system in the mid
 25 nineties. And the way they wanted to ensure

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1 that if one area went way, they wanted
 2 everyone—there was a reciprocity aspect to
 3 an open access tariff. So, if you want
 4 service through a system, you have to offer
 5 equal or superior, equivalent service in
 6 your system. And so, that way—and that's
 7 how it grew. And then, that also extended
 8 into the United States, and I think at the
 9 time there was three exporters, NB Power,
 10 Manitoba Hydro and BC Hydro. So, they
 11 signed the reciprocity agreements. So,
 12 then, when they developed their open access
 13 tariffs, they had to build reciprocity into
 14 it. So, then, once the neighbouring
 15 entities wanted to go in, like Nova Scotia,
 16 PEI, Quebec, they also had to get
 17 reciprocity. And now, we do have—so, if we
 18 want access through Nova Scotia, well they
 19 have a reciprocity clause in their tariff.
 20 If you use our tariff, you have to agree to
 21 reciprocity. And the same with Hydro
 22 Quebec. In future we may want to plan
 23 transactions, further transactions through
 24 Quebec or once we are open to the North
 25 American grid, there's a possibility that HQ

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1 could cry foul if we don't offer the
 2 equivalent open access service within
 3 Newfoundland and Labrador.
 4 MR. FITZGERALD:
 5 Q. Okay. So, there's no central registry if
 6 you will of these, of the document? This is
 7 jurisdiction to jurisdiction. In other
 8 words, you say to Nova Scotia, "Well, here's
 9 my certification."
 10 MR. LEBLANC:
 11 A. Yes.
 12 MR. FITZGERALD:
 13 Q. "I'm a member of this group."
 14 MR. LEBLANC:
 15 A. Yeah. Yeah, there is no open access police
 16 force. It's a complaint system, and if the
 17 complaint gets done, it gets lodged, and in
 18 Canada people who hear the complaints are
 19 usually the provincial regulators.
 20 (12:45 p.m.)
 21 MR. FITZGERALD:
 22 Q. Okay. So, just the way it would work then
 23 is if you're dealing with alliance in Nova
 24 Scotia, they have to be satisfied on a
 25 checklist or whatever that you're a member

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1 of—or not a member, whatever the wording is,
 2 that you have signed up?
 3 MR. LEBLANC:
 4 A. Yes. They expect reciprocity. And usually
 5 they don't always have a checklist because I
 6 don't want to say there's a form out there
 7 that's signed, but if they ever went to ask
 8 for the equivalent service in our
 9 jurisdiction, and it's not there, then
 10 they'd cry foul.
 11 MR. FITZGERALD:
 12 Q. Okay.
 13 MR. LEBLANC:
 14 A. Or they could cry foul. And the fear with
 15 Hydro Quebec as well, if they cry foul, and
 16 we do have transmission service through
 17 Quebec now from north to south, and if they
 18 cried foul, they could just suspend that
 19 transaction and then there would be lost
 20 opportunity for Nalcor.
 21 MR. FITZGERALD:
 22 Q. Right. So, the issue of the extent of the
 23 reciprocity, has that ever come up?
 24 MR. LEBLANC:
 25 A. No, it's says you have to offer a service on

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1 the same terms and conditions.
 2 MR. FITZGERALD:
 3 Q. As they are?
 4 MR. LEBLANC:
 5 A. As they are.
 6 MR. FITZGERALD:
 7 Q. As they are.
 8 MR. LEBLANC:
 9 A. Similar.
 10 MR. FITZGERALD:
 11 Q. Just the point I guess is that, you know,
 12 the Electrical Power Control Act, you know,
 13 restricts them selling directly, that is
 14 them, outside exporters or importers of
 15 power, or sellers of power, to--directly to
 16 Newfoundland Power for example?
 17 MR. LEBLANC:
 18 A. Yes, there are restrictions within the
 19 province.
 20 MR. FITZGERALD:
 21 Q. And do the other tariff holders or members,
 22 are they aware of those restrictions?
 23 MR. LEBLANC:
 24 A. Okay. Usually the reciprocity does not
 25 pertain to energy sales or energy markets.

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1 It's more on the open access of the
 2 transmission system itself. So, the
 3 eligibility of the transmission customer is
 4 not part of the reciprocity. That's more of
 5 an energy marketing function.
 6 MR. FITZGERALD:
 7 Q. So, if that's the case, it doesn't make any
 8 difference to the other marketer that there
 9 is a market, if you will, that they can sell
 10 to? That's not the point? It's –
 11 MR. LEBLANC:
 12 A. That is not part of the reciprocity aspect.
 13 MR. FITZGERALD:
 14 Q. Okay. Is the cost of the Maritime Link
 15 included in Nova Scotia's open access
 16 transmission tariff?
 17 MR. LEBLANC:
 18 A. It is not included in ours. I am not sure
 19 if it is or not. I know there was talk of
 20 it at one time. There was talk of not
 21 putting it in there. I could not say for
 22 certain whether it is or not, but it is—that
 23 would be up to Nova Scotia Power and the
 24 URB.
 25 MR. FITZGERALD:

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1 Q. So if you, now I say you, Hydro is required
 2 to pay the Nova Scotia open access
 3 transmission tariff if it imports power from
 4 New England, wouldn't the effect of that be
 5 paying twice if in fact it is not included—
 6 or sorry, if it is included?
 7 MR. LEBLANC:
 8 A. I have to—repeat the question?
 9 MR. FITZGERALD:
 10 Q. Do I have to?
 11 MR. LEBLANC:
 12 A. I just don't want to answer it wrong.
 13 MR. FITZGERALD:
 14 Q. If Hydro is required to pay the Nova Scotia
 15 open access transmission tariff if it
 16 imports power from New England, and the cost
 17 is already included in the Maritime Link, if
 18 we're already paying for that, are we paying
 19 twice?
 20 MR. LEBLANC:
 21 A. Okay, we are not paying twice because one
 22 thing with the Maritime Link I know all of
 23 the transmission access has been granted to
 24 Nalcor, who then have assigned it to them,
 25 so in effect they get, and the cost of that

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1 transmission is built into all the
 2 agreements, so there is no separate billing
 3 for them to use it, so when Hydro wants to
 4 import, and as Ms. Williams mentioned
 5 previously, NEM is our agent for doing that,
 6 so they would deliver the power to Bottom
 7 Brook, so on the Newfoundland side of the
 8 Maritime Link, so in that aspect we would
 9 not be paying twice.
 10 MS. WILLIAMS:
 11 A. There's an RFI, I think it's Consumer
 12 Advocate's 183 that answers that
 13 specifically.
 14 MR. FITZGERALD:
 15 Q. Okay, thank you. Just a few questions on
 16 the off-island power procurement process.
 17 How it originates, I think Ms. Williams
 18 indicated before need is identified and then
 19 the wheels start turning, if you will, as
 20 need is required, so you contact NEMs first,
 21 is that how it works?
 22 MS. WILLIAMS:
 23 A. There's several stages and I did some
 24 explanation of it yesterday but I'm not sure
 25 I did a great job. There's an immediate

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1 need that could develop, there's a need that
 2 would be, and we would witness it on a day
 3 ahead, and then there's also sort of a
 4 forward looking, we'd meet on a weekly
 5 basis, and a forward looking ahead where we
 6 might also identify an opportunity, so at
 7 any one of those times Hydro is watching the
 8 system and identifying a need, and then on
 9 the weekly meetings, we meet with Energy
 10 Marketing on a weekly basis and look at
 11 those opportunities in those meetings and so
 12 it's a bit more planned for than the ones
 13 that kind of crop up.
 14 MR. FITZGERALD:
 15 Q. So which department in Hydro is a liaison
 16 with NEMs?
 17 MS. WILLIAMS:
 18 A. The department is resource and production
 19 planning and it reports to me.
 20 MR. FITZGERALD:
 21 Q. And you've indicated this morning that, I
 22 think it was this morning, that there is no
 23 fee for this service that is being charged
 24 by NEMs?
 25 MS. WILLIAMS:

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1 A. Correct.
 2 MR. FITZGERALD:
 3 Q. So on the other end then, so NEMs, do you
 4 know what they do then? Once you put in
 5 your requisition, do you know how it works
 6 on the other end?
 7 MS. WILLIAMS:
 8 A. I never, you know, gone and sat down in the
 9 chair and specifically witnessed it, but
 10 they do go out and they would source, you
 11 know, available in the market, how they
 12 could get that through, how they could get
 13 us energy, you know, through any of the
 14 people that they have contacts with, and so,
 15 you know, do they source ten different
 16 opportunities, they would have their, I
 17 guess their experience in knowing what could
 18 be available at any time and the systems
 19 they use, I'm not a hundred percent sure,
 20 but they would pursue, you know, whatever
 21 opportunity they could provide to us and
 22 then come back and say here's the
 23 opportunity that we can present to you, does
 24 that meet, does that beat the price that
 25 you're able to generate at.

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1 MR. FITZGERALD:
 2 Q. Right, and how did this arrangement develop?
 3 It was just a natural thing or, you know,
 4 the Maritime Link is there now, NEMS seems
 5 to be, like, the person on the spot, but do
 6 you have the discretion to use other
 7 marketers?
 8 MS. WILLIAMS:
 9 A. We could, we don't really think—we didn't
 10 think that that quite made sense for us,
 11 there's also a couple of RFIs there, I think
 12 Consumer Advocate 54 and 184 would address
 13 some of that. If you look at how Energy
 14 Marketing developed, there was excess
 15 capacity in Labrador that Nalcor had the
 16 opportunity to sell and it started selling
 17 it in late 2000s, I believe, if I have the
 18 date wrong, and it was, I think, selling it
 19 directly to Hydro Quebec and when the term
 20 of that arrangement ended, I think the
 21 renegotiation terms were not acceptable to
 22 Nalcor and so they said, well, how can we
 23 now do this sale of energy, and they
 24 contracted it on a temporary basis to EMERA
 25 while they determined what the long term

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1 correct approach was and the correct
 2 approach would be to again try to maybe
 3 renegotiate something with Hydro Quebec,
 4 continue to contract out to EMERA or another
 5 person, or to take that in-house, and so
 6 through the course of working with EMERA,
 7 they decided it was appropriate for them to
 8 take that in-house, to take that work in-
 9 house and I believe it was a several year
 10 process of learning the business and then
 11 Energy Marketing, I believe it was 2015
 12 perhaps that they started doing it
 13 themselves, selling the excess energy, so
 14 they've been doing it for several years, you
 15 know, so for Hydro to decide to take that on
 16 themselves, we'd have to go through a very
 17 similar process of, you know, a number of
 18 years of experience and adding in, you know,
 19 twenty plus people to try to undertake
 20 similar work.
 21 MR. FITZGERALD:
 22 Q. I don't quite understand that, why wouldn't
 23 you be just—are there not energy marketers
 24 out there that, you know, are similar to
 25 NEM? You wouldn't have to develop your own

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1 department?
 2 MS. WILLIAMS:
 3 A. No, we could also contract out to somebody
 4 else, I think the reality is in the province
 5 right now we would then be competing with
 6 Nalcor because they are going to be selling
 7 excess Muskrat energy and so there's
 8 facilities that Hydro has first right on in
 9 the province and there's facilities that
 10 Nalcor, through the agreements that Mr.
 11 LeBlanc mentioned, has first right through,
 12 so we would end up competing with each other
 13 and if we went and got a separate energy
 14 marketer, so right now we're working with
 15 NEM to develop a way to optimize all of the
 16 assets and work together so then Energy
 17 Marketing wins and Hydro wins and customers
 18 win.
 19 MR. FITZGERALD:
 20 Q. So when I asked you earlier about whether
 21 you have any discretion, does that mean that
 22 you don't have any discretion, that is
 23 Hydro, to source out independent contractors
 24 because of this competition issue?
 25 MS. WILLIAMS:

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1 A. I don't know if it's necessarily connected.
 2 I think that it is the best solution for
 3 Hydro at this time to proceed as we are
 4 proceeding.
 5 MR. FITZGERALD:
 6 Q. That is with NEMS?
 7 MS. WILLIAMS:
 8 A. Correct.
 9 MR. FITZGERALD:
 10 Q. The purchases that you, or the procurement,
 11 I guess or purchases through NEMS, they're
 12 not reviewable by the Board per se, though,
 13 are they?
 14 MS. WILLIAMS:
 15 A. No, I think we are hoping to find an
 16 appropriate review process with the Board
 17 for purchases and I think in other
 18 jurisdictions the regulator does indeed
 19 review purchases on a reverse looking
 20 process, I believe in Nova Scotia they do
 21 review the purchases. I'm not exactly sure
 22 if it's in some form of an aggregate or if
 23 it's on a detail, every single transaction
 24 basis, that may not be helpful, or it might
 25 be, but we will work with the Board on what

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1 is an appropriate review mechanism to review
 2 the purchases.
 3 MR. FITZGERALD:
 4 Q. If you have Hydro purchase power from, you
 5 know, an entity other than NEMS, would the
 6 Board have direct review of the contracts
 7 then?
 8 MS. WILLIAMS:
 9 A. Yes, I believe the Board would have the
 10 jurisdiction, if they pleased, to review any
 11 purchases that we would make.
 12 MR. FITZGERALD:
 13 Q. With the alternate marketer?
 14 MS. WILLIAMS:
 15 A. Correct.
 16 MR. FITZGERALD:
 17 Q. So have you, has there been any direction
 18 from Nalcor that you must use NEM?
 19 MS. WILLIAMS:
 20 A. I don't know that there's direction from
 21 Nalcor you must use NEM, Hydro believes that
 22 this partnership with NEM is the right move
 23 forward. If we didn't feel it was the right
 24 move forward, we would have to have that
 25 conversation, but I really am convinced it's

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1 appropriate for Hydro to undertake this
 2 relationship.
 3 MR. FITZGERALD:
 4 Q. And sorry, in a nutshell why is it more
 5 appropriate?
 6 MS. WILLIAMS:
 7 A. As I just mentioned, you know, for some of
 8 the reasons we just talked about, is that I
 9 think we'd be in competition with each other
 10 if we didn't partner. We are talking about
 11 provincial assets and Nalcor is still a
 12 Crown corporation, as we are, we are all
 13 interested in doing the best thing for the
 14 Province. So, you know, us working together
 15 to optimize all of the assets that we have
 16 with the intention that both customers and
 17 the shareholder will benefit the most.
 18 MR. FITZGERALD:
 19 Q. Leaving aside the competition factor, that's
 20 not prohibited or is it?
 21 MS. WILLIAMS:
 22 A. Sorry, what's not prohibited?
 23 MR. FITZGERALD:
 24 Q. You're saying that the reason why it's
 25 preferable is because otherwise you'd be

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1 competing with Nalcor?
 2 MS. WILLIAMS:
 3 A. I haven't pursued if it's prohibited or not,
 4 because I believe it's the right course of
 5 action.
 6 MR. FITZGERALD:
 7 Q. Would you agree that from a consumer's
 8 perspective that the optic might be better
 9 if in fact there was a marketer other than
 10 NEMS?
 11 MS. WILLIAMS:
 12 A. I guess it's similar, it would be similar to
 13 if we're, you know, using Nalcor to do, say,
 14 some of the information services for us.
 15 You know, to me, it feels similar, you've
 16 got a group of people who are specialists
 17 and we are availing of a specialist to do
 18 work that we don't currently have the
 19 capability to do, and so I don't know that I
 20 agree that the optics, it would be better if
 21 you had an outside party, I mean, I think
 22 it's, if you had an affiliate party, it
 23 should be acting in your best interest as
 24 opposed to a third party would be more
 25 conflicted because they could have other

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1 customers that they might be also trying to
 2 satisfy and they would be more conflicted
 3 than if you had an affiliated party.
 4 MR. FITZGERALD:
 5 Q. Yeah, with all due respect to Nalcor though,
 6 I think you indicated they've just developed
 7 this expertise; ten years ago there was no
 8 such things of their expertise.
 9 MS. WILLIAMS:
 10 A. Correct.
 11 MR. FITZGERALD:
 12 Q. But I'm assuming ten years ago there would
 13 have been very experienced marketers.
 14 MS. WILLIAMS:
 15 A. Yes.
 16 MR. FITZGERALD:
 17 Q. I would think, you know, intuitively that
 18 there would be a body of knowledge out there
 19 that might be advantageous to tap into,
 20 rather than this "new kid on the block" if
 21 you will. So that's why I asked the
 22 question, I'm not quite sure why there's a
 23 lock with NEMS right now, other than you
 24 said the competition issue.
 25 MS. WILLIAMS:

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1 A. Right. I don't believe that I had suggested
 2 that NEM is the right choice because of
 3 their depth of experience, ten, twenty,
 4 thirty years of experience, it is just that
 5 it would be an affiliate and I think we're
 6 in this together with trying to make the
 7 right decisions for the Province, as opposed
 8 to a third party who could be making the
 9 best decisions from a, you know, from just a
 10 private company's perspective, they would be
 11 acting in their best interest.

12 MR. FITZGERALD:

13 Q. I guess one point, the Consumer's advantage,
 14 I guess, is that if it was purchased from
 15 somewhere else, then the procurement
 16 contracts could be reviewed by this Board?

17 MS. WILLIAMS:

18 A. And again, how we, the purchases that do
 19 occur will be put before the Board for
 20 review and certainly for the parties to
 21 review on a confidential basis, as would be
 22 required depending on how the information
 23 gets presented.

24 MR. FITZGERALD:

25 Q. We understand that obviously there's power

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1 coming over the Maritime Link right now and
 2 it's being purchased from Nova Scotia and do
 3 we know whether that power is being
 4 generated by coal plants?

5 MS. WILLIAMS:

6 A. We would not have any knowledge about where
 7 any, the source of the energy.

8 MR. FITZGERALD:

9 Q. And do I take it then that that's not a
 10 criteria as to why you would purchase one
 11 from the other, it doesn't matter to you?

12 MS. WILLIAMS:

13 A. No, we are looking for the least cost.

14 MR. FITZGERALD:

15 Q. So environmental aside, environmental is not
 16 a factor that you look into when it comes to
 17 least cost?

18 (1:00 p.m.)

19 MS. WILLIAMS:

20 A. If there is an environmental adder, if
 21 that's the correct word to use, on the
 22 price, it would be certainly factored in
 23 there with the ultimate delivered price, but
 24 when we are looking to purchase, if we could
 25 purchase something at five cents and it was

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1 coal, and we could purchase something at
 2 eight cents and it was generated a hydraulic
 3 facility, we would be purchasing the five
 4 cent energy.

5 MR. FITZGERALD:

6 Q. Yeah, I guess we're saying the same thing, I
 7 guess, it doesn't, environmental emissions
 8 or the cost of environment emissions in
 9 another jurisdiction are not something that
 10 Hydro has to concern itself with?

11 MS. WILLIAMS:

12 A. We are not concerning—we are only concerning
 13 ourselves with environmental restrictions in
 14 our own jurisdiction.

15 MR. FITZGERALD:

16 Q. One of the questions that, this may have
 17 been in an RFI, but it's common knowledge
 18 that Hydro's alternative to off-island
 19 purchases is Holyrood and they all want 90
 20 percent that Holyrood costs, so if that's
 21 the number to beat, you know, what does NEMS
 22 offer, like it doesn't sound like a very
 23 high bar, if you will.

24 MS. WILLIAMS:

25 A. I'm sorry?

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1 MR. FITZGERALD:

2 Q. Everyone knows that the displacement cost is
 3 90 percent, all they have to get is 90
 4 percent of the Holyrood, the cost of running
 5 Holyrood.

6 MS. WILLIAMS:

7 A. Sorry, that was in the evidence from what
 8 we've estimated and included in evidence.

9 MR. FITZGERALD:

10 Q. Right. So that's not a solid figure then.

11 MS. WILLIAMS:

12 A. That is an estimate, if we found something
 13 that was, say, 9 percent, you know, we
 14 probably would think that, you know, that's
 15 not close enough, we want to make sure that
 16 at a minimum we're doing our best to plan
 17 for that minimal amount of savings, but we
 18 are asking NEM to get us, you know, the best
 19 deal that they can get, as opposed to just
 20 that 90 percent deal.

21 MR. FITZGERALD:

22 Q. Has there been any talk or any suggestion
 23 that the current arrangement where they're
 24 not charging for this service may change?

25 MS. WILLIAMS:

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1 A. Yes, I expect it will change throughout the
 2 course of this year, is that we are working
 3 with Energy Marketing and Nalcor to develop
 4 a, I think Mr. Haynes might have testified
 5 to it probably early in his testimony about
 6 how we're going to work together for all the
 7 assets once we start, you know, integrating
 8 because if there's additional capacity or
 9 energy in Labrador that can be sold and if
 10 how you generate your energy throughout the
 11 course of a year can result in better
 12 pricing by using ponding, like I mentioned
 13 earlier, we're going to work together to get
 14 as much net financial benefit as possible
 15 and find a way to split the net benefit of
 16 that, and the intention is to come up with
 17 what that looks like and obviously through
 18 the course of that and that's the real long
 19 term how NEM will function and provide
 20 support to Hydro, so the intention is that
 21 how we work that out, we will present that
 22 to the Board for their approval this fall.
 23 MR. FITZGERALD:
 24 Q. Is it contemplated that it's going to be
 25 performance based or are you just going to

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1 get a bill from NEMS on their efforts?
 2 MS. WILLIAMS:
 3 A. No, I don't know if it will be, exactly if
 4 it was going to be performance based, you
 5 know, ultimately we're going to get a set of
 6 revenue and exactly how we're going to work
 7 together is still going to be subject to
 8 technical restrictions, if I can use that
 9 word, that Hydro would impose, so we would
 10 always still be able to be in control of our
 11 assets in the same way that I mentioned
 12 we're in control now of deciding to veto or
 13 approve a purchase over the Maritime Link
 14 and we decide how we dispatch our
 15 generation. But, you know, exactly how we
 16 split that benefit will be determined and
 17 then presented to the Board for their review
 18 and approval.
 19 MR. FITZGERALD:
 20 Q. Okay, and again when you say "dispatch",
 21 again you're referring to the NLSO?
 22 MS. WILLIAMS:
 23 A. Sort of, I guess how the production planning
 24 group works is that those weekly meetings
 25 that we have, we will decide what the plan

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1 to dispatch is for the actual generation
 2 units and we hand that information over to
 3 the NLSO and then they then execute that
 4 dispatch.
 5 MR. FITZGERALD:
 6 Q. But does that weave them then back into the,
 7 not the performance base, but I mean, you
 8 know, the shared profit type of situation
 9 compromising the sales? I may have
 10 misunderstood you, sorry if I did, but the
 11 NLSO I thought was just a regulator, it's an
 12 on/off switch, if you will. It is not
 13 profit driven, it's got nothing to do with
 14 revenue, if you will, correct?
 15 MS. WILLIAMS:
 16 A. Correct.
 17 MR. FITZGERALD:
 18 Q. But if you're saying a decision regarding
 19 dispatching will be interlinked with NEMS
 20 and Hydro making strategic calls as to when
 21 to sell or buy power, wouldn't that be
 22 included in the NLSO?
 23 MS. WILLIAMS:
 24 A. No, Mr. LeBlanc can probably speak to that a
 25 bit better.

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1 MR. LEBLANC:
 2 A. No, again, NLSO looks at the system
 3 reliability. Okay, so if part of the plan
 4 was we are going to export this much
 5 generation, NLSO might way, well hold on,
 6 you can't do that because if we have one
 7 unit fail, we don't have enough spinning
 8 reserves so you can't sell it; or no, that
 9 transmission corridor is completely booked,
 10 you can't make that export. So they look at
 11 it from a system reliability point of view,
 12 and again, the only thing the NLSO sells per
 13 se is transmission access, so the sales or
 14 energy deals are outside the scope of the
 15 NLSO, but they have to use the highway
 16 system of the NLSO and then NLSO is also
 17 responsible for the system reliability of
 18 the grid, so if they see a violation,
 19 they'll flag it.
 20 MR. FITZGERALD:
 21 Q. Right, I see that between the reliability,
 22 that's all they're concerned with is
 23 reliability, they're not concerned with
 24 profitability.
 25 MR. LEBLANC:

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1 A. No, the NLSO and its department are a non-
 2 profit entity.
 3 MR. FITZGERALD:
 4 Q. There was an exhibit, I don't think we have
 5 to go to it because I think we've all seen
 6 it a hundred times, it's the Industrial
 7 Customer's NLH-122. This was the 22.89
 8 kilowatt figure that Mr. Haynes referred to
 9 as where he thought things were going as of
 10 2021. Has that figure changed at all since
 11 we sat here last in April, or is that still
 12 -
 13 MR. LEBLANC:
 14 A. As far as I know that's still the figure.
 15 MR. FITZGERALD:
 16 Q. So that's Hydro's figure?
 17 MR. LEBLANC:
 18 A. That was a figure prepared by Nalcor.
 19 MR. FITZGERALD:
 20 Q. Nalcor, right, so my question should be are
 21 you just going with that figure or is Hydro,
 22 in-house, going to -
 23 MR. LEBLANC:
 24 A. Again, that was an estimate, like Hydro was
 25 not doing the cost estimates for the entire

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1 Maritime Link project and that was a figure
 2 that was done up in advance just to see
 3 where things were going, so they took where
 4 Hydro was, there was some input in what our
 5 portion would be and then they added on
 6 their portion to come up with that number.
 7 MR. FITZGERALD:
 8 Q. Okay, so the answer is no, you're just going
 9 with the Nalcor number?
 10 MR. LEBLANC:
 11 A. For now, but once we progress and get closer
 12 to that date, the Hydro portion is going to
 13 be updated through these hearings and all
 14 that and so the number will mature over
 15 time.
 16 MR. FITZGERALD:
 17 Q. Okay. I just want to move to an issue of
 18 recall that Mr. Haynes brought up and if we
 19 can go to the April 24th transcript, pages 94
 20 to 96, sorry, looking at the wrong
 21 transcript, my apologies, I had the wrong
 22 site, just bear with me for a moment.
 23 Sorry, did you pull up April 24th? Is that
 24 the one that was pulled up?
 25 MR. YOUNG:

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1 Q. Steve, I believe it might be April 23rd
 2 you're looking at.
 3 MR. FITZGERALD:
 4 Q. April 23rd? Okay, I'll try that. So rather
 5 than wasting everybody's time, perhaps, I'll
 6 come back to that question, I've lost it in
 7 the haystack there. If we can turn, sorry
 8 about that, to the issue of the load
 9 forecast, has Hydro updated its load
 10 forecast since the application has been
 11 filed?
 12 MS. WILLIAMS:
 13 A. Mr. LeBlanc will answer.
 14 MR. LEBLANC:
 15 A. The load forecast is usually done annually
 16 with updates as need be, so again, I'm not a
 17 hundred percent positive when the last
 18 update to a load forecast was.
 19 MR. FITZGERALD:
 20 Q. Has there been any, I mean with all the
 21 information that's come out, it's
 22 information that you had, but the public
 23 information that's come out, since April has
 24 there been any contact with the Industrial
 25 customers or Newfoundland Power regarding

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1 any shifting or changing in load?
 2 MR. LEBLANC:
 3 A. I know they are asked several times per year
 4 to provide a load forecast update to us and
 5 so that would continue. Whether they have
 6 responded or not, I cannot say because
 7 there's lots of times they do not respond,
 8 so then we take that as no change and if
 9 they do respond, then it's incorporated.
 10 MR. FITZGERALD:
 11 Q. When you say "they", sorry, that's your
 12 customers?
 13 MR. LEBLANC:
 14 A. Industrials or Newfoundland Power.
 15 MR. FITZGERALD:
 16 Q. So there's been no communication between you
 17 regarding changes in load informally?
 18 MR. LEBLANC:
 19 A. No, it's usually by email that they are
 20 requested to provide updates to their load
 21 forecast and that's done on a regular basis.
 22 MR. FITZGERALD:
 23 Q. So you're not aware of any change, if you
 24 will, going on right now -
 25 MR. LEBLANC:

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1 A. Of a material change? No.
 2 MR. FITZGERALD:
 3 Q. Material change, nothing. So everything,
 4 there's no indication whatsoever that
 5 there's been a decrease in expected load?
 6 MR. LEBLANC:
 7 A. Not that I am aware of, no.
 8 (1:15 p.m.)
 9 MR. FITZGERALD:
 10 Q. Okay, the elasticity studies or data, if you
 11 have any for 2019 test year, do any of
 12 those, you know, reflect upcoming rate
 13 increases, the 22.89 we just talked about?
 14 MR. LEBLANC:
 15 A. Yes, elasticity is taken into account in the
 16 load forecast and we use an elasticity, and
 17 again that's more for the residential area,
 18 for the Newfoundland Power we rely on their
 19 load forecast which we incorporate into ours
 20 and they do take elasticity into account.
 21 The General Service, a lot of their, they
 22 don't have alternate means of switching, so
 23 elasticity is not a big factor for General
 24 Service customers. And for the Industrial
 25 customers, we, again rely on their forecast

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1 for what they require and if there's a price
 2 of elasticity, they take that into account
 3 themselves.
 4 MR. FITZGERALD:
 5 Q. So the data that you rely on or the studies,
 6 you know, have you encountered or do you
 7 have comparators of, you know, rate changes
 8 in the magnitude that we're talking about to
 9 -
 10 MR. LEBLANC:
 11 A. For elasticity?
 12 MR. FITZGERALD:
 13 Q. Yes.
 14 MR. LEBLANC:
 15 A. For residential, for the increases that
 16 we're looking at with Muskrat Falls coming
 17 on line, we have an elasticity factor of
 18 about minus .3, so that means for a hundred
 19 percent increase in rates you'd see a drop
 20 off approximately 30 percent in load.
 21 MR. FITZGERALD:
 22 Q. At a hundred percent increase.
 23 MR. LEBLANC:
 24 A. A hundred percent, yeah, so that's a factor.
 25 MR. FITZGERALD:

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1 Q. All right, so does the math slide scale, so
 2 if you're 50 percent it's -
 3 MR. LEBLANC:
 4 A. It's not necessarily linear, so it depends
 5 on the rate impact for any increase—again,
 6 other factors come into account, so that's
 7 one factor you have to take into account.
 8 You also have to look at how much of a load
 9 can be switched. Not all electricity load
 10 can be switched to alternate means. Your
 11 TV, you can't use wood or propane to drive
 12 your TV, so certain loads you cannot switch,
 13 so you can't get a hundred percent reduction
 14 or a hundred percent or a negative hundred
 15 percent elasticity. Then you also have to
 16 do a cross price elasticity analysis. Okay,
 17 what are your alternatives doing if the
 18 electricity went up 20 percent, but oil went
 19 up 25 percent for heating, you may have a
 20 positive elasticity factor in that case.
 21 Then you also have to look at the cost of
 22 what are the alternative means to switch.
 23 Okay, if you have a small house and it's
 24 very chopped up, lots of rooms, you may not
 25 be able to put a mini split in or things

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1 like that, or it may be cost prohibitive to
 2 put in a furnace and put in more air ducts
 3 for heating, so a lot of factors have to be
 4 looked at in determining your elasticity
 5 model. And right now with the way the
 6 markets are, it's about a minus .3 factor.
 7 MR. FITZGERALD:
 8 Q. Based on the hundred percent increase.
 9 MR. LEBLANC:
 10 A. Oh, that's based on a hundred. Again,
 11 there's a scale, you're not going, for a 20
 12 percent increase you're not going to get a
 13 30 percent drop in, it will be a lesser
 14 amount.
 15 MR. FITZGERALD:
 16 Q. I just want to refer back now to a
 17 transcript, it's the April 24th transcript,
 18 pages 94 to 96. Okay, so this is Mr.
 19 Haynes' evidence and he's talking about the
 20 recall power, down at line 19, he starts, he
 21 says "When NEM was created, there was a
 22 bunch of things that were going to happen,
 23 you know, there was the presumption that
 24 recall would be, would continue to be sold
 25 by NEM, long term, any profits, whatever,

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1 would go to Nalcor. Basically that's been
 2 reviewed and basically Hydro owns that
 3 recall." So when that evidence came out, it
 4 appeared to us in any event that this was a
 5 discovery of sorts, was that something new
 6 that came forward, that Hydro discovered
 7 that they owned some recall?
 8 MS. WILLIAMS:
 9 A. No, I don't know that it was, I'm looking
 10 at—I don't know that it was a new discovery
 11 at the time. I will apologize to you, some
 12 of this is before my time, I'm not as
 13 intricately involved with history of how all
 14 of this would have occurred, you know,
 15 depending on how far you want to go with
 16 this, I would probably have to consult or
 17 defer.
 18 MR. FITZGERALD:
 19 Q. Defer, okay, all right. And who would be
 20 better to speak with on this?
 21 MS. WILLIAMS:
 22 A. I don't want to say Mr. Haynes, he might
 23 fire me. I'm looking for help here, it
 24 might be Mr. Haynes, I don't necessarily
 25 think it's Mr. Fagan or Ms. Hutchens.

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1 MR. FITZGERALD:
 2 Q. You don't think it's Mr. Fagan, okay, all
 3 right.
 4 MS. WILLIAMS:
 5 A. I don't think that's it's necessarily Ms.
 6 Hutchens or Mr. Fagan. I'm thinking about,
 7 say, some of the history of this.
 8 MR. FITZGERALD:
 9 Q. Yeah, because it talks about, "Right now is
 10 that the recall will be sold and anything
 11 that we can't use, I mean, but first our
 12 objective is to bring to the Island anything
 13 that can't be sold will be sold by them, but
 14 the process of the overall value sharing, if
 15 you will, between NEM and the power supply
 16 in Hydro is subject to ongoing dialogue."
 17 MS. WILLIAMS:
 18 A. I can speak to that, which I think we've
 19 already done, but I think your question,
 20 sorry, was did you just discover that you
 21 had recall and I was a bit confused by the
 22 question, I wasn't sure by what you meant
 23 there.
 24 MR. FITZGERALD:
 25 Q. Sorry.

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1 MS. WILLIAMS:
 2 A. But I think we've talked a little bit about
 3 this earlier, about the following, we're
 4 going to do the fall, so maybe I should have
 5 asked for clarification on your question.
 6 MR. FITZGERALD:
 7 Q. Okay, so can you run that by me again?
 8 MS. WILLIAMS:
 9 A. So sorry, the question?
 10 MR. FITZGERALD:
 11 Q. The value sharing.
 12 MS. WILLIAMS:
 13 A. So yeah, so the value sharing is intended,
 14 any additional energy that either Muskrat or
 15 Hydro has, wherever the source, whether it's
 16 on-island, whether it's recall or it's
 17 Muskrat, we'll be working with Energy
 18 Marketing and Muskrat to come up with an
 19 operational and optimization plan and the
 20 value that would result from how we
 21 assimilate and function all of those assets
 22 together, we look up at the plan and we'll
 23 present it to the Board for their review and
 24 approval this fall.
 25 MR. FITZGERALD:

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1 Q. So this isn't newly discovered recall power.
 2 It's recall power that everyone knew existed
 3 in the first place.
 4 MS. WILLIAMS:
 5 A. Yes, yes. Sorry, I'm making sure I'm
 6 understanding your question.
 7 MR. FITZGERALD:
 8 Q. Well it's just the way the evidence came
 9 out, it says that basically that's been
 10 reviewed and basically Hydro owns that
 11 recall, so –
 12 MR. WILLIAMS:
 13 A. I don't think Mr. Haynes was—I don't want to
 14 put words in his mouth, certainly, but I
 15 don't think he was saying this was a new
 16 discovery. If it reads that way, if it was
 17 inferred that way, I don't believe that that
 18 was what he intended but I don't have the
 19 history about, you know, years ago how all
 20 the contracts were put in place.
 21 MR. FITZGERALD:
 22 Q. Okay. And one final question that just came
 23 out yesterday, the hiring at Hydro,
 24 different topic, is there currently a hiring
 25 freeze at Hydro or is it business as usual?

- 1 MS. WILLIAMS:
 2 A. There's no freeze. As we mentioned that
 3 every position, you can almost consider that
 4 a freeze, you were not approved on that
 5 position until you fully justified that it's
 6 absolutely required. Would you call that a
 7 freeze? Not necessarily, but in the context
 8 of what the public would infer it as, but
 9 there's no official freeze.
- 10 MR. FITZGERALD:
 11 Q. Okay, thank you, that concludes our
 12 questions.
- 13 CHAIR:
 14 Q. Thank you, Mr. Fitzgerald. Mr. Coxworthy,
 15 would you prefer to wait until tomorrow
 16 morning?
- 17 MR. COXWORTHY:
 18 Q. Madam Chair, I'd ask if perhaps we can
 19 adjourn for the day.
- 20 CHAIR:
 21 Q. Absolutely, we'll see you at 9:00 in the
 22 morning.
- 23 MR. COXWORTHY:
 24 Q. Thank you.
 25 Upon concluding at 1: 25 p.m.

CERTIFICATE

I, Judy Moss, hereby certify that the foregoing is a true and correct transcript of a Newfoundland and Labrador Hydro 2017 General Rate Application hearing, heard on the 17th day of July, 2018 before the Board of Commissioners of Public Utilities, 120 Torbay Road, St. John's, Newfoundland and Labrador and was transcribed by me to the best of my ability by means of a sound apparatus.

Dated at St. John's, Newfoundland and Labrador this 17th day of July, 2018

Judy Moss

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