

Hearing Transcript

**REFERENCE TO THE BOARD
RATE MITIGATION OPTIONS AND IMPACTS
MUSKRAT FALLS PROJECT**

October 4, 2019

PRESENT:

The Board:

Darlene Whalen, Chair and CEO
Dwanda Newman, Vice-Chair
John O'Brien, Commissioner

Board Counsel/ Staff:

Jacqueline Glynn, Board Counsel
Maureen Greene, Q.C., Reference Counsel
Cheryl Blundon, Board Secretary

Parties

Nalcor Energy/

Newfoundland and Labrador Hydro

Geoff Young, Q.C., Counsel - NL Hydro
David Eaton, Q.C., Counsel – Nalcor Energy

Newfoundland Power:

Kelly Hopkins, Counsel
Liam O'Brien, Counsel

Consumer Advocate:

Dennis Browne, Q.C. – Consumer Advocate
Stephen Fitzgerald, Counsel – Consumer Advocate

Island Industrial Consumer Group:

Paul Coxworthy, Counsel
Dean Porter, Counsel
Denis Fleming, Counsel

Witnesses:

The Liberty Consulting Group – Panel

John Antonuk
Brian Daschbach
Kevin Cellars
Dr. James Letzelter
Randall Vickroy

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1 (9:00 a.m.)
 2 CHAIR:
 3 Q. Good morning, everybody. Ms. Greene, are
 4 there any, or Jacqui, are there any
 5 preliminary matters, issues that you're
 6 aware of?
 7 GREENE, Q.C.:
 8 Q. No, Madam Chair, there's not issues that I'm
 9 aware of.
 10 CHAIR:
 11 Q. Okay. I guess we're going straight to
 12 Newfoundland Power then for questions.
 13 MR. O'BRIEN:
 14 Q. Thank you, Madam Chair. Good morning, Madam
 15 Chair, Commissioners. Good morning, Panel.
 16 Good to see most of you again. I'm not sure
 17 I've seen all of your before, but most of
 18 the faces look familiar. I'll try to direct
 19 my questions, I guess, this morning just to
 20 the Panel and I guess maybe directly to Mr.
 21 Antonuk, but as Mr. Eaton said yesterday, if
 22 anybody on the Panel has information, you
 23 feel free to share on any one of the
 24 questions that I might have. And I don't
 25 have too many for you today. I think you

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1 for your presentation yesterday. You
 2 covered off most of the questions that I
 3 would have had. So, I do have mostly
 4 clarify questions really today. The first
 5 one I wanted to ask you had to do with the
 6 financial mitigation opportunities, and you
 7 identified the LCP dividends as the main
 8 sort of financial opportunity we have here
 9 for mitigation. It's the largest I guess in
 10 terms of potential funds there. I wonder, I
 11 notice you indicated that you felt it was
 12 outside of your scope to look at sort of
 13 policy issues with respect to whether or not
 14 all or any of those would be applied towards
 15 mitigation, but I wonder whether you
 16 considered, is there any risk that any—that
 17 all of those dividends might be available?
 18 Are there economic risks or other risks that
 19 might influence whether all of those
 20 dividends might be available in the future?
 21 Did you consider that?
 22 MR. ANTONUK:
 23 A. We did not do that. We know that there are
 24 certainly some significant uncertainties
 25 with respect to load and sales.

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1 MR. O'BRIEN:
 2 Q. Yes, okay.
 3 MR. ANTONUK:
 4 A. There have been issues raised about whether
 5 the rates are kind of sustainable in an
 6 economic basis. We did not get into those
 7 issues.
 8 MR. O'BRIEN:
 9 Q. Okay.
 10 MR. ANTONUK:
 11 A. The only issues we looked at or identified,
 12 we didn't examine them, were the economic
 13 issues to the province by having funds
 14 directed away from other uses and toward
 15 mitigation, and then the other issue was the
 16 whole question of maintaining the self-
 17 sustaining status of Hydro. So, when we
 18 talked about policy issues with respect to
 19 mitigation, it was those. It was those
 20 kinds of issues.
 21 MR. O'BRIEN:
 22 Q. It was those types of issues, yes. Okay.
 23 And just sort of moving along from that, you
 24 did identify some smaller sort of potential
 25 financial sources. And one of the ones I

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1 noted you identified were water revenues,
 2 for water rentals. Newfoundland Power pays
 3 water rentals. Is that a source that you
 4 could see as a potential pot for mitigation?
 5 MR. ANTONUK:
 6 A. I don't see any reason why the issues that
 7 caused us to look at Nalcor and Hydro
 8 rentals in that way would not apply to
 9 Newfoundland Power.
 10 MR. O'BRIEN:
 11 Q. Okay, yes.
 12 MR. ANTONUK:
 13 A. I would put those in the same category.
 14 MR. O'BRIEN:
 15 Q. On the same principle, I guess?
 16 MR. ANTONUK:
 17 A. Correct.
 18 MR. O'BRIEN:
 19 Q. Yes.
 20 MR. ANTONUK:
 21 A. The same logic would apply to those, I
 22 think.
 23 MR. O'BRIEN:
 24 Q. Yes. And did you have a look at what
 25 potential revenues were there or what impact

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1 that might have on your numbers?
 2 MR. ANTONUK:
 3 A. We did not.
 4 MR. O'BRIEN:
 5 Q. Okay.
 6 MR. ANTONUK:
 7 A. So, those would be additive.
 8 MR. O'BRIEN:
 9 Q. Additive to what you've got there, okay.
 10 Thank you. And you did mention yesterday
 11 one of the other ones was the HST. You
 12 didn't really look at taxation policy, but
 13 you did flag that in the past some of the
 14 provincial sort of side of HST has been
 15 applied as a rebate. You don't see any
 16 barrier to that happening in the future
 17 subject to government policy, do you?
 18 MR. ANTONUK:
 19 A. Correct.
 20 MR. O'BRIEN:
 21 Q. Yes, okay. Do you have any idea sort what
 22 kind of impact that might have on your
 23 numbers?
 24 MR. ANTONUK:
 25 A. I think the numbers were somewhere in the

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1 vicinity of 50.
 2 MR. VICKROY:
 3 Q. Yes, 50.
 4 MR. O'BRIEN:
 5 Q. Yes. And I think -
 6 MR. ANTONUK:
 7 A. Let me stand on the numbers in the report.
 8 MR. O'BRIEN:
 9 Q. Yes, yes.
 10 MR. ANTONUK:
 11 A. But it would be fairly direct to calculate.
 12 MR. O'BRIEN:
 13 Q. Yes.
 14 MR. ANTONUK:
 15 A. Actually, what I'd like to do, we probably
 16 could do that, and rather than doing it off
 17 the top of my head, if you don't mind, we
 18 can do that and provide that after the
 19 break.
 20 MR. O'BRIEN:
 21 Q. I'd appreciate that. Yes, thank you. Okay.
 22 And one of the other areas you talked about
 23 yesterday and briefly in your report, and I
 24 kind of wanted just to get a little bit more
 25 information on that, was depreciation and

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1 what sort of analysis you might have done
 2 there. I got the point with respect to
 3 Newfoundland and Labrador Hydro's assets
 4 sort of already having gone through a study
 5 recently, and you kind of looked at that and
 6 didn't see any reason to modify that. And I
 7 gather with respect to the LCP assets, that
 8 you took the position that they're sort of
 9 set in stone with the commercial agreements.
 10 Is that fair?
 11 MR. ANTONUK:
 12 A. That's correct.
 13 MR. O'BRIEN:
 14 Q. In your report, and I wonder if we could
 15 bring up page 28, the top of the page there.
 16 And I just wanted to ask you about that,
 17 that first line, "Nevertheless, we did
 18 examine whether the unwinding of
 19 arrangements that may involve Emera, the
 20 federal government and all bond investors
 21 might produce sufficient benefits to warrant
 22 pursuit." Did you do any sort of analysis
 23 around that, the unwinding of those
 24 arrangements and what benefits you could
 25 see?

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1 MR. ANTONUK:
 2 A. Randy, do you want to take that one?
 3 MR. VICKROY:
 4 A. Pretty much it's the last sentence in that
 5 particular paragraph.
 6 MR. O'BRIEN:
 7 Q. Okay.
 8 MR. VICKROY:
 9 A. We did look at 75 years to get a rough
 10 example of what might happen.
 11 MR. O'BRIEN:
 12 Q. Yes.
 13 MR. VICKROY:
 14 A. Yes.
 15 MR. O'BRIEN:
 16 Q. So, if you extended them out, service logs I
 17 guess, you extended them out 75—to 75 from
 18 the 50 in the agreement. This last sentence
 19 there, you indicated there's a one-to-one
 20 ratio. So, I guess there's—any dollar
 21 saved, was a dollar lost on dividends? Is
 22 that fair?
 23 MR. VICKROY:
 24 A. Yes, that's true.
 25 MR. O'BRIEN:

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1 Q. And this is I guess all subject to the
 2 parties agreeing to unwind those
 3 arrangements. Is there any benefit to
 4 looking at methodologies? Would that assist
 5 with moving depreciation funds around?
 6 Would that assist in a rate mitigation
 7 perspective?
 8 MR. VICKROY:
 9 A. Yes, as John says, the PPA and the TRA are
 10 locked in.
 11 MR. O'BRIEN:
 12 Q. Right.
 13 MR. VICKROY:
 14 A. Inflexible. But if those agreements are
 15 opened up, I would expect everything to be
 16 on the table, including depreciation.
 17 MR. O'BRIEN:
 18 Q. Okay.
 19 MR. VICKROY:
 20 A. Returns, everything. If that ever happened.
 21 MR. O'BRIEN:
 22 Q. Okay, and if that were to be the case, so I
 23 guess depreciation could be modified to
 24 assist with the rate mitigation process?
 25 MR. VICKROY:

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1 A. Sure.
 2 MR. O'BRIEN:
 3 Q. Okay.
 4 MR. VICKROY:
 5 A. I would think.
 6 MR. O'BRIEN:
 7 Q. Okay, and moving along to--the next topic I
 8 had was the Hydro and Power Supply
 9 Integration. And you spoke a fair bit about
 10 that yesterday and I appreciate that. And
 11 one of the comments I noted and you were
 12 brought to in terms of there being, in your
 13 report, no sound operational reason for
 14 continuing with that. Could you just expand
 15 on that just a little bit on what was in
 16 your report?
 17 MR. ANTONUK:
 18 A. I'm not quite sure I'm tracking with the
 19 point that --
 20 MR. O'BRIEN:
 21 Q. Okay. No, Mr. Eaton had pointed out to you
 22 a line in the report where you had indicated
 23 there is no sound operational reason for
 24 maintaining the distinction any more between
 25 Hydro and power supply.

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1 MR. ANTONUK:
 2 A. Oh, I'm sorry.
 3 MR. O'BRIEN:
 4 Q. Could you expand on that?
 5 MR. ANTONUK:
 6 A. Yeah, I can. We looked at how the Power
 7 Supply assets are managed, we looked at how
 8 the Hydro Power Supply assets are managed
 9 and we found that combining them would not
 10 pose any operational barriers, and in fact,
 11 would promote operational improvements as a
 12 matter of fact in addition to producing
 13 staffing reductions.
 14 MR. O'BRIEN:
 15 A. Okay.
 16 MR. ANTONUK:
 17 A. So, that was the point.
 18 MR. O'BRIEN:
 19 Q. All right, okay. And in terms of the
 20 figures that you identified, you identified,
 21 I think there 113 FTE reductions. Is that
 22 correct?
 23 MR. ANTONUK:
 24 A. Yes.
 25 MR. O'BRIEN:

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1 Q. I got the import from your evidence
 2 yesterday, you felt that was a conservative
 3 figure?
 4 MR. ANTONUK:
 5 A. We're comfortable with that figure and any
 6 figure like that has risks, error risk. I
 7 would say it this way, the risk that that
 8 number is high is, in our opinion, lower--
 9 higher than the risk that the number is
 10 high. In other words, if I would take a 50
 11 percent probability, I think we're well
 12 above that in terms of that number. So, I
 13 would expect is it more likely that those
 14 numbers will go up than down.
 15 MR. O'BRIEN:
 16 Q. All right. Than down, okay.
 17 MR. ANTONUK:
 18 A. And I don't want to try to get it any more
 19 precise than that because I think we have to
 20 accept the fact that we're dealing with
 21 something that not subject to mathematical
 22 certainty.
 23 MR. O'BRIEN:
 24 Q. That's fair, okay. I wonder if we could
 25 bring up the Nalcor submission, page 26?

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1 And I'm not certain you can answer this
 2 question, but I'm going to ask it anyway.
 3 So, it's page 26 on the bottom, I think.
 4 Yes, so there's a heading there, "Finding
 5 Efficiencies," and there's a discussion
 6 there about a table that starts on the next
 7 page, but if we start on line 23, it says,
 8 "The table below shows actual Nalcor FTE
 9 numbers in 2016 and steady state 2022
 10 forecast post-reliable in service of the new
 11 assets." And the plan transition of
 12 Holyrood Thermal Generating Station to
 13 synchronous condenser facility." So, if we
 14 go to the next page then, now there's a
 15 table up top. So, Nalcor has—it shows the
 16 actual FTEs in 2016 up to a forecast in 2020
 17 and a '22, 2022 forecast. And I gather from
 18 this submission there's an indication that
 19 the actuals increased from 2016 to 2020 and
 20 that's sort of associated with the
 21 commissioning, getting ready for
 22 commissioning, that sort of thing, but
 23 there's an indication of a decrease forecast
 24 from 2020 to 2022. Those figures, do you
 25 know and did you consider those figures and

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1 whether or not they include your 113 FTEs?
 2 Are you able to answer that?
 3 MR. ANTONUK:
 4 A. No, we can't parse that. I can say that to
 5 the extent that they assume the change in
 6 Holyrood, that certainly would be different.
 7 MR. O'BRIEN:
 8 Q. Yes.
 9 MR. ANTONUK:
 10 A. And I imagine some folks in this room have
 11 read our Reliability Report and we certainly
 12 do not—did not proceed from the assumption
 13 that Holyrood would be retired.
 14 MR. O'BRIEN:
 15 Q. Okay.
 16 MR. ANTONUK:
 17 A. We think that's a matter we're probably
 18 going to be talking a little more about in a
 19 month or two.
 20 MR. O'BRIEN:
 21 Q. Okay.
 22 MR. ANTONUK:
 23 A. Beyond that, we did not parse these numbers
 24 to try to see if they did or did not
 25 include—I think the clearest statements in

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1 the Nalcor submission related to a 2.5-
 2 million-dollar reduction associated with
 3 Exploits.
 4 MR. O'BRIEN:
 5 Q. With Exploits.
 6 MR. ANTONUK:
 7 A. And then, I think an additional \$2,000,000,
 8 but we weren't able to determine, and I'm
 9 not sure Hydro has either, exactly where
 10 that 2 million would come from.
 11 MR. O'BRIEN:
 12 Q. Well, I guess on that point, in the
 13 submission that \$2,000,000 is raised as an
 14 efficiency goal, but it's also indicated
 15 that that was suggested by Liberty. Is that
 16 the case?
 17 MR. ANTONUK:
 18 A. No, that's not. I don't think that's
 19 correct. It's not easy to tell what that 2
 20 million is from our perspective, but our
 21 numbers are the 113.
 22 MR. O'BRIEN:
 23 Q. Okay.
 24 MR. ANTONUK:
 25 A. And that includes changes at Exploits.

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1 MR. O'BRIEN:
 2 Q. All right.
 3 MR. ANTONUK:
 4 A. It would be wrong to suggest that we're
 5 saying 2.5 million from Exploits and only 2
 6 million more.
 7 MR. O'BRIEN:
 8 Q. Okay.
 9 MR. ANTONUK:
 10 A. Somehow, I don't think that can possibly be
 11 what Hydro or Nalcor were saying there, but
 12 as I said, it's a little unclear.
 13 MR. O'BRIEN:
 14 Q. But that 2 million, that's not a figure that
 15 you put on the table as being a reasonable
 16 figure. It's a figure that you see as
 17 additive to the 113?
 18 MR. ANTONUK:
 19 A. No. What would be additive to the 113 would
 20 be the results of what we do recommend which
 21 is a comprehensive efficiency and
 22 effectiveness review by Hydro.
 23 MR. O'BRIEN:
 24 Q. Okay.
 25 MR. ANTONUK:

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1 A. I think they have put on the table something
 2 that sounds close to that, but I don't know
 3 its dimensions. So, there is a number in
 4 excess of the 113, but I would not suggest
 5 that that number is 2 million.
 6 MR. O'BRIEN:
 7 Q. Okay.
 8 MR. ANTONUK:
 9 A. I would suggest that that number would be
 10 determined after the effort that hydro is
 11 talking--I think Hydro is talking about and
 12 certainly the effort that we recommend Hydro
 13 undertake.
 14 MR. O'BRIEN:
 15 Q. Okay, that's clearer to me, thank you. And
 16 in terms of—if we go back just to the 113, I
 17 gather from your report that you identified
 18 that after reaching a “steady state,” you—
 19 the figure I guess in terms of dollars and
 20 cents you put on it was somewhere in the
 21 range about 17 million dollars? Is that the
 22 annual –
 23 MR. ANTONUK:
 24 A. Yes. Yeah, the number obviously will grow
 25 after that.

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1 MR. O'BRIEN:
 2 Q. Yes, yes.
 3 MR. ANTONUK:
 4 A. Because inflation will occur.
 5 MR. O'BRIEN:
 6 Q. Okay.
 7 MR. ANTONUK:
 8 A. So, I can't remember the numbers. I mean,
 9 we certainly have them plotted out more
 10 specifically.
 11 MR. O'BRIEN:
 12 Q. Yes.
 13 MR. ANTONUK:
 14 A. We tried to stick with—more with averages.
 15 So -
 16 MR. O'BRIEN:
 17 Q. Okay. And does that include, and I'm going
 18 to just ask you a few more questions in a
 19 minute on this, but does that include the 12
 20 million that you identified for the O&M
 21 costs? Is there an overlap in that?
 22 (9:15 a.m.)
 23 MR. ANTONUK:
 24 A. The fellow whose son is getting married
 25 could do this a little better, but the only

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1 overlap relates to a category with LCPM, the
 2 three that was administration.
 3 MR. O'BRIEN:
 4 Q. Okay.
 5 MR. ANTONUK:
 6 A. I believe that's the title for it. And
 7 those were costs that were in the LCP O&M
 8 budget as an allocation of certain corporate
 9 and service costs.
 10 MR. O'BRIEN:
 11 Q. Okay.
 12 MR. ANTONUK:
 13 A. We addressed corporate and service costs
 14 reductions directly in the rest of the
 15 report. So, that administrative portion,
 16 while the elimination of the positions we're
 17 talking about would lower the LCP O&M
 18 budget, that portion is not additive.
 19 MR. O'BRIEN:
 20 Q. Okay.
 21 MR. ANTONUK:
 22 A. You know the problem we have, not the
 23 problem we have. The need we had was to
 24 address the total reductions.
 25 MR. O'BRIEN:

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1 Q. Right.
 2 MR. ANTONUK:
 3 A. But then, also to say, “Well, what's going
 4 to happen with LCP O&M?”
 5 MR. O'BRIEN:
 6 Q. Right, okay.
 7 MR. ANTONUK:
 8 A. You know, so the fact that that
 9 administrative portion that we remove from
 10 LCP O&M is not additive, still doesn't mean
 11 it's not going to show in the LCP O&M
 12 budget.
 13 MR. O'BRIEN:
 14 Q. No, I get that, yes.
 15 MR. ANTONUK:
 16 A. It's not really a matter of where the
 17 dollars are allocated. They're not
 18 additional dollars.
 19 MR. O'BRIEN:
 20 Q. It's not addition, okay. And do you have
 21 any sort of idea as to what that kind of
 22 figure might be in terms of that you'd see
 23 in both categories?
 24 MR. ANTONUK:
 25 A. We do and I think that's in the report.

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1 MR. O'BRIEN:
 2 Q. Okay.
 3 MR. ANTONUK:
 4 A. I don't recall it, and do know where that
 5 is?
 6 MR. O'BRIEN:
 7 Q. If it's in the report, I can pull that up
 8 just in terms our –
 9 MR. ANTONUK:
 10 A. Is it the--where is that? Where would we
 11 find that? Well, why don't we do this? We
 12 already have one mission at the break. I
 13 think we can take this one on, too.
 14 MR. O'BRIEN:
 15 Q. I'd appreciate that, thank you. Yes.
 16 GREENE, Q.C.:
 17 Q. And just to be clear, Mr. O'Brien, could you
 18 clarify your question, please?
 19 MR. O'BRIEN:
 20 Q. Just to see what the impact of the dollars
 21 and cents were in the overlap between the
 22 LCP, that administration cost between the
 23 overlap, I guess the overlap between the LCP
 24 O&M and the 113. So, your Power Supply
 25 Integration figure.

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1 MR. ANTONUK:
 2 A. Yes, and I'll clarify. I called it
 3 administrative.
 4 MR. O'BRIEN:
 5 Q. Yes.
 6 MR. ANTONUK:
 7 A. We'll clearly identify what the category
 8 actually is.
 9 MR. O'BRIEN:
 10 Q. Perfect.
 11 MR. ANTONUK:
 12 A. If it's other than that, and we'll identify
 13 the dollars associated with that.
 14 MR. O'BRIEN:
 15 Q. The dollars and cents. Yes, okay. With
 16 respect to the analysis you did for the
 17 Hydro Power Supply and I'll call it
 18 reintegration, I believe is what you had
 19 called it in your report. You made a
 20 comment yesterday about sort of allowing
 21 Nalcor then to focus on Nalcor efforts, I
 22 guess, and future, and I got the impression
 23 that that would allow then Hydro to focus on
 24 utility efforts and there not being an
 25 overlap once Power Supply came back in. Is

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1 that fair?
 2 MR. ANTONUK:
 3 A. I think that's correct. I think our
 4 recommendations would in effect say that the
 5 consolidation of the utility assets and
 6 their operation under Hydro would be the end
 7 result and that would leave Nalcor to pursue
 8 the other elements of whatever mission the
 9 province decides is appropriate for it with
 10 respect to energy development or anything
 11 else for that matter.
 12 MR. O'BRIEN:
 13 Q. And that's sort of what I took from your
 14 comment yesterday and I wonder whether or
 15 not the idea or the thought process that
 16 Nalcor will be continuing to focus on oil
 17 and gas in the future, was that something
 18 that was in your mindset when you analyzed
 19 this integration process from the start?
 20 MR. ANTONUK:
 21 A. Yes. Yes, we understood—I think we started
 22 with the belief that the entirety of the oil
 23 and gas business, both operation or
 24 management of current assets and future
 25 assets would move to another entity. Then,

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1 we came to understand that from an
 2 investment management perspective and equity
 3 investment management perspective, if you
 4 will, that certain functions would remain.
 5 And we saw those sounding like they were
 6 largely a financial and accounting function.
 7 We assumed that they would stay.
 8 MR. O'BRIEN:
 9 Q. Okay.
 10 MR. ANTONUK:
 11 A. Not per our ideal scenario, but I think
 12 where we ended up on that is that if you
 13 sort of consolidate under Hydro and you
 14 leave Nalcor to pursue these, whatever else
 15 in on its agenda separately, that that
 16 function could just as easily move, that
 17 those are not the -
 18 MR. O'BRIEN:
 19 Q. Okay.
 20 MR. ANTONUK:
 21 A. The kind of resources who are going to
 22 manage investments in oil and gas resources
 23 aren't the kind of resources you could find
 24 only at Hydro. You know, you could--
 25 presumably somewhere else in the province,

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1 those kinds of resources exist and it would
 2 be just as easy it seems to us to provide
 3 that, those services, from elsewhere.
 4 MR. O'BRIEN:
 5 Q. Okay, all right.
 6 MR. ANTONUK:
 7 A. Or there's another way of looking at it,
 8 too. If they truly are nominal, if it's a
 9 nominal level of effort, it would not not
 10 also be a big deal to keep those in Hydro.
 11 It just seems to us that there's no real
 12 reason to do that and there's no real
 13 efficiency in doing that.
 14 MR. O'BRIEN:
 15 Q. Okay. Did you consider or can you answer
 16 this, whether or not there may be any risks
 17 associated with moving Power Supply back
 18 into Hydro? Does anything there jump out at
 19 your as being a risk to the customer?
 20 MR. ANTONUK:
 21 A. No, I think it's mitigative of both price
 22 and operational risk to do so.
 23 MR. O'BRIEN:
 24 Q. Okay, thank you. Just moving on to another
 25 topic. You talked yesterday about some

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1 jurisdictions where you may see T&D or
 2 Transmission and Distribution regulated, but
 3 generation in a competitive market. So, I
 4 guess I'd say regulated by competition or
 5 the discipline of competition. Have you
 6 ever come across a jurisdiction where
 7 transmission is not regulated?
 8 MR. ANTONUK:
 9 A. There are cases where some elements of
 10 transmission is unregulated at the local
 11 level. It is always regulated at the
 12 federal level.
 13 MR. O'BRIEN:
 14 Q. Okay.
 15 MR. ANTONUK:
 16 A. In the US. The issue is still the same
 17 though in terms of the reason it is not
 18 regulated at the state level. When it
 19 becomes unregulated at the state level, it's
 20 because it is operating in an interstate
 21 competitive market and the retail customers
 22 are not kind of price-and-service takers
 23 from it. Deregulation of transmission is
 24 largely a function of, in fact, deregulating
 25 the generation market. It's been decided

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1 that in certain cases, the bulk power market
 2 would be advantaged by encouraging entry of
 3 competitive players who are willing to take
 4 investment risks.
 5 MR. O'BRIEN:
 6 Q. So, absent that kind of scenario, are you
 7 aware of any situation where transmission is
 8 not regulated?
 9 MR. ANTONUK:
 10 A. No. No.
 11 MR. O'BRIEN:
 12 Q. Or is regulated, I should say.
 13 MR. ANTONUK:
 14 A. No, and as I said, the better way to look at
 15 transmission is not so much deregulation,
 16 but movement of regulation from the state to
 17 the federal level.
 18 MR. O'BRIEN:
 19 Q. Okay.
 20 MR. ANTONUK:
 21 A. We're trying very hard to promote a fully
 22 integrated electricity market in the US, at
 23 least our federal energy regulatory
 24 commission is. Some old buzzards don't
 25 necessarily like that, but that's really the

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1 goal, is to encourage investment that will
 2 promote linkage of systems so that
 3 generation, market-based generation, can now
 4 have a greater reach that it could before
 5 transmission constraints get eliminated.
 6 MR. O'BRIEN:
 7 Q. Okay, thank you.
 8 MR. ANTONUK:
 9 A. It's not a departure from the classic model
 10 though.
 11 MR. O'BRIEN:
 12 Q. It's not? No, okay. And the last area I
 13 wanted to cover with you was the LCP O&M
 14 costs. So, I had a few questions on that.
 15 You've talked about yesterday and it's in
 16 your report about the basis that you sort of
 17 worked from, from the O&M costs, and I
 18 believe it's the more recent June or March
 19 and October of 2018 figures. The last one I
 20 think being in the 97-million-dollar range
 21 for annual O&M costs. And you mentioned
 22 that you thought that was a sound baseline.
 23 Can you explain that to me just a little bit
 24 further in terms of the any analysis you
 25 went into to come to the conclusion that was

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1 a sound baseline?
 2 MR. ANTONUK:
 3 A. Yeah, I cannot start, and if we want to
 4 pursue details, I guess Kevin is going to my
 5 next stand-in.
 6 MR. O'BRIEN:
 7 Q. Sure.
 8 MR. CELLARS:
 9 A. I'll be his proxy for a second.
 10 MR. ANTONUK:
 11 A. In other words, we may pass this ball a lot
 12 before we shoot it. We looked at the basis
 13 for the estimate.
 14 MR. O'BRIEN:
 15 Q. Okay.
 16 MR. ANTONUK:
 17 A. The staffing, the internal contractors,
 18 services, contingency. We looked at all of
 19 those, questioned how they were developed
 20 and with any estimate on something that is
 21 under development, estimates get smarter as
 22 you go along. You have more information.
 23 You narrow ranges of uncertainty around key
 24 elements of that estimate. And I think
 25 where we were is we reached the conclusion

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1 that they had a sound foundation. They used
 2 assumptions that were solid. They were
 3 using information that was reasonably
 4 current. So, we decided it wasn't anymore
 5 conceptual. It really was pretty well
 6 founded.
 7 So, the issue became not so much kind
 8 of saying is the structure of the estimate
 9 any good. It was. Are the assumptions wide
 10 open? They weren't. It was really more a
 11 question of now we can dig into each
 12 specific assumption, question it and see if
 13 refinements are possible. So, I'd say our
 14 process was more saying how can we, if
 15 possible, refine this estimate in a way that
 16 would have an effect on the costs.
 17 MR. O'BRIEN:
 18 Q. And did you do any sort of benchmarking sort
 19 of based on the cost of construction and
 20 that kind of thing, the project? Is that
 21 something that happens? Did look at O&M
 22 costs?
 23 MR. ANTONUK:
 24 A. As came up yesterday with the sanity check
 25 that we talked about, we did do some

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1 staffing and O&M cost benchmarking with
 2 other hydro projects. But the work that we
 3 did to actually come up with the specific
 4 adjustments was based on a look at what's
 5 happening here and what management was
 6 assuming here.
 7 MR. O'BRIEN:
 8 Q. And I guess in terms of if you apply just a
 9 benchmarking approach at the start, you'd
 10 get into issues surrounding costs of delay,
 11 cost in the project itself. We saw a
 12 project that went way over budget, that kind
 13 of thing, and with delays and that sort of
 14 thing. If you use that as a benchmark, you
 15 don't get a good feel for what the real O&M
 16 costs would be going forward? Is that
 17 correct?
 18 MR. ANTONUK:
 19 A. That's certainly a factor and there are
 20 other factors too, which is, you know, the
 21 LCP here involves a significant transmission
 22 component. So, you know, to benchmark just
 23 Muskrat Falls, you have isolate. Trying to
 24 benchmark LTA or the LIL would – I'm not
 25 even sure how you'd start to do that. You

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1 know, they're so unique. So, there were a
 2 lot of – there are a lot of reasons for
 3 that. And there's a fairly high level of
 4 variability in those costs from plant to
 5 plant too. You know, the – you have adjust
 6 for size because there's not a linear
 7 relationship, for example, between the
 8 number of people it takes to run a plant and
 9 the megawatts or the megawatt hours it
 10 produces. So, it's a difficult exercise to
 11 do that with these kinds of assets,
 12 particularly with the mix of assets involved
 13 in LCP because your O&M budget is not just
 14 Muskrat Falls.
 15 MR. O'BRIEN:
 16 Q. And that wasn't your main analysis, a
 17 benchmark?
 18 MR. ANTONUK:
 19 A. No, it -
 20 MR. O'BRIEN:
 21 Q. Just your sanity check?
 22 MR. ANTONUK:
 23 A. That's correct.
 24 MR. O'BRIEN:
 25 Q. And I guess in the end, in terms of those

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1 costs, customers would be looking at paying
 2 actual costs anyway in future and I believe
 3 you did speak yesterday about a number of
 4 things, processes the Board could do if this
 5 is regulated to look at those costs as to
 6 whether or not they're reasonable. Is that
 7 fair?
 8 MR. ANTONUK:
 9 A. Yes.
 10 MR. O'BRIEN:
 11 Q. The reductions that you noted, the 12
 12 million dollars, I guess, in total -- it's
 13 in that range -- am I right in understanding
 14 that Nalcor was given a mandate to try to
 15 come up with 12 million dollars in reduction
 16 in that area?
 17 MR. ANTONUK:
 18 A. I know there was a mandate. I don't know
 19 what the number was.
 20 MR. O'BRIEN:
 21 Q. Okay.
 22 MR. ANTONUK:
 23 A. I'm sure I knew it at one time. It doesn't
 24 -- it didn't stick with me. It wasn't
 25 something that we considered and I don't

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1 know if that number came out before or after
 2 anything we did. It wasn't a factor to us.
 3 MR. O'BRIEN:
 4 Q. And I guess that's really the point of my
 5 question, just wondering whether or not your
 6 process was to look at that figure and
 7 verify that's an appropriate reduction or
 8 did you look at areas that Nalcor suggested
 9 to you as areas to reduce or was this your
 10 own process? How did that work?
 11 (9:30 a.m.)
 12 MR. ANTONUK:
 13 A. Oh, I think it's -- it was our own process,
 14 but we certainly worked very closely with
 15 the folks who know the estimate from a
 16 financial perspective and the folks whose
 17 operations drive the cost. So, we worked
 18 pretty closely with them in trying to
 19 identify areas. There were some areas where
 20 they talked about possible changes. There
 21 were areas we talked about possible changes.
 22 As a result of that dialogue though, we kind
 23 of stepped away from it and said "what's our
 24 judgment?" So, I'm going to give them a lot
 25 of credit for participating and for putting

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1 suggestions on the table in real -- you know,
 2 real savings suggestions, but in the final
 3 analysis, we didn't just use anything they
 4 gave us.
 5 MR. CELLARS:
 6 A. That's correct.
 7 MR. ANTONUK:
 8 A. We processed it through our own analysis.
 9 MR. O'BRIEN:
 10 Q. And were there any areas where you differed?
 11 Where they might have said well, that's not
 12 an area where you can see savings or vice
 13 versa, that you can re-cost (sic.)?
 14 MR. ANTONUK:
 15 A. I don't. Kevin, do you recall any?
 16 MR. CELLARS:
 17 A. Yeah, I think the contingency area John
 18 talked about I think yesterday was an area
 19 where we probably differed somewhat and some
 20 timing of some of the reductions. But, as
 21 John indicated, we did a line-by-line review
 22 of that estimate back from the original
 23 estimate to three generations of it. We
 24 looked at the drivers of those costs. We
 25 even dove deeply into the environmental

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1 costs. So that speaks to your benchmarking.
 2 The environmental costs here were so unique
 3 that it'd be hard to do some benchmarking
 4 here. But there was benchmarking done by
 5 other consultants in some of the numbers of
 6 people. We reviewed all that. So, there
 7 were recommendations we did make that were
 8 different than theirs. And as John had
 9 indicated, we agreed with some and disagreed
 10 with some.
 11 MR. ANTONUK:
 12 A. I think what we -- you know, we may know
 13 where they -- where we -- when our discussions
 14 ended, we might have known their last
 15 statements and our last statements. I think
 16 you really need to ask -- it's worth asking
 17 them now where they are after seeing the
 18 report, because, you know, when they saw our
 19 report, I assume they went through another
 20 process of saying "are there areas where we
 21 disagree? Where do we disagree?"
 22 So, all I'm saying is I think that we
 23 can describe to you the discussions, but I
 24 think it's a little harder for us to kind of
 25 tell you where today where we sit, there

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1 might be disagreements about the pieces. I
 2 suspect they'll have a sense of that though.
 3 MR. O'BRIEN:
 4 Q. Those are all the questions I have for this
 5 panel, Madame Chair.
 6 CHAIR:
 7 Q. Thank you, Mr. O'Brien. Who are we going to
 8 next? The Island Industrial Customers or
 9 Consumer Advocate?
 10 GREENE, Q.C.:
 11 Q. Consumer Advocate, Madame Chair.
 12 CHAIR:
 13 Q. So, Mr. Browne.
 14 BROWNE, Q.C.:
 15 Q. Thank you. Thank you, Madame Chair and
 16 Panel. And members of the panel, we
 17 generally agree with your findings and are
 18 pleased that you entered into so many areas
 19 which will certainly be of assistance to –
 20 ultimately, I guess, to the Government in
 21 following the Board's recommendation in
 22 assisting consumers to find a ways and means
 23 to have affordable electricity.
 24 In terms of an overview, everything has
 25 context. How are the electricity markets

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1 doing in the United States right now and can
 2 you comment in terms of the future? Where
 3 are energy markets headed generally in the
 4 future, just from your own knowledge? And
 5 you all have healthy resumes and I'm sure
 6 you could comment on that.
 7 MR. ANTONUK:
 8 A. Wow. I'm going to start with the
 9 transmission and distribution side. I think
 10 those markets are healthy. I think in the
 11 US, we have made a substantial commitment to
 12 addressing aging infrastructure, which was,
 13 I believe, the most challenging problem that
 14 we had. I think we've also done a good job
 15 of incorporating intelligence into the
 16 networks in ways that shorten outage
 17 durations, in ways that allow customers to
 18 have more control of and understanding of
 19 their usage. I think there's still
 20 substantial room to grow there.
 21 On that side of the business, I think
 22 the main challenge we face is a strong
 23 interest in allowing distributed generation
 24 and customer provided generation. We are in
 25 the process of working through what are some

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1 pretty substantial technical technological
 2 issues and allowing that form of
 3 integration, but I'm optimistic that we're
 4 going to work through those and we're going
 5 to start to create, even at the T&D level,
 6 some interesting and important means of
 7 competition, increased customer choice,
 8 increased customer benefits.
 9 With respect to transmission, I think
 10 we already talked about the fact that we're
 11 doing a lot to strengthen interties. I'm
 12 not sure we've been very smart about
 13 subjecting them to the right kind of
 14 economic analysis all the time, but I'm
 15 comfortable with that because I think we're
 16 moving in the right direction there, which
 17 is to allow generation to reach farther, a
 18 greater population, and the more it does
 19 that that means the more competitive choice
 20 that will exist.
 21 I have a lot of concern about the
 22 energy supply business. Prices are very
 23 low. We have a lot of sources of
 24 generation. They are sources that, on the
 25 whole, are less carbon intensive, primarily

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1 natural gas. I think surprisingly you'll
 2 find that the biggest carbon reductions in
 3 the world are occurring in the US
 4 electricity industry and it's primarily
 5 through the substitution of natural gas for
 6 coal. The problem we have there right now
 7 is that a lot of the people in the energy
 8 business or trading business, generation
 9 business, are struggling because prices are
 10 so low because there are so many low cost
 11 sources of generation around and that
 12 competition is driving prices down. But
 13 another factor that's just as important is
 14 there's an increasing level of required take
 15 of wind and solar generation. Whether it's
 16 economic or not, that's being put into the
 17 system for economic reasons and that is
 18 effectively having an adverse effect on
 19 those who are generating by traditional
 20 resources now because the available pool to
 21 sell is smaller because so much more of it
 22 is now through renewable resources.
 23 So, I'm not sanguine about the energy
 24 market. There's over supply now. There are
 25 continuing uncertainties about how much more

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1 we're going to move towards clean sources of
 2 energy. I think it's a very open question
 3 of whether there will be room for many – for
 4 new entrants in the business and the fact
 5 that the existing entrants are struggling
 6 suggests to me that we face, not in the near
 7 term but in the longer term, a shortening of
 8 what is now an amble and fairly economical
 9 source of supply.
 10 Overriding all of this is where we and
 11 the rest of the world come out on production
 12 of carbon. I think that that's an issue
 13 whose outcome I have no ability to foresee,
 14 but I think it has the potential for more
 15 fundamental changes in the energy market
 16 then I've ever lived through, as someone
 17 who's been in this business for closing in
 18 on 40 years now. I'm sorry, that probably
 19 was pretty longwinded, but that's it.
 20 BROWNE, Q.C.:
 21 Q. Does anyone else have something to offer in
 22 terms of where you see the future, in terms
 23 of energy, electric, electric versus natural
 24 gas, the competitive American market
 25 pricing?

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1 DR. LETZELTER:
 2 A. To put the future into context you have to
 3 look at where the US power markets are over
 4 the past decade. Thanks largely to
 5 fracking, natural gas prices are at
 6 extremely low price levels and since in most
 7 of the mature competitive power markets in
 8 the US, PJM, the New York ISO, ISO New
 9 England, ERCOT, and the CAL ISO, a lot of
 10 the time energy prices in these markets are
 11 set by gas-fired units and with gas prices
 12 so low, we've seen extremely depressed power
 13 prices. And there's no reason to believe
 14 that the gas commodity and delivered prices
 15 are going anywhere much higher than they are
 16 in the foreseeable future, which means that
 17 power prices will continue to remain at
 18 fairly low levels from an historical
 19 standpoint.
 20 BROWNE, Q.C.:
 21 Q. So, when you said – one of you said there's
 22 no room probably for new entrants into the
 23 market. What does that mean?
 24 MR. ANTONUK:
 25 A. Well, with prices so low, the cost of entry

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1 is installation of the source of supply and
 2 you're just not – you're not seeing the
 3 ability to make the kind of returns with
 4 extremely low gas prices that would make the
 5 market as rich as it was. We had a literal
 6 explosion of new – I shouldn't say it that
 7 way. We had a vast increase in natural gas
 8 supplied resources. It was very healthy.
 9 And I think the problem is this is what
 10 happens with competition, you know.
 11 Everybody's chasing a good deal 'til they
 12 make it a bad deal. So, you can still get
 13 into the business. I mean, the barriers to
 14 entry are low in the sense of you can – just
 15 about anybody who has the money can build a
 16 plant, but the barrier is trying to get
 17 enough revenue to justify the cost of it and
 18 the best evidence that that's problematic is
 19 this is all the major players in the game
 20 pretty much are reducing – projecting
 21 significant reductions in their investment
 22 on the generation side of the business now.
 23 Exelon.
 24 MR. CELLARS:
 25 A. PS.

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1 MR. ANTONUK:
 2 A. Yeah. They're all cutting back because they
 3 all see basically a glut of capacity and
 4 natural gas prices that are so low that they
 5 foreclose pretty much any other option,
 6 except options that will continue to have
 7 value because we will support them kind of
 8 despite higher costs. We're supporting them
 9 because they're reducing carbon production
 10 basically.
 11 So, the market is still probably pretty
 12 good for people who can find a way to
 13 provide solar and wind, but for those who
 14 are supplying traditional sources, I think
 15 they're struggling with what their future is
 16 and frankly, a lot of them are actually
 17 turning towards investment in their utility
 18 operating companies.
 19 I told you a little bit ago, I was
 20 happy to see infrastructure development
 21 because I think it was solving a big problem
 22 we had, but you can go too far there too.
 23 You know, if I'm a – if I have a generation
 24 and trading business and a utility business
 25 and I can't put my cash flow into the

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1 generation, where do I end up starting to
 2 put too much into the T&D side. So we may
 3 actually be moving into that position in the
 4 US where we're gold plating the T&D systems
 5 because the affiliates who are in the energy
 6 and generation business don't find
 7 investment there as attractive as they did
 8 over the last ten years anyway.
 9 BROWNE, Q.C.:
 10 Q. So, it's a fair comment that there wouldn't
 11 be too many in the United States that are
 12 building large hydroelectric projects right
 13 now?
 14 MR. ANTONUK:
 15 A. I can't think of any. I can't think of any.
 16 BROWNE, Q.C.:
 17 Q. And it's because of this natural gas
 18 competition that's out there and the cost of
 19 building versus the cost of producing
 20 natural gas and -
 21 MR. ANTONUK:
 22 A. There's no doubt that natural gas prices are
 23 going to become so low and the competition
 24 in competitive markets is so great that
 25 hydro is not the bargain it used to be.

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1 That's for sure. And there's risk, you
 2 know. If you build the plant, even if it
 3 looks cheap by comparison, it's still hard
 4 to find folks who are kind of building on
 5 spec. In other words, trusting to the
 6 market to provide them with the revenues
 7 that they need to cover the cost of the
 8 investment and the operations.
 9 BROWNE, Q.C.:
 10 Q. So there's no financiers giving money for
 11 hydroelectric because there are no long term
 12 contracts people are signing onto, in
 13 reference to the purchase of the same? Is
 14 that a fair comment?
 15 MR. VICKROY:
 16 A. Go ahead.
 17 MR. CELLARS:
 18 A. Absolutely.
 19 BROWNE, Q.C.:
 20 Q. What's that?
 21 MR. ANTONUK:
 22 A. I'd say that's fair. That's fair. Now
 23 what's going to happen - I don't want to
 24 project that indefinitely into the future
 25 because as I said, I think we're - I think

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1 we're wrestling very mightily with the
 2 balance between the threat that carbon
 3 produces and the need to sustain a strong
 4 economy and I don't know who's going to win
 5 that wrestling match, to be honest with you.
 6 I'm not sure where I come out on it, to be
 7 very candid with you. I think it's almost
 8 an existential threat and even if it's not
 9 so from a climatological point of view, it
 10 is from an industry structure point of view
 11 for sure. I'm just kind of out investment
 12 in the energy business.
 13 BROWNE, Q.C.:
 14 Q. And yes, anecdotally, we hear that large
 15 companies such as Hydro Quebec are having
 16 difficulties securing contracts. People
 17 prefer the spot market. Is that correct?
 18 MR. ANTONUK:
 19 A. I don't know about Hydro Quebec
 20 specifically, but I do know that the spot
 21 markets are - there's heavy use of them and
 22 I think they're not considered as risky as
 23 they were before because of the nature of
 24 the relationship between supply and demand
 25 in our country. I can't - I don't - I think

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1 it would be presumptuous to speak for
 2 Canada. We haven't looked at that aspect of
 3 the issue north of the friendly line that
 4 divides us.
 5 (9:45 a.m.)
 6 BROWNE, Q.C.:
 7 Q. I think just yesterday, and I think it's Dr.
 8 Feehan who checked when we were meeting, the
 9 New England market price for electricity was
 10 2.4 cents, 2.5 cents US.
 11 MR. ANTONUK:
 12 A. Yeah, that's not surprising. We manage - or
 13 not manage, we oversee the conduct of
 14 auctions that are done across an entire
 15 state to provide supply and what we were
 16 yesterday calling restructured markets and I
 17 think we're constantly surprised at the
 18 level of the prices that we're seeing.
 19 Pleasantly so in the short run; somewhat
 20 worryingly so in the long run because when
 21 you see those kind of prices and you think
 22 about the kind of costs that are driving
 23 them, it should give you concern about who
 24 are going to be new entrants as the old
 25 facilities wear out and as people leave the

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1 business.
 2 You know, we just had a major
 3 bankruptcy by a company called First Energy
 4 and the last I heard, they were having
 5 trouble selling their assets. So, it's
 6 likely those assets are going to shut down.
 7 So, what does that mean in the long term?
 8 Anybody's guess, I think.
 9 BROWNE, Q.C.:
 10 Q. When you're talking about the future, future
 11 is a large word, are we talking 5, 10, 15
 12 years? When will we see some level of
 13 certainty in reference to pricing or will we
 14 ever? There's a new game in town, I guess,
 15 in reference to fracking and what that does
 16 for the business, period.
 17 MR. ANTONUK:
 18 A. Yeah. I think Jim's right. I think the
 19 consensus is pretty clear that gas prices
 20 are down to stay and I'm not – I used to be
 21 a Pennsylvanian and we produce a heck of a
 22 lot of it. So, I'm not sure I'm happy about
 23 that. But that's – I think that's the
 24 reality. So, I think gas is really going to
 25 set a very, very high bar because of its

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1 price is staying so low. Again, I think
 2 what's really the big factor that's going to
 3 change is whether we do or don't expand the
 4 percentage of energy production that we
 5 demand to be produced from non-carbon
 6 producing sources.
 7 BROWNE, Q.C.:
 8 Q. Just moving on, it's good to have that
 9 context because as we're here preparing and
 10 preparing for the future, it's good to know
 11 what's out there and this is helpful that we
 12 have this context. Just as an update
 13 because we're trying to make a determination
 14 here of how much money will be needed to
 15 mitigate against Muskrat Falls and you
 16 referred yesterday to General Electric, the
 17 LIL software issues. Do you have any idea
 18 when we can see electricity coming down
 19 through the LIL when the software issue will
 20 be remedied?
 21 MR. ANTONUK:
 22 A. I find the persistence of that issue
 23 troubling, without intending to cast any
 24 aspersions on management's ability to get GE
 25 to perform. I have – as I think we've been

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1 saying in our quarterly reports, we've lost
 2 confidence in the ability to have faith in a
 3 firm date. There have just been too many,
 4 too many misses. The problems are still
 5 pretty substantial. And again, I say that
 6 without intention of saying that I think –
 7 I'm not intending to say management's not on
 8 top of it and when we meet with them, it's
 9 clearly as big a concern as they have in
 10 running the business. But, no, I don't
 11 think I have an ability to state with
 12 confidence when we think the LIL will be
 13 fully functional. I think we're about due
 14 to start – every time I think we just
 15 finished the last quarter, another one's
 16 starting. So, we're going to be looking
 17 again beginning, I guess, in a couple of
 18 weeks. So, we will be issuing another
 19 report in the reasonably near future on that
 20 and I hope we'll be able to say that
 21 management sees the light at the end of the
 22 tunnel and the light's bright enough to
 23 conclude that it's just around the corner.
 24 BROWNE, Q.C.:
 25 Q. Because from our perspective, from a rate

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1 payers perspective, and I guess from what
 2 we're doing here, until the LIL is
 3 operational and there's electricity coming
 4 down, we are effectively dependent still on
 5 Holyrood and on oil, and what transpires
 6 there, but you also mentioned here a few
 7 moments ago that in reference to Holyrood
 8 and the closure of Holyrood, did you not say
 9 you were uncertain of whether or not that
 10 would happen?
 11 MR. ANTONUK:
 12 A. Yes, our reliability report, I think,
 13 attempts to make clear the need to look very
 14 carefully at reliability even after the LIL
 15 is in full and dependable operation, and to
 16 determine whether there will remain
 17 exposures that other alternatives,
 18 potentially including Holyrood, could
 19 mitigate, risk those options could mitigate.
 20 I would commend you to that report where we
 21 go into a great deal of detail on those
 22 issues.
 23 BROWNE, Q.C.:
 24 Q. So it's not inconceivable that after
 25 spending all of this money to bring

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1 electricity to the island and to the Avalon
 2 Peninsula, that we still might need
 3 Holyrood?
 4 MR. ANTONUK:
 5 A. That is not inconceivable. I don't think
 6 I'm in a position to say whether it's
 7 probable or not, but it's certainly not
 8 inconceivable.
 9 BROWNE, Q.C.:
 10 Q. In reference to your report, initially in
 11 your report part of what you were studying
 12 in the first phase of your report was
 13 financing, the federal and provincial
 14 governments, and the possibilities there and
 15 it's referenced in Phase 1 of your report.
 16 I think it's page 11, if we can just go to
 17 that, page 11 of your report and the first
 18 phase. So we're in Phase 2 now, Madam
 19 Clerk. If you can go to Phase 1, on Phase
 20 1, you were looking there at various
 21 financing options and you had these there
 22 because, I guess, you anticipate, or the
 23 Board anticipated that the federal and
 24 provincial governments would be studying
 25 these and, therefore, you were given a

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1 directive not to study them any further to
 2 avoid duplication, but from what you knew
 3 from Phase 1, what are the possibilities,
 4 what would the federal and provincial
 5 governments be looking at in terms of ways
 6 to, I guess, defer or bring down rates or
 7 find some money to deal with in the short
 8 term so we can mitigate against rates and
 9 probably postpone something for down the
 10 road. One of the things you state you're
 11 looking at is Sinking Fund Payments.
 12 Exactly how would that work?
 13 MR. ANTONUK:
 14 A. I have to – I'm not hesitating because I
 15 don't have an answer. I just want to make
 16 sure that I'm on solid ground with respect
 17 to what's public and not, so as soon as I
 18 get the green light, I'll go for it.
 19 GREENE, Q.C.:
 20 Q. It may help if I clarify. Certain
 21 information in terms of dollar amounts are
 22 only available on a confidential basis, but
 23 in terms of what the options are, they are
 24 in your Phase 1 report. I'm not sure how
 25 helpful the commissioners will find it at

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1 this point to go into a lot of detail, but I
 2 think at a high level if you identify what
 3 you found the potential options were without
 4 any knowledge of what the current
 5 discussions are, because Liberty has not
 6 been involved and has not been informed of
 7 any of the specifics of any of the
 8 discussions, nor has the Board.
 9 MR. ANTONUK:
 10 A. Okay.
 11 GREENE, Q.C.:
 12 Q. So if you stay at a high level without
 13 getting into numbers, we should be fine.
 14 BROWNE, Q.C.:
 15 Q. And if we could do a general number, I'm not
 16 interested in breaching any kind of
 17 confidentiality which may or may not be
 18 there in reference to these, a lot of them
 19 have been publicly discussed, so Sinking
 20 Funds certainly have been discussed for a
 21 while and that it's one covenant that could
 22 be looked at.
 23 GREENE, Q.C.:
 24 Q. Yes, and the fact that it could be looked
 25 at, but unfortunately the information as to

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1 the amount and the impact it would have is
 2 available in the confidential information
 3 and remember there was two days notice
 4 required if you wanted to get into the
 5 specifics of what the numbers are. So if
 6 you want to pursue it further, you would
 7 have to raise that issue with the Chair and
 8 we would have to decide how the process
 9 would continue from here if you want the
 10 numbers.
 11 BROWNE, Q.C.:
 12 Q. Well, maybe we could do it in a general
 13 fashion. If we're talking 50, 100, or 200
 14 million or in that vicinity, we can do
 15 vicinities as opposed to specifics because,
 16 I guess, the specifics change anyway. So
 17 just to get on with this, rate payers need
 18 to know, people are looking for certainty
 19 out there. It's not just a matter of the
 20 reference to the Board and the Board giving
 21 government. People are curious as to how
 22 this is going to occur, and is this a song
 23 and dance that's being done between the
 24 federal and provincial governments, or are
 25 there real opportunities here to mitigate.

Page 57	<p>1 So that's where I'm coming from to ensure</p> <p>2 rate payers out there that there are real</p> <p>3 possibilities here, and one such possibility</p> <p>4 probably would be the Sinking Fund payments.</p> <p>5 If you could just generally describe the way</p> <p>6 Sinking Fund Payments work, and we've all</p> <p>7 seen the covenants, the agreements are all</p> <p>8 out there publicly. The loan guarantees and</p> <p>9 the various financial instruments are there,</p> <p>10 they're out there. So can you just comment</p> <p>11 generally what the real possibilities are?</p> <p>12 Maybe that's the way we can approach and</p> <p>13 everyone be in general agreement, is that</p> <p>14 okay?</p> <p>15 GREENE, Q.C.:</p> <p>16 Q. That would be – I believe, Madam Chair, that</p> <p>17 would be consistent with the process that</p> <p>18 we've outlined.</p> <p>19 MR. ANTONUK:</p> <p>20 A. Randy, can you describe basically how the</p> <p>21 Sinking Funds work? I think we should stay</p> <p>22 away from amounts, right, and then I'll try</p> <p>23 to pick up and tell you how we might use</p> <p>24 something like Sinking Funds to sort of,</p> <p>25 what I'll say, manage the future rate path.</p>	Page 59	<p>1 yesterday. I think that's real Slide 15.</p> <p>2 While she's doing that, think of Sinking</p> <p>3 Funds as payments made early that have the</p> <p>4 effect of reducing payments you will make</p> <p>5 later. So thinking of Sinking Funds as</p> <p>6 moving mitigation around not necessarily</p> <p>7 increasing it. If you look at this chart,</p> <p>8 you'll see the mitigation line goes up quite</p> <p>9 substantially, and what that means there's a</p> <p>10 corresponding rate effect. Because it goes</p> <p>11 up late, we have a large – even after</p> <p>12 mitigation, we have a large spike in rates.</p> <p>13 Then we have an essentially flat path, not</p> <p>14 even moving with inflation. So think of</p> <p>15 Sinking Funds avoided in the early years as</p> <p>16 increasing the magnitude of this line you're</p> <p>17 seeing in the early years, and then in turn</p> <p>18 decreasing it in the later years. There's</p> <p>19 not a net. There's not much of a net gain</p> <p>20 or loss. It's just when you get it. What</p> <p>21 you would do with the financial alternative,</p> <p>22 Sinking Funds among them, would be to try to</p> <p>23 move the time when financial payments would</p> <p>24 be made later when there are other larger</p> <p>25 sources of mitigation available. So on the</p>
Page 58	<p>1 So can you just describe, without numbers,</p> <p>2 what the Sinking Funds are doing?</p> <p>3 MR. VICKROY:</p> <p>4 A. The Sinking Funds are established in the</p> <p>5 debt agreements, and basically the idea of</p> <p>6 the Sinking Fund Payment is to set aside in</p> <p>7 escrow funds for the repayment of the bonds</p> <p>8 at maturity. Now the Sinking Funds in this</p> <p>9 case would be applied to Tranche A and</p> <p>10 Tranche B of the FLG, and they are</p> <p>11 substantial. Now the reason that the</p> <p>12 Sinking Fund Payments are there is primarily</p> <p>13 so that the federal government is assured</p> <p>14 that the projects have the capital on hand</p> <p>15 or have the cash on hand to pay for the</p> <p>16 bonds at maturity. So it's really the</p> <p>17 Sinking Funds in this case are for the</p> <p>18 comfort of the federal government that the</p> <p>19 bonds will be repaid. This is not for the</p> <p>20 investors. This is for the federal</p> <p>21 government's comfort, we would say.</p> <p>22 MR. ANTONUK:</p> <p>23 A. Now Randy has just established the diving</p> <p>24 board, I'm going to jump in. Can you put up</p> <p>25 page 15, Slide 15, from our presentation</p>	Page 60	<p>1 whole, you wouldn't be saving customers</p> <p>2 money, you would rather be producing a rate</p> <p>3 increase path that looks a lot more like</p> <p>4 you'd see for a utility whose costs are just</p> <p>5 moving with inflation, let's say. So that</p> <p>6 was the goal of looking at those kind of</p> <p>7 alternatives. We weren't going to save more</p> <p>8 money. We were just going to be able to</p> <p>9 produce a rate path that would look a little</p> <p>10 more like what you'd see from a normal</p> <p>11 utility versus what we have here, and</p> <p>12 there's a chart that shows this, but let me</p> <p>13 just use my hands where the rate jumps like</p> <p>14 this and then stays flat for a long time.</p> <p>15 So it was really managing when customers see</p> <p>16 the benefits, not so much changing the</p> <p>17 benefits.</p> <p>18 (10:00 a.m.)</p> <p>19 BROWNE, Q.C.:</p> <p>20 Q. Back to Sinking Funds and that covenant, so</p> <p>21 what would be discussed just from a common-</p> <p>22 sense perspective is that covenant that's</p> <p>23 required by the federal government, if there</p> <p>24 were no Sinking Funds that the province had</p> <p>25 to pay annually, that would reduce the</p>

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1 amount that the province needs for Muskrat
 2 Falls, is that a fair comment?
 3 MR. ANTONUK:
 4 A. That would reduce what it needs to pay on
 5 the current basis, but it would move the
 6 obligation to pay it back, and the central
 7 point being, as Randy said, and I think you
 8 just said, that's essentially between the
 9 federal government and us because it exists
 10 to give the federal government greater
 11 comfort that the project will produce the
 12 revenues needed ultimately to pay back the
 13 debt. So if the government is willing to
 14 see that its risk position isn't changed
 15 much by losing those, or if it's willing to
 16 take additional risk if it sees it, then
 17 changes in Sinking Funds would become an
 18 option, not to increase the benefit to
 19 customers, but to provide it sooner.
 20 BROWNE, Q.C.:
 21 Q. In addition to Sinking Funds, what else
 22 would they be looking at generally in these
 23 agreements? Would they be looking at
 24 interest payments?
 25 MR. ANTONUK:

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1 A. Principally, it would be the amount of
 2 increase in the amount of debt that's
 3 allowable under those agreements. By
 4 issuing debt now, it would probably take
 5 federal guarantees to make that rate
 6 attractive, and then applying those monies
 7 to lower rates now, rates would be somewhat
 8 higher later, not by much. So on a net
 9 basis, you wouldn't be increasing the
 10 benefit, but again you would be producing a
 11 more typical future rate path rather than
 12 kind of requiring a big jump now and then
 13 kind of keeping rates flat for quite a long
 14 time.
 15 BROWNE, Q.C.:
 16 Q. So there are possibilities within those
 17 agreements which will be of assistance
 18 ultimately in the larger picture for rate
 19 mitigation for the present generation of
 20 rate payers. Is that a fair comment?
 21 MR. ANTONUK:
 22 A. Yes, that is fair, and they would require
 23 the federal government's agreement and
 24 participation, but unlike breaking up the
 25 PPA and the TFA, it would not require

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1 agreements by other parties or debt holders.
 2 It really would be a deal that could be made
 3 between basically us and the federal
 4 government, "us" meaning the province.
 5 BROWNE, Q.C.:
 6 Q. I think there's been a publicly stated
 7 figure in the vicinity of 200 million of the
 8 750 million that's required in the first
 9 year of Muskrat Falls that could be applied
 10 to that. So that would be a general figure
 11 that obviously the province has stated, so
 12 it might be a provincial objective.
 13 MR. ANTONUK:
 14 A. Yeah, I don't know what that 200 is, whether
 15 that's cash on the table, whether that's
 16 some kind of support, but the options that
 17 we're talking about are not necessarily
 18 confined to making 200 million dollars
 19 available. Again what we're talking about
 20 would not require any direct contribution
 21 from the federal government. With Sinking
 22 Funds, it would require the federal
 23 government to say I'm not going to force you
 24 to make them.
 25 BROWNE, Q.C.:

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1 Q. Yes.
 2 MR. ANTONUK:
 3 A. With respect to the other option, which is
 4 increasing debt to allowable levels under
 5 the agreements, I believe there to make it
 6 economically attractive, it probably would
 7 require a federal guarantee, but again none
 8 of that would be direct cash out of the
 9 federal government's pocket today. If it
 10 has any effect on the federal government
 11 really is a matter of whatever risk it puts
 12 on the federal government relative to non-
 13 payment of either the current debt or any
 14 debt that would be issued in addition.
 15 BROWNE, Q.C.:
 16 Q. So that would obviously be one large
 17 financial measure that could assist overall
 18 in finding some contribution, a larger
 19 contribution toward the 750 million, and
 20 there are other ways, some of which you have
 21 in your report – well, most of which you
 22 have in your report, but you didn't study
 23 oil and gas and what revenues Nalcor have in
 24 reference to oil and gas because that was
 25 outside the Board's mandate, or perceived as

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1 being outside the Board’s mandate. Is that
 2 true?
 3 MR. ANTONUK:
 4 A. That is correct. The basis on which we
 5 conducted our study was that we were not
 6 asked to look at whether mitigation sources
 7 from oil and gas were available. I don’t
 8 know that it was so much there was a direct
 9 exclusion of anything, but there was a
 10 direct statement of what we were supposed to
 11 do is the way I view it.
 12 BROWNE, Q.C.:
 13 Q. And in terms of oil and gas, did you have
 14 discussions with Nalcor or Hydro regarding
 15 their oil and gas revenues?
 16 MR. ANTONUK:
 17 A. Not their revenues, no. I profess complete
 18 ignorance as to what they even are at a
 19 general level.
 20 BROWNE, Q.C.:
 21 Q. Because we had some comments from Nalcor and
 22 Hydro in their most recent filings, sort of
 23 an admonition, you were being admonished for
 24 not looking at oil and gas. Is that not
 25 true? Did you see that, did you observe

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1 that?
 2 MR. ANTONUK:
 3 A. Yeah, I saw the statement. I couldn’t tell
 4 if we were intended to take it personally or
 5 not.
 6 YOUNG, Q.C.:
 7 Q. Well, you could -
 8 MR. ANTONUK:
 9 A. It was a statement, you know, there was not
 10 – I didn’t see a finger pointing, but I
 11 think the folks coming next week can say
 12 whether I missed a criticism or not.
 13 GREENE, Q.C.:
 14 Q. And again, Madam Chair, if you want at this
 15 point in time to discuss the mandate that
 16 the government asked the Board to look at in
 17 the reference questions which was related to
 18 the electricity industry in the province,
 19 which was why the Board did not ask Liberty
 20 to look at any other source, whether it be
 21 other sources of taxation that might be
 22 available to the province, or any other
 23 business that Nalcor might have, such as oil
 24 and gas, and as you know, the Board did
 25 advise the parties of that after seeing the

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1 filing by Nalcor. I just want to put on the
 2 record that the oil and gas mandate from the
 3 perspective of the Board was not part of the
 4 reference questions from the government
 5 addressing options in the electricity
 6 industry in the province.
 7 BROWNE, Q.C.:
 8 Q. Yeah, we all are aware of that because we
 9 all got the letter from the Board stating
 10 that, but nonetheless, from a rate payers
 11 perspective, if Nalcor or Hydro are telling
 12 rate payers that there is 2.4 billion, I
 13 think they used, available, although they
 14 didn’t give a period of time for that, we
 15 note, and granted I take the comments of my
 16 learned friend that they can address is
 17 better because they’re the ones that made
 18 the comments, but where we’re into rate
 19 mitigation and if there is a funding out
 20 there of 2.4 billion dollars which Nalcor is
 21 saying should be on the table, I think it’s
 22 not irrelevant to what we’re doing here.
 23 CHAIR:
 24 Q. I would agree, Mr. Browne, but I think, as
 25 Mr. Young said, you can ask Hydro.

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1 BROWNE, Q.C.:
 2 Q. Pardon, Madam Chair?
 3 CHAIR:
 4 Q. I agree, but you can ask Hydro perhaps next
 5 week or Nalcor next week.
 6 BROWNE, Q.C.:
 7 Q. Sure.
 8 YOUNG, Q.C.:
 9 Q. Thank you, Madam Chair. We certainly will
 10 have witnesses who can address that.
 11 BROWNE, Q.C.:
 12 Q. So you’ll speak to that next week?
 13 YOUNG, Q.C.:
 14 Q. Well, we will. However, we’ve been
 15 instructed by the Board as to what is before
 16 it, which is a little different than we
 17 first thought when that information was
 18 provided. It’s been fine tuned, I would say
 19 in that regard, because we thought it was
 20 relevant, and we can speak to that issue.
 21 It’s something like this other issue that
 22 arose this morning in a sense about matters
 23 that might be confidential. We understand
 24 that these things are generally relevant.
 25 We also understand that the Board has been

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1 given terms of reference, some further
 2 instructions, and has to make decisions
 3 about this. So we're certainly willing to
 4 act within that.
 5 GREENE, Q.C.:
 6 Q. I would like to respond to that, Madam
 7 Chair. I would point out that no
 8 information was provided by Nalcor
 9 throughout the reference period with respect
 10 to any information on oil and gas, whether
 11 the forecast were dividends, so Liberty has
 12 not had the opportunity to review the
 13 information to determine whether it's
 14 realistic. They do not know what's
 15 available by year or over the entire period.
 16 So when we say we're going to ask questions,
 17 I do want to make it clear on the record
 18 that that information was not provided by
 19 Nalcor at any time during the process, nor
 20 did Liberty have the opportunity to analyze
 21 it, nor were they asked to analyze it. So I
 22 just caution as to the level of detail we
 23 should and can get into next week about oil
 24 and gas.
 25 CHAIR:

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1 Q. I would expect it will just be at a general
 2 level, and I would go farther to say, as we
 3 indicated in our correspondence, we're not
 4 going to be addressing it in our report.
 5 BROWNE, Q.C.:
 6 Q. Yes, and I understand. I understand why
 7 because you didn't get an opportunity to
 8 delve into it, but at the same time it seems
 9 to be a late offering that's been dropped
 10 into this proceeding.
 11 CHAIR:
 12 Q. And promptly removed by the Board's
 13 directive.
 14 BROWNE, Q.C.:
 15 Q. Sure. So from a rate payers perspective,
 16 we're very interested in anyone who says
 17 there could be 2.4 billion that should have
 18 been considered for rate mitigation.
 19 CHAIR:
 20 Q. It's not something the provincial government
 21 can't – they don't have to ignore it. They
 22 can take it up as part of their discussions,
 23 but we won't be dealing with it.
 24 BROWNE, Q.C.:
 25 Q. Sure. It's nice to know, though.

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1 CHAIR:
 2 Q. Yeah.
 3 GREENE, Q.C.:
 4 Q. It might have been nicer to know even
 5 earlier.
 6 BROWNE, Q.C.:
 7 Q. I take your point. We would have enjoyed
 8 finding that out as well.
 9 CHAIR:
 10 Q. It still doesn't change our terms of
 11 reference, though.
 12 BROWNE, Q.C.:
 13 Q. So thank you, and we'll take Nalcor at its
 14 word and Hydro that they will take us on a
 15 side trip in reference to that when they
 16 give evidence because for all of us here it
 17 will be interesting information.
 18 YOUNG, Q.C.:
 19 Q. Madam Chair, I don't think that was what we
 20 said. I think we said when we provided the
 21 information, it was done in good faith.
 22 It's now clear that that's not part of the
 23 reference, and I don't expect, and I'd like
 24 to be set straight on this, but I don't
 25 expect that this will be a matter discussed

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1 next week by Hydro's witnesses and Nalcor's
 2 witnesses.
 3 CHAIR:
 4 Q. My point is, I don't think we need to have
 5 this discussion here with our consultants on
 6 the stand. Carry on, Mr. Browne, please.
 7 BROWNE, Q.C.:
 8 Q. Thank you, Madam Chair. In your final
 9 report, and I think it's page 22, if we can
 10 go to that, you make reference to Hydro's
 11 rate of return, and Hydro's rate of return
 12 is guaranteed to be the same as Newfoundland
 13 Power's rate of return because of an Order
 14 in Council. You might call it a Fiat, and
 15 the Order in Council, as you know, tags
 16 Newfoundland Power's efficient rate of
 17 return because Newfoundland Power is a
 18 private utility, and they go through Board
 19 scrutiny in reference to all matters in
 20 order to get their rate of return. Hydro
 21 doesn't have to do any of that. Hydro just
 22 takes it sort of a "me too, we get it as
 23 well". Whether they earn it or not is
 24 another matter. Are you suggesting that
 25 Hydro should have to actually earn its rate

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1 of return and be awarded a rate of return by
 2 this Board other than by way of an Order in
 3 Council?
 4 MR. ANTONUK:
 5 A. I'll say we did not think of it in that
 6 context, so give me a minute to think of it
 7 in that context. Let me tell you how we did
 8 approach it, and then I'll try to get at
 9 your question. We approached it from the
 10 point of view of how much of that return can
 11 the province afford to put to mitigation,
 12 and we tried to sort of do that from two
 13 bases. One is using the objective Hydro has
 14 and then kind of saying what would happen if
 15 we thin that objective. So we did not look
 16 at it from the point of view of what is a
 17 fair return for Hydro. We just took that
 18 current return and said how much of it can
 19 we put to mitigation. So that's just to
 20 tell you what we did do. It is a hard
 21 question to answer. It is a very hard
 22 question to answer, Hydro's rate of return
 23 from the perspective of how does it or how
 24 should it compare to that for an IOU, and
 25 the reason is that for an IOU, the rate of

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1 return needs to be set at a rate that will
 2 attract the investment that is needed to
 3 keep the business healthy, make investments
 4 and such.
 5 (10:15 a.m.)
 6 A. Public owners don't issue equity, so we
 7 don't really, we don't ever really think
 8 financially from the perspective of what
 9 rate of return does the government need to
 10 provide its investors, whoever they are, to
 11 attract money. So I don't think there's a
 12 way to do that under traditional principles.
 13 You can say what does the government need to
 14 do to attract debt investors because the
 15 government issues debt, they've got to
 16 attract, they've got to persuade people to
 17 lend them money. So you start from that as
 18 I'd say a floor, you know, you got to give
 19 them that much. Therefore, the way this
 20 always ends up getting approached is each
 21 government owner decides what they want out
 22 of their investment. I've seen this
 23 everywhere from generation and transmission
 24 cooperative to municipal utilities, all the
 25 way up to massive G and T authorities like

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1 the New York Power Authority, one of the
 2 biggest in the country. So what you
 3 generally see are two things then, one is a)
 4 how much in funds from operation do you need
 5 to make your debt remain attractive and make
 6 the debt financial community comfortable
 7 that you're self-sustaining. And then the
 8 other thing you tend to do is compare among
 9 the various government owners and use that
 10 as a leveler to say, well, if they're all
 11 asking for a range between 7 to 9, that's
 12 how you end up saying that's what looks
 13 reasonable. But I think even the word
 14 "reasonable" is difficult there because, you
 15 know, in theory if I were the mayor of a
 16 municipal utility and I had a really low
 17 cost source of power and the investor own
 18 utilities all around me had to charge 5
 19 cents, I'd think I could make a pretty good
 20 case of saying, well, I'm going to charge 4
 21 ½ cents and then I'm going to build the
 22 money to build roads to improve schools, so
 23 I really think you get into a situation
 24 where if you go anywhere beyond saying how
 25 much equity do they need to be self-

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1 sustaining and how much does the owner
 2 decide it needs to get as its return, its
 3 tribute, its margin, whatever you want to
 4 call it, I have trouble going much beyond
 5 that in terms of saying, you know, how much
 6 is appropriate to earn as a rate of return.
 7 So I tend to look at things like what's the
 8 rate of return here look like compared to
 9 others, and then I would take that, if I
 10 were the Commission, and say, well, if I
 11 reduce that return, what effect is it going
 12 to have on the ability to earn enough funds
 13 to stay self-sustaining, and there's a big
 14 range in there, so I don't think you'll ever
 15 get me in a position of saying there is one
 16 rate of return for Hydro that is too high or
 17 too low. There's no magic line there. The
 18 key is making sure they have enough funds
 19 from operation to be self-sustaining and
 20 then having the regulator recognizing the
 21 interest of the government, as owner, and
 22 what it's doing with those returns, say
 23 what's fair. And I don't see anything wrong
 24 with 8 ½, it's pegged at a fairly typical
 25 rate in the provinces. If this Commission

<p style="text-align: right;">Page 77</p> <p>1 decided it wanted to significantly lower 2 that rate for customer objectives because 3 they wanted to keep rates down, I think as 4 long as you give them enough funds for 5 operation, you're in good shape, then I 6 think it's just a matter of, you know, the 7 government kind of telling you in one way or 8 another, however they express their pleasure 9 or displeasure with you, I don't like that, 10 because now you've taken away money I'm 11 using for hospitals or roads. So I think 12 this is a very fuzzy issue and it's not 13 driven by logic; it's really driven by a 14 balance of assuring that the utility keeps 15 enough funds to be self-sustaining, figuring 16 out from a customer perspective what's 17 affordable and then doing that all with 18 reference to the fact that you need to 19 understand that whatever you take away from 20 that rate of return leaves the government 21 with a need to either adjust the level of 22 service it provides or find another funding 23 source for it. Sorry, but I don't think you 24 can – 25 BROWNE, Q.C.:</p>	<p style="text-align: right;">Page 79</p> <p>1 move on to the next mission. I think Hydro 2 paid a price for some things that we said 3 were not done prudently and the Board 4 agreed. So I think there is some 5 accountability there. I think there is also 6 accountability when Hydro comes in for a 7 rate case, I believe the Board actually, and 8 again, we didn't do this so I may be wrong, 9 but I think the Board has said things like 10 your staff, "we're not accepting cost rates 11 based on staffing that's at your level, 12 we're knocking some out." So there is 13 accountability there, there's also 14 accountability when capital projects get 15 reviewed. The Board has the power to say 16 "No, we don't approve those expenditures." 17 So I think the Board has a reasonable set of 18 tools. I think I can make a theoretical 19 argument that it would be good if the Board 20 had more flexibility with respect to rate of 21 return, but again, even if you gave the 22 Board that flexibility, the Board and you 23 know what the government is doing with its 24 money and I think when you need to know that 25 if you use that flexibility, if you had it,</p>
<p style="text-align: right;">Page 78</p> <p>1 Q. Yes, and I appreciate what you're saying, we 2 know why the government has set it at that 3 particular rate, rate of return, but in 4 terms of the general topic of efficiencies 5 and largesse and all that goes with that, if 6 one utility, Newfoundland Power, has to 7 bring forward all its efficiencies and show 8 where everything is and the lay of the land 9 and are scraping through to make sure that 10 they are a lean mean machine before coming 11 before the Board to even suggest a rate of 12 return or any kind of an increase or where 13 they should be, and the other utility 14 doesn't have to do any of that, what kind of 15 efficiency does that signal to the other 16 utility, to Hydro in this instance? 17 MR. ANTONUK: 18 A. I think it would be improper for the Board 19 to assure Hydro recovery of all of its cost 20 and a 8 ½ percent return regardless of 21 whether Hydro is operating prudently or not, 22 but it wasn't all that long ago we were here 23 fussing pretty hard over that and the Board, 24 I think, I usually don't look at kind of 25 what Boards do after we leave, we like to</p>	<p style="text-align: right;">Page 80</p> <p>1 that if you cut the rate of return, you're 2 making government make some tough decisions, 3 so I don't know if that flexibility really 4 would change much. I think it would make 5 your life a little tougher, you know, 6 because you'd be kind of in the middle of 7 those things now of making that decision 8 about, you know, what needs am I pushing off 9 the government if I cut returns, so 10 theoretically I like it, but I think about 11 if I were sitting up there, I might have a 12 different view of having to make those kind 13 of decisions. 14 BROWNE, Q.C.: 15 Q. And it's interesting you should say that 16 because the first time that Hydro came 17 forward when it was put under the 18 jurisdiction of the Board to seek a rate of 19 return and I'm going back a ways there, but 20 I think it's around 1996 or thereabouts, and 21 the Board had a dilemma in setting its rate 22 of return because of all the other things 23 that Hydro does out there which affects 24 government policy, but I think at the end of 25 the day they set the rate of return of</p>

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1 somewhere less than 4 percent and therefore,
 2 I guess what we had was the government
 3 involvement then trying to cope with what
 4 they needed out of Hydro and so on. But
 5 what we're doing here, in trying to find
 6 efficiency and ways and means to ensure
 7 consumers are getting good value and not
 8 forgetting the fact that the entire problem
 9 of what we're doing here emanates from
 10 Nalcor and Hydro, they caused this, that by
 11 reducing Hydro's rate of return would there
 12 be more, some more money available to
 13 mitigate against rates, would that be a
 14 simple proposition?
 15 MR. ANTONUK:
 16 A. It is quite simply true that their return
 17 can be reduced without foreclosing their
 18 development of a needed equity base and
 19 there is no doubt that reducing that return
 20 would provide mitigation. We actually took—
 21 and we actually tried to show that full
 22 amount and the amount you see us showing is
 23 attributable to the returns the province
 24 receives from Hydro was intended very
 25 specifically to say if you accept 25 percent

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1 as a target, this is how much you can gain
 2 by either having the province return those
 3 monies it makes or dropping it from rates in
 4 the first place. Then we said, well, 25 not
 5 necessarily the rate target, you can thin
 6 it, what we tried to show is what happens if
 7 you reduce that equity amount and we didn't
 8 pick that, the minimum amount we think will
 9 work, but what we did show is that if you
 10 reduce it from 25 percent and set rates on
 11 the basis of achieving 20 percent, you get
 12 about 110 million more dollars now when
 13 other sources of mitigation are low, but you
 14 will lose that 110 million when mitigation
 15 sources are high. So on a net basis you
 16 haven't done anything, but what you have
 17 done is instead of having rates go, like
 18 this, they go like a little lower in the
 19 earlier years and they don't go much higher
 20 in the later years, so you produce a more
 21 typical pattern of growth you'd see in the
 22 industry which is utility rates growing by
 23 somewhere on the order of inflation,
 24 subject, of course, to every utility now and
 25 then has a big investment that causes a step

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1 increase. So I think we tried to do what
 2 you're saying, but we expressed it as a pod
 3 because, said I said, if you take that money
 4 and apply it to rates, you're taking it away
 5 from the government to use for other sources
 6 and in effect, I think all our job here is
 7 to tell the government what can be done and
 8 I think what we ought to make clear to the
 9 government is here's how much we're asking
 10 you to give up and that's what this part of
 11 it is all about. And then they're going to
 12 decide how much of it they can give up,
 13 based on whatever considerations they apply.
 14 BROWNE, Q.C.:
 15 Q. At least it's an avenue that should be
 16 mentioned.
 17 MR. ANTONUK:
 18 A. Sure. I think it's an avenue that should be
 19 pursued, it's a valuable one and I think
 20 it's a question of how far and how much.
 21 BROWNE, Q.C.:
 22 Q. You mentioned already about reducing Hydro's
 23 equity and I think they're at about 19
 24 percent, but they are able to go to 25,
 25 that's their target. So by moving it back

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1 to 20 percent, they really wouldn't be too
 2 far from where they are actually, would it?
 3 MR. ANTONUK:
 4 A. That's correct and it would be even higher
 5 than some others.
 6 BROWNE, Q.C.:
 7 Q. Yes, there are others out there and I think
 8 you gave a schedule there of various
 9 equities that are there throughout Canada.
 10 MR. ANTONUK:
 11 A. Yes.
 12 BROWNE, Q.C.:
 13 Q. And certainly they're within a range, Hydro
 14 is within a range, maybe at the higher end
 15 of the range even at 25 percent, but in
 16 reality a lot of them are striving for
 17 higher equities, but in reality they're down
 18 below 20 percent.
 19 MR. ANTONUK:
 20 A. I think that's right, I think you will find
 21 the 25 percent target is not out of order
 22 and I think you will also find that
 23 companies operating at significantly below
 24 that 25 percent, that's also not out of
 25 order, that's the typical situation.

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1 BROWNE, Q.C.:

2 Q. And mindful of the province’s financial

3 situation and debt rating agencies, the

4 credit rating agencies, if it were to—that’s

5 why you’re suggesting 20 percent and you’re

6 being cautious, because of that if you

7 suggested 15 percent or 10 percent, that

8 might have ramifications?

9 MR. ANTONUK:

10 A. It might, yes, and we did not study that.

11 We have done that in other situations, it

12 can be studied, you can make some judgments.

13 You will never get the firm, you know, line

14 in the sand below which you won’t go, but

15 that was not part of what we did. I’m

16 certain that’s what the government is going

17 to do, I hope that’s what the government is

18 going to do because they need to do it

19 right, because the way financing occurs

20 here, if there are adverse financial

21 consequences at Hydro, they affect right now

22 all the debt that the government issues

23 because that’s how the government issues

24 debt for Hydro under the current financial

25 strategy and policies of the government.

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1 (10:30 a.m.)

2 BROWNE, Q.C.:

3 Q. Sure, and your prudence is noted, but at the

4 same time if we can move it from 25 to 20

5 percent, that’s 110 million over what period

6 of time did you say?

7 MR. ANTONUK:

8 A. I think 4 years.

9 BROWNE, Q.C.:

10 Q. Over 4 years, that is not insignificant

11 given the situation with which we find

12 ourselves.

13 MR. ANTONUK:

14 A. No, it’s not inconsiderable, but remember

15 that 111 (sic.) that you gain in those four

16 years, you will lose in later years, so

17 again the value is producing a stable kind

18 of rate incline, it’s not producing more net

19 dollars for mitigation. It just moves when

20 you get those dollars.

21 BROWNE, Q.C.:

22 Q. But for this generation of rate payers who

23 are about to deal with this situation, it’s

24 not necessarily a bad thing.

25 MR. ANTONUK:

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1 A. It’s not at all a bad thing, no, I think

2 that’s a call that’s going to have to be

3 made by those who—sorry, I should look at

4 you because you are those, who are charged

5 with deciding what kind of rate path you

6 want to produce.

7 BROWNE, Q.C.:

8 Q. Now you hint at some more savings which may

9 be available, some more mitigation which may

10 be available, on page 7 of your report, if

11 we can go to page 7 of your September 2,

12 2019 report, Madam Clerk. And you’re

13 dealing with the issue of Hydro and

14 Newfoundland Power integration and you

15 decided to stay away from that because there

16 are no values, no real values that would

17 come out of these type mergers ultimately, I

18 think that was your comment?

19 MR. ANTONUK:

20 A. I think that’s fair, the values we

21 identified were subject to such substantial

22 risk that we thought that ability to execute

23 on them was too uncertain, so it was likely

24 that you would not—it was a very high risk,

25 you wouldn’t even attain the dollars that we

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1 identified as possible.

2 BROWNE, Q.C.:

3 Q. And we have to be very careful in reference

4 to that as well because as you’re aware,

5 Hydro does not pay income tax, but

6 Newfoundland Power does and that’s

7 ultimately paid for by rate payers.

8 MR. ANTONUK:

9 A. Correct.

10 BROWNE, Q.C.:

11 Q. So we want to be very careful of moving any

12 kind of large rate base items into

13 Newfoundland Power because it could have an

14 interesting effect for rate payers

15 generally.

16 MR. ANTONUK:

17 A. It would be a negative for customers.

18 BROWNE, Q.C.:

19 Q. Sure. Your last paragraph is sort of

20 interesting, if not timely, because on page

21 7 you say, right above paragraph 3, “In

22 addition, we found striking the nearly 0.5

23 billion dollars and five-year capital

24 spending, Hydro and Newfoundland Power

25 combined have identified reductions in the

Page 89	<p>1 amount of capital spending will reduce</p> <p>2 revenue requirements as much or greater than</p> <p>3 those obtainable through reorienting the</p> <p>4 longstanding division of responsibility that</p> <p>5 exists in the province for providing</p> <p>6 electricity service.” Now, we have two</p> <p>7 capital budgets we’re looking at currently,</p> <p>8 by way of example, Newfoundland Power is</p> <p>9 seeking 96 million, Hydro is seeking one</p> <p>10 hundred and something million, so between</p> <p>11 the two of them, they’re looking for 200</p> <p>12 million dollars in capital spending, and as</p> <p>13 you are aware, we’re in a rate base system</p> <p>14 here, so they’re not disinterested, either</p> <p>15 utility, from spending to increase their</p> <p>16 rate base. From Newfoundland Power’s</p> <p>17 perspective that helps its shareholder and</p> <p>18 that’s fair, that’s the system we have right</p> <p>19 now, and it also affects Hydro. But can you</p> <p>20 expand upon that? We’re in difficult times</p> <p>21 here now and for these utilities to be</p> <p>22 presenting large capital expenditure budgets</p> <p>23 to the Board, seems to be out of sync with</p> <p>24 what we’re trying to do here. And I pity</p> <p>25 the Board because they bring these large</p>	Page 91	<p>1 programs from the perspective always of how</p> <p>2 they will affect service quality and</p> <p>3 reliability verses what you’re paying for.</p> <p>4 I don’t think that’s ever irrelevant. I</p> <p>5 think they way you look at it in what I’d</p> <p>6 call a steady stay, where costs are moving</p> <p>7 kind of as you’d expect based on changes in</p> <p>8 the consumer price index, whatever your</p> <p>9 metric is, is different from where we are</p> <p>10 now. I think now, if nothing else, the</p> <p>11 analysis of capital programs has to consider</p> <p>12 another factor. Even if you decide that you</p> <p>13 need it, even if you decide that on the</p> <p>14 whole it’s cost effective, I think you have</p> <p>15 to look, if nothing else, now very closely</p> <p>16 at what risk will we be taking by deferring</p> <p>17 some of those projects, and by doing so, you</p> <p>18 can have consequences that are good, you can</p> <p>19 say we’ll save in rates now and when we put</p> <p>20 them in the effective inflation or whatever</p> <p>21 it is, will be worth the small extra cost we</p> <p>22 pay for putting them in later. Some</p> <p>23 investments you may say they are so critical</p> <p>24 that we aren’t going to defer them, even if</p> <p>25 we could save money because we think</p>
Page 90	<p>1 capital budget applications before the Board</p> <p>2 and I’m not unempathetic because they say</p> <p>3 essentially unless we do a), b), c), d) and</p> <p>4 do it over this period of time, we could</p> <p>5 lose electricity, that’s essentially what</p> <p>6 they’re saying, that’s implicit. And</p> <p>7 indeed, I’ve been before this Board on</p> <p>8 occasion dealing with capital budgets and</p> <p>9 one of the utilities actually brought in</p> <p>10 rusty bolts that they found, bit of a “show</p> <p>11 and tell” along their transmission line to</p> <p>12 emphasize the point if you are challenging</p> <p>13 them for building a particular transmission</p> <p>14 line, “these appear, look what we found”,</p> <p>15 show and tell, Kindergarten. So, how can we</p> <p>16 cope with these large budget applications in</p> <p>17 the Muskrat era, can you help us there?</p> <p>18 MR. ANTONUK:</p> <p>19 A. Yes, I’m going to say I’ve seen my share of</p> <p>20 rusty bolts that are still good bolts, but</p> <p>21 that’s a different issue.</p> <p>22 BROWNE, Q.C.:</p> <p>23 Q. You did that trick as well.</p> <p>24 MR. ANTONUK:</p> <p>25 A. I think you do need to look at capital</p>	Page 92	<p>1 reliability would be threatened at a level</p> <p>2 that is troubling. So I think you really</p> <p>3 need to do, I’m going to refer you to our</p> <p>4 reliability report, it’s exactly what we</p> <p>5 said in the reliability report here is that</p> <p>6 you can sit here and look at reliability</p> <p>7 standards in the abstract and say, oh, we’ve</p> <p>8 got to have this, but I think we’re in a</p> <p>9 position now where we have to say, well, we</p> <p>10 don’t got to, we ought to, but if we don’t</p> <p>11 do it, you know, what risks—how do we</p> <p>12 measure the risks we’re taking and are those</p> <p>13 risks enough to say we would rather give</p> <p>14 customers a short-term break on rates</p> <p>15 because I think we all are from, I don’t</p> <p>16 know if we all are, but I’m with you,</p> <p>17 customers need a break, particularly in the</p> <p>18 short-run here. Even if you do everything</p> <p>19 we said, even if the province gives up every</p> <p>20 penny we identified, we still have a rate, a</p> <p>21 pretty significant rate jump coming in the</p> <p>22 near term, so I don’t know if it’s too</p> <p>23 early, too late or not to deal with it in</p> <p>24 this capital budget, but I do want to say</p> <p>25 that this is the time to look very carefully</p>

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1 at what we can delay, what we will be
 2 risking and what we will be saving by
 3 undertaking that delay.
 4 BROWNE, Q.C.:
 5 Q. Now the ordinary measurement for reliability
 6 in the SAIDI and SAIFI regulating, all the
 7 regulators are governed by those and in the
 8 case of Newfoundland Power, their frequency
 9 of outages and the length of outages, they
 10 are much, much, much better than the
 11 national average in that regard. They have
 12 fewer nationally than most other utilities
 13 in terms of they have a really good record.
 14 So they present the Board with this record
 15 and at the same time are presenting a large
 16 capital budget, at what point does that
 17 count? Are they overbilling, are they over
 18 capitalizing? We've never going to have a
 19 perfect system, at some point the lights
 20 will go out for some reason or another.
 21 MR. ANTONUK:
 22 A. Yeah, I think the way you need to look at it
 23 is not at a global level of where they are
 24 now and use that as an indicator of where
 25 they will be, whether they spend money or

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1 not. I think you have to try to look as
 2 best you can at the incremental change. So
 3 if you're at a level, let's assume we're at
 4 a level of reliability with which we're
 5 comfortable and I have to do this on
 6 assumptions because I'm not, I don't have
 7 the data you have on it. I would say then
 8 you have to look at what are you spending
 9 and tell me what non spending that or the
 10 avoidance or the elimination of the delay of
 11 this project or that project, what effect
 12 will that have? You have to put the company
 13 to the burden of showing you that. That's
 14 how we value the logic of capital
 15 expenditures when we do it. And then,
 16 frankly, we have seen cases where—we're just
 17 finishing one now, where utility was in the
 18 dumps on reliability, they engaged in a
 19 really admirable program to improve
 20 reliability quickly and they did it. They
 21 actually went, I think from the third
 22 quartile to the first quartile. Now, what's
 23 the problem? Well the problem is they're
 24 proposing the continuation of all the
 25 programs that got them to the first

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1 quartile, so the question becomes where do
 2 you go next, you know. You could be No. 1 I
 3 guess in the country, but it's time to step
 4 back and say what programs do we need to
 5 sustain where we are, and if want to get
 6 better—and there are still ways to get
 7 better that are worth it. For example, some
 8 forms of automatic meter reading will allow
 9 the company to tell much quicker where
 10 outages are and get to them quicker. So you
 11 can still do things that are cost effective,
 12 but as I'm saying, I think you've got to
 13 look at every program that has material
 14 dollars to it and say, what's the difference
 15 if we don't spend it? How do we measure
 16 that difference? It's not always easy or
 17 straightforward, but it's always doable.
 18 BROWNE, Q.C.:
 19 Q. When you made your comment here on page 7
 20 concerning the reductions in amount of
 21 capital spending, had you studied the
 22 capital budgets or what led you to these
 23 comments?
 24 MR. ANTONUK:
 25 A. What we've been talking about is given the

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1 need to look at ways to reduce rates and
 2 given the fact that it's much harder to
 3 reduce them in the near term than it is over
 4 the full 20 years, we wanted to kind of
 5 inject just what we're talking about, this
 6 whole notion of showing the value to be
 7 gained by doing it, the consequences of
 8 delaying it and then assessing whether there
 9 are real opportunities to delay things that
 10 cost big money, because then you will be
 11 able to smooth out the rate path. It was
 12 not a concern about whether the Board's
 13 process is adequate or not, I think it's
 14 fine, it's often done after the fact in the
 15 US and that's troubling because then you
 16 really have to kind of get to a level of
 17 showing imprudence to say something, you
 18 know, some costs should not be recovered.
 19 So there's merit in doing it this way, but
 20 you know, it does take an effort if you do
 21 it this way, it takes effort on the Board's
 22 part, it takes effort on the part of people
 23 like you who have interest to bring before
 24 the Board's attention.
 25 BROWNE, Q.C.:

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1 Q. Should there be an annual cap put on capital
 2 spending in this situation so that the cap
 3 annually is 40 or 50 million dollars, you
 4 prioritize your projects around that cap,
 5 would that be a way of dealing with it?
 6 MR. ANTONUK:
 7 A. I wouldn't do that in a flat way, but what's
 8 intriguing about what you raise is the
 9 notion of saying show we what you're going
 10 to do if I only give you "X". Tell me
 11 what's going to happen if you only spend
 12 "X". I think that's a more, that sounds
 13 like a more tender hearted way of doing one.
 14 MR. CELLARS:
 15 A. I like that.
 16 BROWNE, Q.C.:
 17 Q. I notice Mr. Cellars is trying to get in
 18 there. Do you have a comment on that?
 19 MR. CELLARS:
 20 A. No, no, I can agree with everything John
 21 said, I mean, what he said is exactly true.
 22 A cap is a good start and then you look at
 23 the one off from there and you, it's never
 24 the end, but it does produce a real critical
 25 thought.

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1 MR. ANTONUK:
 2 A. I think the approach you're recommending I
 3 wouldn't offer as a kind of a sustaining way
 4 of doing it.
 5 MR. CELLARS:
 6 A. Right.
 7 MR. ANTONUK:
 8 A. I think it will lead to short-sighted
 9 decisions, but I think under the
 10 circumstances that kind of a look, it's
 11 interesting. I don't want to say I'm
 12 recommending it because, you know, you hit
 13 me with it kind of –
 14 BROWNE, Q.C.:
 15 Q. You want to think about it.
 16 MR. ANTONUK:
 17 A. Yeah, it wasn't exactly a soccer punch, but
 18 I wasn't expecting, so I'd like to think
 19 more before I say that's what the Board
 20 ought to do by getting some sense of what
 21 burdens that would put on the Board, but it
 22 is an option. I would say it this way, from
 23 management's perspective in the interest of
 24 my customers, I think I would certainly be
 25 thinking that way now in terms of what I'm

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1 bringing before the Board.
 2 (10:45 a.m.)
 3 BROWNE, Q.C.:
 4 Q. Did you deal in reference to this comment,
 5 the duplications, for instance Newfoundland
 6 Power has 25 million dollars over, I think a
 7 four or five year period has been approved
 8 for improvement of its information systems.
 9 Well, I mean, you know, Hydro is looking for
 10 something similar, is out there now with new
 11 information systems. Couldn't there be
 12 mergers there in the interest of rate payers
 13 so there could be one information system
 14 that they share and track according to their
 15 usage for the regulated verses the
 16 unregulated and so on?
 17 MR. ANTONUK:
 18 A. I think on a steady state basis there might
 19 be some very small savings. I don't think
 20 I'd recommend that as long as they each
 21 remain responsible for their own customers
 22 because there are ramifications of making
 23 them use the same system in terms of how
 24 they staff, how they train, all of that. I
 25 would be concerned that the small gain you

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1 might get though a common system would be
 2 wiped out by all the changes they would have
 3 to make. If there's benefit in commonality
 4 that kind of gets my attention, it's more,
 5 you know, if you're going to start doing
 6 more with respect to customers' ability to
 7 influence their usage of the kind of
 8 information customers should have about
 9 usage so they can make decisions about
 10 conservation measures, that sort of thing.
 11 I see value there in kind of requiring the
 12 companies to do similar things so that their
 13 customers have the same kind of access to
 14 choices, to knowledge about what they're
 15 using, so those sort of things, I think.
 16 But for the most part I think a lot of those
 17 are not that hard to develop within the
 18 context of their own system. It's more a
 19 matter of the Board saying, you know, we
 20 want you to make sure customers have this
 21 kind of information, that kind of
 22 information. So I don't see a lot of
 23 dollars there. You know, we looked pretty
 24 closely at combining the customer service
 25 functions and I will say that I think when

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1 we started, we saw that as the most likely
 2 source of gain. It just seemed almost
 3 illogical to have one company serving so
 4 many people at retail and then Hydro serving
 5 here or there or the next place. I think it
 6 was surprising when we dug into it that the
 7 savings there weren't as nearly as great as
 8 we thought they were going to be.

9 BROWNE, Q.C.:
 10 Q. Well I guess savings is in the eye of the
 11 beholder from a rate payer who is paying for
 12 both, any savings.

13 MR. ANTONUK:
 14 A. Well I think that's fair and we certainly
 15 went from that premise. We cranked the
 16 numbers first and we saw some dollars there,
 17 but as we said earlier, I think when we
 18 looked at what it would take to accomplish
 19 those changes, there were things that were
 20 going to wipe out a portion of that directly
 21 and there were risks that we think were much
 22 more likely than not to wipe out most, if
 23 not all of the remainder, so –

24 BROWNE, Q.C.:
 25 Q. Was there anywhere else when you studied

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1 that area of duplications, just based on
 2 your comment, where you saw some promise in
 3 combining services for the benefit of
 4 reducing costs?

5 MR. ANTONUK:
 6 A. No, I think we looked at all the areas of
 7 potential. I think the one that we didn't
 8 really get as far along as I had hoped we
 9 would, was in common purchasing. I think
 10 opportunities remain there. I think they
 11 would effectively require Hydro to have the
 12 same purchasing flexibility that
 13 Newfoundland Power has to be able to capture
 14 them, and the barriers, I don't want to call
 15 them "barriers", the rules under which Hydro
 16 operates are statutory, so that barrier is
 17 not inconsiderable, but I don't think we
 18 were ever able to kind of get the dialogue
 19 between the companies far enough along to
 20 nail that one down, but I think we still
 21 think they are potentially some dollars
 22 there that continue to be worth exploring
 23 and we encourage that. I believe Hydro
 24 acknowledge the value in that discussion. I
 25 don't remember exactly what Newfoundland

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1 Power said in its filing about that option,
 2 but I certainly don't recall them opposing
 3 it. So I would hope that those discussions
 4 would continue and be transparent to the
 5 Board and the stakeholders. It would be
 6 good to see those come to some kind of
 7 resolution in a way that has transparency.

8 BROWNE, Q.C.:
 9 Q. In terms of systems and the different
 10 systems that are out there, in the Muskrat
 11 era, does this rate base system make any
 12 sense at all? Should we be looking at
 13 alternatives?

14 MR. ANTONUK:
 15 A. Yeah, you're talking about maybe performance
 16 based rate making, something like that. You
 17 know, we—forgive me for saying "me", I'm not
 18 being presumptuous, maybe I'm starting to
 19 feel comfortable here, you all face a need
 20 to swallow the cost of the LCP. There's not
 21 really any way around that. The financial
 22 consequences of default under those
 23 agreements are just horrific to contemplate.
 24 So I don't really see anything, other than
 25 saying as bad as it sounds and as harsh as

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1 it sounds, customers have to take the
 2 medicine for what's happened. So no, I
 3 don't with respect to what's happened so
 4 far. I do, as I tried to emphasize
 5 yesterday, think that it's important for the
 6 Board to have a role in kind of making sure
 7 that the costs going forward are managed
 8 effectively. I talk, I think pretty
 9 directly, about Board oversight of
 10 continuing cost, but you know, there is 13
 11 or however many billion it ends up being out
 12 there that we just have to deal with. So I
 13 think the issue becomes where do you go from
 14 here?

15 BROWNE, Q.C.:
 16 Q. Would it make any sense in reference for
 17 Newfoundland Power to be placed in some kind
 18 of, would it be better for them and probably
 19 better for us if they had some flexibility?

20 MR. ANTONUK:
 21 A. I haven't thought about it in their context,
 22 so I can only tell you my general view. I
 23 have, in all the cases I have found that
 24 have attempted to use some sort of metrics
 25 or standard, I've had trouble getting

Page 105	<p>1 comfortable with the standard adopted was a</p> <p>2 correct one, and correct more from the</p> <p>3 perspective of customers than the company.</p> <p>4 I've seen a lot of incentive methods that</p> <p>5 say if you do well here you will get</p> <p>6 rewarded, or if you don't do well there, you</p> <p>7 will get penalized. My problem is that they</p> <p>8 way I've seen that work is there are usually</p> <p>9 four or five metrics, so if I have my own</p> <p>10 company I can say I'm not going to get</p> <p>11 anywhere close on metrics one, so I'm not</p> <p>12 spending a lot of attention time or money</p> <p>13 there, I'm going to move over to metric two</p> <p>14 where I'm on the cusp of reward or penalty,</p> <p>15 so I'm going to put my resources there. So</p> <p>16 what happens? You get a very small gain in</p> <p>17 metric two, company makes profit and then</p> <p>18 performance on metric one goes to you know</p> <p>19 where. So conceptually I don't have a</p> <p>20 problem with it, but I have not seen, nor</p> <p>21 have I devised some way to set a standard</p> <p>22 that I think is going to set a full holistic</p> <p>23 set of incentives that's going to be</p> <p>24 consistent both with keeping service at high</p> <p>25 levels and promoting effective costs. So if</p>	Page 107	<p>1 I said, I can say, my optimum performance</p> <p>2 says to hell with metric one, I'm going to</p> <p>3 go for metrics two, three and four and I'm</p> <p>4 going to make a small enough gain in those</p> <p>5 to make incentives and then I'm going to</p> <p>6 sort of leave number one with a major drop</p> <p>7 in performance. And I look at all that and</p> <p>8 I say, wait a minute, on a net basis nothing</p> <p>9 has changed for customers, I've just put all</p> <p>10 my resources in three of the five or four of</p> <p>11 the five, or short verses long run and</p> <p>12 that's even more serious, is I can do</p> <p>13 something with my expenditures now to make a</p> <p>14 gain and then sort of I'll worry about the</p> <p>15 chickens coming home to roost in three</p> <p>16 years, four years or five years, and if I'm</p> <p>17 a CEO and I've got three years left, do I</p> <p>18 really worry about whether my production of</p> <p>19 gains under an incentive system is going to</p> <p>20 leave my successor with a problem or not.</p> <p>21 Like I said, I just have never seen a</p> <p>22 sufficiently holistic approach to make me</p> <p>23 comfortable that it's in the long run.</p> <p>24 BROWNE, Q.C.:</p> <p>25 Q. And it's fair enough, and you haven't</p>
Page 106	<p>1 you can show me a way that made me think</p> <p>2 there was no way to gain in the system, then</p> <p>3 I'd sure be interested because I like it,</p> <p>4 because I'm a firm believer, as I said</p> <p>5 yesterday, in the fundamental concept that</p> <p>6 regulation is a substitute for competition.</p> <p>7 There are many ways to potentially to</p> <p>8 substitute for it.</p> <p>9 BROWNE, Q.C.:</p> <p>10 Q. Because it's my understanding that Fortis</p> <p>11 Energy companies in Ontario and Alberta are</p> <p>12 into some form of performance based rate</p> <p>13 making, are you familiar with that?</p> <p>14 MR. ANTONUK:</p> <p>15 A. I'm not. I don't know what its scope,</p> <p>16 nature or results are there. I just know</p> <p>17 every one I've looked for, I've sort of put</p> <p>18 myself in the position of the company and</p> <p>19 say I think I can gain it. Sometimes it's</p> <p>20 gain –</p> <p>21 BROWNE, Q.C.:</p> <p>22 Q. What do you mean you can gain, what are you</p> <p>23 suggesting there?</p> <p>24 MR. ANTONUK:</p> <p>25 A. Well if there are a number of metrics, like</p>	Page 108	<p>1 studied it in this context, but it's</p> <p>2 certainly is something we will be</p> <p>3 recommending that the Board recommend to</p> <p>4 government that some form of performance</p> <p>5 based rate making be studied and</p> <p>6 particularly for the private enterprise</p> <p>7 Newfoundland Power that's mutually</p> <p>8 beneficial to the utility and to the rate</p> <p>9 payer. Do you think it's worthy of study?</p> <p>10 MR. ANTONUK:</p> <p>11 A. That's a hard one because I'm not—I sort</p> <p>12 have thought about it and I like it</p> <p>13 conceptually, but I guess I've just seen too</p> <p>14 many times, all the times it just doesn't do</p> <p>15 what I think it ought to do, so I think I'm</p> <p>16 kind of pessimistic that anything will come</p> <p>17 out of it, but, you know, it would be nice</p> <p>18 to think something could. So I think it</p> <p>19 becomes a question of with all the things</p> <p>20 that the Board has to decide is this</p> <p>21 something—how much attention is this worth</p> <p>22 verses other opportunities.</p> <p>23 BROWNE, Q.C.:</p> <p>24 Q. Well when we're spending 200 million</p> <p>25 annually on capital budgets, it's worth a</p>

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1 lot.
 2 MR. ANTONUK:
 3 A. I agree completely with the importance of
 4 focussing on capital expenditures.
 5 BROWNE, Q.C.:
 6 Q. So you'd see why we would suggest there
 7 might be merit in studying this because
 8 these huge capital expenditures are
 9 unsustainable in the Muskrat era the way
 10 they are currently devised, that the utility
 11 can just come forward and pretty well get
 12 what they're looking for and as I said
 13 before, I'm not unempathetic to the Board
 14 because, you know, the implication give us
 15 this or you're responsible when the lights
 16 go out, and that's hardly a fair
 17 presentation, but it's there, it's implicit
 18 in it.
 19 MR. ANTONUK:
 20 A. I think we've talked a lot about sort of the
 21 difficulties and again, I'm going to tell
 22 you I think the key thing for me in the
 23 short run is the whole question of would we
 24 be taking material reliability risk or not
 25 in deferring projects. I sort of see that

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1 in the short term of much more –
 2 BROWNE, Q.C.:
 3 Q. Sir, while we're waiting or studying the
 4 issue, because remember, we have examples in
 5 Ontario and Alberta of the same company that
 6 owns Newfoundland Power that seem to be in
 7 some kind of a performance rate base and I
 8 admittedly haven't studied the particular
 9 yet, but I'm looking forward to the
 10 opportunity. But in the meantime, yes, we
 11 do have to deal with these capital budget
 12 issues, so maybe the cap is the way to go or
 13 something similar.
 14 MR. ANTONUK:
 15 A. Yes, and subject to the –
 16 BROWNE, Q.C.:
 17 Q. Subject to the discretion of the Board.
 18 MR. ANTONUK:
 19 A. - subject to everything I have said about it
 20 before without hopefully having to remember
 21 it and repeat it.
 22 BROWNE, Q.C.:
 23 Q. Okay, well it's 11:00 now. I will be about
 24 another half hour, I think. I just want to
 25 caucus with my colleagues and see the few

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1 remaining areas that I have to –
 2 CHAIR:
 3 Q. Okay, we will break now and reconvene at
 4 1:30.
 5 BROWNE, Q.C.:
 6 Q. Thank you very much, Chair.
 7 (BREAK AT 11:00 A.M.)
 8 (RECONVENED AT 11:35 A.M.)
 9 CHAIR:
 10 Q. Thank you. I understand, Ms. Greene, you're
 11 going to address Mr. Antonuk's two takeaways
 12 that he addressed over the break?
 13 GREENE, Q.C.:
 14 Q. Yes, thank you Chair. At this point we were
 15 going to respond to the two requests to date
 16 that Mr. Antonuk said he would take away.
 17 The first concerns the portion of the HST
 18 that is paid by Domestic customers and what
 19 impact that would have it that were rebated
 20 by the province or if the province gave up
 21 that revenue. So, Mr. Antonuk, could you
 22 explain about the portion of the HST and
 23 what that would mean for customers?
 24 MR. ANTONUK:
 25 A. Yes, if you go to Chart 17 from my

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1 presentation, I think that's a good starting
 2 point, those are rates without the tax. So
 3 the best way to measure that would be to, in
 4 effect, drop that line by the province's
 5 portion of the tax. That starts at 50
 6 million dollars a year under current rates,
 7 which is with revenue requirement, with each
 8 66 million dollars in revenue requirements
 9 equalling about a cent in rates, that means
 10 that the waiver return, elimination of that
 11 tax would reduce rates initially by about
 12 three quarters of a cent more. That,
 13 because the tax is levied on a percentage
 14 basis, if the tax continues at the same
 15 rate, its cents per kilowatt hour
 16 contribution to mitigation would increase,
 17 although on a percentage basis it would stay
 18 the same. So if you drop the line shown on
 19 page 17 by 10 percent, you will see the
 20 effect on a cents per kilowatt hour. We
 21 could draw that line, you know, it's simple
 22 arithmetic, but essentially what didn't
 23 occur to us until we were on the break is
 24 that we showed the rates without the tax, so
 25 in effect we're already showing the rates

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1 mitigated by not considering or eliminating
 2 it, so –
 3 GREENE, Q.C.:
 4 Q. Yes, so a savings for the Domestic customer
 5 for their pocketbook, but it's not actually
 6 in the actual rate because they pay it after
 7 the rate is applied.
 8 MR. ANTONUK:
 9 A. Correct.
 10 GREENE, Q.C.:
 11 Q. The second takeaway that you had related to,
 12 as I understood it, potential duplication
 13 related to how you track and account for
 14 Lower Churchill Project operating and
 15 maintenance and whether the reduction in the
 16 labour component was included in your 113
 17 FTEs overall reduction and also included in
 18 the LCP O & M, so could you explain that,
 19 please?
 20 MR. ANTONUK:
 21 A. Yes, I've referenced to two pages in our
 22 report will help. The first is page 64,
 23 Table 5.1, if we turn there first, that will
 24 set us up for, I think, a fairly
 25 straightforward explanation. You will see

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1 the total 94 there, keep that in mind and
 2 also keep in mind Corporate Services, which
 3 is listed there as 24. Less important, but
 4 also note Engineering 21. So we have a
 5 total of 94 in that page, 24 of which is
 6 from Corporate Services. So now if we could
 7 turn to page 89, if you look at conclusion
 8 3, the targeted reduction there is 19. That
 9 19 is additive to the 94 which produces the
 10 113 that we've been talking about. Now, if
 11 you go down, I believe it's the last
 12 conclusion on that page, I believe it was
 13 No. 6, I was calling the category
 14 "Administrative", it's really "Corporate
 15 Support". If you go down to the second half
 16 of that paragraph, you will note that we say
 17 that while the reduction in allocations for
 18 Corporate Support will reduce the O & M
 19 budget, that reduction has already been—
 20 unlike the other one I just mentioned, has
 21 already been accounted for in the Corporate
 22 Services reduction shown on Table 5.1. So
 23 that portion is not additive; the remainder,
 24 however, is.
 25 MR. O'BRIEN:

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1 Q. So it's 19 FTEs is really the calculation.
 2 MR. ANTONUK:
 3 A. That's correct, that's correct.
 4 GREENE, Q.C.:
 5 Q. One final question, Mr. Antonuk, just to
 6 confirm that when you were talking about the
 7 HST for Domestic customers, the 50 million
 8 dollars is only related to the provincial
 9 portion which is approximately 10 percent,
 10 is that correct?
 11 MR. ANTONUK:
 12 A. That's correct.
 13 GREENE, Q.C.:
 14 Q. Thank you, Chair, that concludes what we
 15 wanted to say on what we will call the
 16 takeaways.
 17 CHAIR:
 18 Q. Thank you, Ms. Greene. Does that meet your
 19 needs, Mr. O'Brien?
 20 MR. O'BRIEN:
 21 Q. It does, thank you, Madam Chair, thank you
 22 Mr. Antonuk.
 23 CHAIR:
 24 Q. Back to you, Mr. Browne.
 25 BROWNE, Q.C.:

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1 Q. Thank you, thank you Chair and thank you,
 2 Ms. Greene. It's your evidence that Nalcor
 3 should be void of anything doing with
 4 electricity or power, all these functions
 5 should go to Hydro, is that correct?
 6 MR. ANTONUK:
 7 A. As they relate to existing assets and
 8 operations, that is correct.
 9 BROWNE, Q.C.:
 10 Q. You made some comments about Nalcor Energy
 11 Marketing. Nalcor Energy Marketing, what
 12 exactly are they marketing, that's my
 13 question.
 14 MR. ANTONUK:
 15 A. In broad terms they are marketing all of the
 16 capability of the generation transmission
 17 portfolio, including Churchill Falls, that
 18 can be made available to customers off
 19 system, meaning outside, effectively outside
 20 of Labrador and Newfoundland.
 21 BROWNE, Q.C.:
 22 Q. But you told us previously that there are
 23 only spot markets there currently, people
 24 are dealing in the spot markets and Hydro
 25 Quebec is as well, so if the spot markets

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1 are there for what purpose, why—how do they
 2 fit into that equation?
 3 MR. ANTONUK:
 4 A. Okay, well I certainly made the point
 5 earlier that spot markets are very strong
 6 and very common now. There are bilateral
 7 deals, if you will, on longer-term deals
 8 that are made. I don't know the degree to
 9 which they're being made in Canada or not,
 10 but it is not, it's less common, but it is
 11 not unknown to find term deals. Also there
 12 are several ways to market or to sell. You
 13 can sell at different delivery points and
 14 that's really a matter that requires some
 15 flexibility. You can sell at your first off
 16 system point of delivery and then either the
 17 buyer or the market takes care of the flow
 18 from there, or you can make an arrangement
 19 further, deeper into the US, let's say as an
 20 example. So there needs to be flexibility
 21 to determine what's the best delivery point
 22 to pick. In the spot market that's usually
 23 pretty straightforward, but particularly if
 24 you're looking for other kinds of deals,
 25 it's not necessarily the case that you're

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1 going to make the transfer at the first
 2 delivery point.
 3 BROWNE, Q.C.:
 4 Q. So the only thing they could be marketing
 5 right now would be the recall power, so
 6 called recall power from the Upper
 7 Churchill?
 8 MR. ANTONUK:
 9 A. Yes, Churchill Falls is the only source that
 10 –
 11 BROWNE, Q.C.:
 12 Q. And historically we didn't have, we were
 13 marketing that power, but we didn't have
 14 Nalcor Energy Marketing, in fact, we didn't
 15 have Nalcor initially recall power. As a
 16 matter of fact, it was marketed through
 17 Hydro Quebec and by Hydro Quebec until it
 18 became politically unpopular to use Hydro
 19 Quebec for that purpose and then we had
 20 Emera doing the marketing for us and we were
 21 told at a hearing here that that was
 22 effectively cost efficient. Why do we need
 23 this creation to do what others have done
 24 already and it seems to be less expensive?
 25 (11:45 a.m.)

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1 MR. ANTONUK:
 2 A. Well, you would use the creation if the
 3 value added by the outside source is less
 4 than the cost it takes to retain the outside
 5 source. I think it's that direct. I would
 6 add this factor, which is I do agree that if
 7 you have what I'm going to call a tangible,
 8 coherent, near to medium term plan for
 9 growth, it is correct to consider whether
 10 you should design for your ultimate approach
 11 initially, meaning potentially an internal
 12 option, or whether you should use an
 13 external source for a period of time while
 14 still allowing you to explore bringing it
 15 in-house or other options, even if it's
 16 another contractor, as that growth occurs.
 17 So, I don't think there's necessarily
 18 one way to do it. I do agree there is a
 19 point at which size does end up not
 20 necessarily dictating, but strongly
 21 favouring development of an in-house
 22 capability.
 23 BROWNE, Q.C.:
 24 Q. And that was probably very well the plan
 25 because when Nalcor Energy Marketing was

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1 conceived and developed first, it was
 2 pursuant to Nalcor's plan to do Gull Island
 3 and when they pivoted from that plan to do
 4 the lesser project, Muskrat Falls, and they
 5 kept Nalcor Energy Marketing intact. So,
 6 I'm wondering if they've gone beyond their
 7 purpose.
 8 MR. ANTONUK:
 9 A. The discussions I had with – and the
 10 information I shared with the folks from
 11 Nalcor did make clear that Gull Island and
 12 what it would present in terms of
 13 tradability, if you will, was a factor and
 14 that factor did appear to have materiality
 15 in deciding on an in-house option.
 16 It is also fair to say that the options
 17 that were on the table for Nalcor to
 18 consider included were it to be a much –
 19 have a much smaller portfolio to trade. The
 20 options that were considered appropriate and
 21 legitimate, not necessarily conclusively
 22 preferable, but at least the options to
 23 consider did include a contracted – what we
 24 would call an asset manager approach. I'm
 25 not sure that's their term, but that's the

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1 common term we use.
 2 BROWNE, Q.C.:
 3 Q. Because even with Muskrat Falls when it
 4 finally comes on stream, and we all wish for
 5 the best there and expeditiously of course,
 6 there's an excess agreement with Emera that
 7 we have to follow anyway in reference to
 8 anything over and above what they're
 9 entitled to under the agreements. So, you
 10 just wonder, umph, you know, there's not
 11 going to be much left after that, I wouldn't
 12 think.
 13 MR. ANTONUK:
 14 A. What is left we consider it to be still
 15 comparatively small in the industry and it
 16 is conceivable that it is – it is certain
 17 that it could be managed effectively by an
 18 outside experienced firm. It is possible
 19 that it could be managed more cost
 20 effectively. And again, cost effectiveness
 21 means what does it cost me to do it
 22 internally and what value will I produce,
 23 and what's an asset manager going to charge
 24 me and is the asset manager going to give me
 25 more value or not. It's really an economic

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1 trade-off at that point.
 2 BROWNE, Q.C.:
 3 Q. And that's why it's your recommendation that
 4 a look be taken to see what this would cost;
 5 if there would be anyone interested in
 6 marketing the power, first and foremost, and
 7 to go out and seek proposals from those who
 8 may be interested to see if there's cost
 9 efficiencies there? That's your evidence?
 10 MR. ANTONUK:
 11 A. Yes, on a phase basis. I think the first
 12 step is what I'll call a solicitation of
 13 interest, if you will. This is a newer
 14 market. It's a market that probably is –
 15 takes a little more thought for the actors
 16 to get their arms around. So, I think the
 17 first question to ask before a solicitation,
 18 which takes time and effort, is to determine
 19 whether there's likely enough interest to
 20 suggest that you're going to get proposals
 21 in response to an RFP.
 22 Using that information then I think you
 23 make a preliminary analysis of whether it
 24 looks like there's a potential for producing
 25 greater value, and if so, then you would

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1 move to some form of a solicitation, not
 2 necessarily an open RFP. A lot of times
 3 these things are better done through private
 4 negotiation. But in any event, a formal
 5 process of actually trying to get dollars
 6 and cents and commitments on the table.
 7 BROWNE, Q.C.:
 8 Q. What risks are inherent in marketing the
 9 power ourselves? The word "risk" seems to
 10 come up in reference to Nalcor Marketing out
 11 marketing that power themselves.
 12 MR. ANTONUK:
 13 A. I think the biggest risk is loss of value by
 14 not taking maximum advantage of the
 15 opportunities. Other folks here have tended
 16 to focus on trading risk and those trading
 17 risks certainly exist, but as I was saying
 18 yesterday, I think they have been
 19 successfully mitigated by both the regulated
 20 and the market or unregulated participants.
 21 With the proper controls, with the proper
 22 approach to risk, tolerance identification
 23 and management, I do not consider those
 24 risks significant. They are significant if
 25 unmitigated, but they are mitigatable and

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1 successfully mitigatable and that's proven
 2 time and time and time again in the US
 3 markets where utility entities manage the
 4 trading of utility rate funded assets.
 5 BROWNE, Q.C.:
 6 Q. Well, if you have an experienced entity out
 7 doing it, presumably the risk will be to
 8 them and wouldn't fall upon Nalcor or Hydro
 9 or the Province should liabilities ensue
 10 from marketing the power ourselves.
 11 MR. ANTONUK:
 12 A. That risk sharing issue is usually part of
 13 the negotiations and there are ways to make
 14 it extremely simple. There are ways that
 15 you can basically make the portfolio,
 16 meaning the excess portion, available for
 17 liquidated amounts, which means that the
 18 trading entity will either – the trading
 19 entity will pay you certain liquidated
 20 amounts and then they either will or won't
 21 do better than that in the market. And as I
 22 said, it's not a clear conclusion whether
 23 that's better for you or not. I think that
 24 takes economic analysis and serious
 25 consideration of the market alternatives and

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1 then ultimately getting the dollars and
 2 cents on the table and signed on to.
 3 BROWNE, Q.C.:
 4 Q. Okay. I guess that's one to watch. It's
 5 your evidence that Nalcor Energy Marketing
 6 should go into Hydro?
 7 MR. ANTONUK:
 8 A. It should be controlled by Hydro. I'm
 9 indifferent as to whether it remains a
 10 separate legal entity, but its operations
 11 should be directed by the same entity that
 12 has responsibility for managing and
 13 operating utility assets.
 14 BROWNE, Q.C.:
 15 Q. If all the power and electricity associated
 16 energy goes into Hydro, directly or
 17 indirectly, what is there left in Nalcor at
 18 the end of the day?
 19 MR. ANTONUK:
 20 A. Well, as I understand it, and there'll be
 21 people here next week who can give you a
 22 better answer of what the latest thinking
 23 is, some element of managing investments in
 24 oil and gas and energy development, and
 25 again, remember we're assuming that we're

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1 past the construction and putting into
 2 service of LCP. So that's gone by
 3 definition as well.
 4 BROWNE, Q.C.:
 5 Q. Thank you very much.
 6 CHAIR:
 7 Q. Thank you, Mr. Browne. Industrial
 8 Customers, who's taking the lead?
 9 MR. COXWORTHY:
 10 Q. Thank you, Madame Chair and Commissioners.
 11 Good morning, gentlemen. My name is Paul
 12 Coxworthy. I'm counsel for the Industrial –
 13 Island Industrial Customer Group. I'd like
 14 to start, Mr. Antonuk, with you and some
 15 comments you made yesterday in your evidence
 16 at page 91 of the transcript. I'm not sure
 17 if we need to go there, but just to make
 18 reference to that, and I'll just briefly
 19 read. "The conundrum that you first face,
 20 Liberty first faced when you started working
 21 in this jurisdiction, looking at
 22 reliability, we sort of looked at
 23 reliability first, economy second when we
 24 were doing work early here. You can see on
 25 our reliability import, we now have kind of

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1 put them on almost an equal footing." So, I
 2 won't go on to read it, but I guess there's
 3 been a shift in emphasis, in terms of where
 4 Liberty thinks concern needs to be exercised
 5 about the regulation and the management of
 6 Hydro and Nalcor. Has there been a shift in
 7 Liberty's thinking?
 8 MR. ANTONUK:
 9 A. I'd say there's been a shift in the balance
 10 as you just described.
 11 MR. COXWORTHY:
 12 Q. And I think this is in another proceeding,
 13 but I understand that Liberty has made
 14 recommendations which I understand to be to
 15 the effect that Hydro should be consulting
 16 with its stakeholders, I'll put it
 17 colloquially, in how much are they willing
 18 to pay for reliability or for more
 19 reliability. Is that a fair
 20 characterization of at least one of the
 21 recommendations that Liberty has made?
 22 MR. ANTONUK:
 23 A. I think that's fair. That's quite fair,
 24 yes.
 25 MR. COXWORTHY:

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1 Q. And I guess my question is: are we at a
 2 point – you're having examined the system
 3 here in this Province for some years now and
 4 from several different aspects – are we at a
 5 point where reliability, in terms of the
 6 norms that you're aware of across North
 7 America, across Canada, are we at a point
 8 where we have to sacrifice our reliability
 9 if we want to have costs that are reflective
 10 of the norms across Canada and across North
 11 America? Are we at a zero sum game?
 12 MR. ANTONUK:
 13 A. I think we're at a point where we have to
 14 look very closely at a rate situation that
 15 is extreme. It's not commonly faced. It
 16 kind of takes me back to – I grew up at the
 17 time of the oil embargo. Most people here
 18 may not even remember it. I went through
 19 that as I was starting my career and then
 20 the next thing was the explosion of nuclear
 21 cost. So, I've seen these sort of huge step
 22 function changes, but I point those out
 23 because that tells you how long ago it was
 24 since I've seen something that reminds of
 25 this. So, I think absolutely we need to

Page 129	<p>1 look very carefully at what risks we are</p> <p>2 willing to take that we wouldn't have even</p> <p>3 considered taking five years, six years or</p> <p>4 seven years ago when rates were much lower.</p> <p>5 And I think that choices we make need to be</p> <p>6 as conscious and as informed about</p> <p>7 reliability consequences on the one side and</p> <p>8 the cost of mitigating them on the other</p> <p>9 side as we can make it. Recognizing that we</p> <p>10 don't necessarily have forever to make these</p> <p>11 decisions.</p> <p>12 MR. COXWORTHY:</p> <p>13 Q. And I guess, I'd suggest, you know, one</p> <p>14 difference between the examples you gave</p> <p>15 from the '70s and what we're facing here in</p> <p>16 this Province is those were fairly broadly</p> <p>17 based concerns that arose – I mean, not</p> <p>18 fairly, very broadly based concerns that</p> <p>19 arose across North America, across the</p> <p>20 western world in respect of the oil embargo.</p> <p>21 MR. ANTONUK:</p> <p>22 A. For sure that.</p> <p>23 MR. COXWORTHY:</p> <p>24 Q. And certainly in the United States with</p> <p>25 respect to nuclear issue or at least perhaps</p>	Page 131	<p>1 to have to absorb the impact of Muskrat</p> <p>2 Falls.</p> <p>3 MR. ANTONUK:</p> <p>4 A. I see no other way around it, given the</p> <p>5 brilliance of the financial people who made</p> <p>6 sure that the debt holders would be fully</p> <p>7 protected.</p> <p>8 MR. COXWORTHY:</p> <p>9 Q. The customer groups you spoke about who are</p> <p>10 impacted by the issues with nuclear</p> <p>11 generation in the United States in the '70s,</p> <p>12 were the full impacts of that visited on</p> <p>13 those customer groups or was it a question</p> <p>14 of companies failing and those customer</p> <p>15 groups being served by other sources?</p> <p>16 MR. ANTONUK:</p> <p>17 A. There were – in response to the nuclear</p> <p>18 calamity, the issue was largely dealt with</p> <p>19 through disallowances of costs, which</p> <p>20 because of the financial agreements here</p> <p>21 don't present the same options. There was a</p> <p>22 fundamental change in the industry to change</p> <p>23 risk of generation assets. I saw that more</p> <p>24 driven by the belief that a competitive</p> <p>25 market could operate more effectively. So,</p>
Page 130	<p>1 the eastern United States. I'm not sure how</p> <p>2 widespread the nuclear -</p> <p>3 MR. ANTONUK:</p> <p>4 A. Yeah, some of the worst were out on the</p> <p>5 other end of the country too.</p> <p>6 MR. COXWORTHY:</p> <p>7 Q. Where here, of course, this is confined.</p> <p>8 This issue is confined to a much smaller</p> <p>9 rate payer base.</p> <p>10 MR. ANTONUK:</p> <p>11 A. Well, it is. I think the – what I was</p> <p>12 saying is particularly the nuclear era, the</p> <p>13 consequences that were faced company by</p> <p>14 company and by company and customer group by</p> <p>15 customer group. But, you're right. The</p> <p>16 causes were broad and people – certainly</p> <p>17 different people managed different nuclear</p> <p>18 projects better and worse, but nobody got</p> <p>19 off without huge consequences.</p> <p>20 MR. COXWORTHY:</p> <p>21 Q. Sure, and you mentioned that at one point in</p> <p>22 response to questions from Mr. Browne, but</p> <p>23 the rate payers – I'm paraphrasing – are</p> <p>24 going to have to absorb this. The rate</p> <p>25 payers here in one way or another are going</p>	Page 132	<p>1 I saw that as an improvement opportunity, as</p> <p>2 perceived by some, not everybody agreed with</p> <p>3 it, as opposed to a response to a crisis.</p> <p>4 (12:00 p.m.)</p> <p>5 MR. COXWORTHY:</p> <p>6 Q. Thank you. And again, I'm not sure that we</p> <p>7 need to refer to it, but you were asked some</p> <p>8 questions at page seven of your report with</p> <p>9 respect to Liberty having found it striking</p> <p>10 that the five-year capital spending by Hydro</p> <p>11 and Newfoundland Power combined over the</p> <p>12 next five years has been proposed to be half</p> <p>13 a billion dollars. And in other parts of</p> <p>14 your report, you prepared comparator tables.</p> <p>15 For instance, Table V.6 with respect to</p> <p>16 comparing operating expenses, employee and</p> <p>17 officer levels, across different Canadian</p> <p>18 Crown corporations as a sanity check, as the</p> <p>19 terminology. And I don't believe you've</p> <p>20 done that for this report, and I guess I'd</p> <p>21 ask: was there any process, I guess, that's</p> <p>22 not evident from the report that Liberty</p> <p>23 went through to come to the observation that</p> <p>24 this was striking, this half billion?</p> <p>25 MR. ANTONUK:</p>

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1 A. No, there was no – we have no – we’ve done
 2 no investigations that would give us concern
 3 about whether any project proposed by either
 4 company was inappropriately proposed. We
 5 have no – we’ve done no comparison of
 6 capital programs here versus elsewhere. The
 7 only reason it was striking is that when we
 8 looked at the amount of dollars on a maximum
 9 basis that could be saved through combining
 10 Hydro and Nalcor – or Newfoundland Power, it
 11 was obvious that even small changes, if
 12 hypothetically achievable, in capital cost
 13 could produce similar savings. So that was
 14 – what was striking was sort of the ability
 15 for relatively moderate changes to produce
 16 savings. It was not in any way a criticism
 17 of those proposals, nor an expression of
 18 concern about any of the projects or of the
 19 Board’s ability to address them as part of
 20 its normal processes.
 21 There’s even another factor here too,
 22 which is that, you know, we know the Board
 23 has a process going on now. There may or
 24 may not be time to change its process now,
 25 but you know, these things come each year.

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1 So, we weren’t even looking at it as
 2 something that said, you know, the Board
 3 better do something different tomorrow. It
 4 was more, you know, as you look at capital
 5 costs like this, if they’re going to be
 6 proposed at a sustained level, just making
 7 sure that they’re analysed with the new
 8 twist we’re talking about, which is the
 9 balance between reliability and price that
 10 you kind of started me off with.
 11 MR. COXWORTHY:
 12 Q. Would it be fair to say that if Government,
 13 in its wisdom, restores or extends to the
 14 Board jurisdiction, the ability to regulate
 15 costs, capital investment costs on a go-
 16 forward basis in relation to the Muskrat
 17 Falls project and the associated components
 18 of it, that that’s only going to be a more
 19 challenging task for the Public Utilities
 20 Board in future capital proceedings to
 21 assess the wisdom, the appropriateness of
 22 that level of cost? Is that job going to
 23 get easier for the Board or harder if that’s
 24 added to their task?
 25 MR. ANTONUK:

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1 A. I don’t think it forces them to ask
 2 different questions or make different
 3 judgments. I think it asks them to make
 4 them on a somewhat larger base of capital
 5 costs and operating costs.
 6 MR. COXWORTHY:
 7 Q. But you’re not concerned that it creates a
 8 regulatory overburden on the Board or on
 9 Nalcor or on Hydro?
 10 MR. ANTONUK:
 11 A. I don’t have concern about it with respect
 12 to Nalcor or Hydro because I think the key
 13 thing that they should be doing to justify
 14 their work better darn well be done before
 15 they come to the Board. I don’t think the
 16 regulatory burden is particularly greater.
 17 With respect to the workload of the Board,
 18 again they’re already doing these things for
 19 everything else. They’re going to be doing
 20 them for Muskrat Falls capital additions and
 21 Muskrat Falls O & M cost – LCP’s, I should
 22 say, sorry.
 23 MR. COXWORTHY:
 24 Q. Thank you. Thank you, Mr. Antonuk. If we
 25 could turn to page 23 of the Liberty Report,

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1 and this is with respect to the comparative
 2 Crown corporation financial targets, and Mr.
 3 Antonuk, you’ve already been asked a number
 4 of questions, perhaps questions I might have
 5 asked myself, but I just want to
 6 contextualize what you’ve said in this
 7 report with what I understood to be your
 8 evidence here this morning, and, I guess,
 9 under that Section 4, the last sentence
 10 reads, “If there were a third hand, it would
 11 be raised in favour of not pressing for a
 12 sustained level materially below 20
 13 percent”, and that’s 20 percent of target
 14 equity, is that correct?
 15 MR. ANTONUK:
 16 A. Yes. I’m sorry.
 17 MR. COXWORTHY:
 18 Q. “Given the open questions the province
 19 faces”, and you, of course, expressed what
 20 those questions are earlier in the
 21 paragraph, “and their implications for its
 22 credit standing”, and, I guess, my question
 23 is, do you have any empirical evidence or
 24 have you come across any empirical evidence
 25 that target equity or actual equity below 20

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1 percent has had any adverse impact on the
 2 credit standing of any province where a
 3 Crown Corporation like this, an electric
 4 Crown Corporation is operating?
 5 MR. ANTONUK:
 6 A. I'm going to let Randy answer, but keep in
 7 mind sustained is the issue there, and I
 8 think a better choice of words there would
 9 have been "steady state". So we didn't mean
 10 to say two years of sustained, three years
 11 of sustained.
 12 MR. COXWORTHY:
 13 Q. So two or three years might be one thing in
 14 terms of the level of risk to the credit
 15 rating in terms of it might be a lesser risk
 16 as opposed to a steady state of a lower –
 17 MR. ANTONUK:
 18 A. That's a fair example of the point I was
 19 trying to get across.
 20 MR. COXWORTHY:
 21 Q. You were going to ask your colleague to
 22 comment on it further.
 23 MR. VICKROY:
 24 A. Yes, I believe that the main audience we're
 25 talking about here really is the rating

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1 agencies. The rating agencies work for debt
 2 holders. Of course, since debt holders and
 3 raising debt capital are very important in
 4 this business, getting their attention is
 5 important. I think, for instance, the
 6 Manitoba Hydro case, they're trying to
 7 finish a very large production and
 8 transmission project, which is even more
 9 expensive than Muskrat Falls is, and they're
 10 under severe pressure there as to how much
 11 to increase rates that won't really hurt
 12 their customers too badly, while also
 13 allowing generation of enough funds from
 14 operations in order to satisfy the debt
 15 holders, and it's that balance that
 16 certainly Manitoba is struggling with, and
 17 it would be the case for all Crown
 18 Corporations.
 19 MR. COXWORTHY:
 20 Q. Do you have any examples or any empirical
 21 evidence where, in fact, there has been, for
 22 instance, the Manitoba Hydro example, a
 23 negative impact on the province's credit
 24 rating as a result of in their cases having
 25 an actual equity level of only 11 percent?

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1 MR. VICKROY:
 2 A. I'm sure that New Brunswick Power in the
 3 past has been downgraded. That has not
 4 happened with –
 5 MR. COXWORTHY:
 6 Q. And they, of course, have a very poor
 7 performance at 5 percent actual equity?
 8 MR. VICKROY:
 9 A. Yes.
 10 MR. COXWORTHY:
 11 Q. They are an outlier, aren't they, in that
 12 regard?
 13 MR. VICKROY:
 14 A. Well, again the real important factor is the
 15 funds flow from operations, and that would
 16 be, of course, a combination of the equity
 17 level and the rate of return on equity, and
 18 how much the company actually earns on that
 19 return. So all of those factors come into
 20 whether they have sufficient funds from
 21 operations or not. I mean, a rating agency
 22 isn't going to say, hey, last year your
 23 earnings were insufficient and the cash flow
 24 was insufficient. You know, they're not
 25 knee-jerk reactors at all. This takes a

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1 long time for something like that to show
 2 up, and it's only after its proven that they
 3 have insufficient funds flow do they make a
 4 move.
 5 MR. COXWORTHY:
 6 Q. It's not a year or two of being under 20
 7 percent that's a problem.
 8 MR. VICKROY:
 9 A. Yes, exactly.
 10 MR. COXWORTHY:
 11 Q. If it looks like it's going to be that way
 12 for the next five years, ten years?
 13 MR. VICKROY:
 14 A. I would agree with that, yes.
 15 MR. COXWORTHY:
 16 Q. And I think you said that ultimately it's a
 17 question for government to balance those
 18 risks, but, I guess, the extent that you're
 19 making or identifying opportunities, if I
 20 can put it that way, or call them
 21 recommendations that are then going to feed
 22 into recommendations that the Board may make
 23 to the province, is this a big flashing red
 24 light or a yellow light you're trying to
 25 send to government saying don't go below 20

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1 percent?

2 MR. ANTONUK:

3 A. No, it was really more an attempt to say if

4 you look at the targets, 25 percent is

5 certainly in the range, and it's not fat by

6 comparison. So we started from that and our

7 analysis was more an attempt to say with

8 reference to the 20 percent is what will it

9 buy you in terms of mitigation. Then I

10 think the last point is really designed to

11 say that, look, we're not weighing in on

12 what you should do in the short run, we're

13 not weighing in on whether it should be 25,

14 20, or maybe even 18. What we are saying is

15 that 20 percent, however, is kind of a long-

16 term marker that should say to you, if you

17 want to keep it below 20 percent on a long-

18 term basis, allow the province the

19 discretion to say whether that's comfortable

20 enough or not.

21 MR. COXWORTHY:

22 Q. And you have identified, or calculated, or

23 estimated that dropping from 25 to 20

24 percent would represent about 110 million

25 dollars in savings per year in terms of

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1 revenue requirement?

2 MR. ANTONUK:

3 A. It would represent an advance of 111 million

4 dollars, for which you would pay a little

5 more than 111 later.

6 MR. COXWORTHY:

7 Q. Thank you, and if you were to drop from 20

8 to 15 percent, is it possible for you to say

9 is it the same magnitude of benefit, if I

10 can put it that way?

11 MR. ANTONUK:

12 A. It's pretty much directly proportional.

13 MR. COXWORTHY:

14 Q. Thank you.

15 MR. ANTONUK:

16 A. If you're searching for a conceptual answer,

17 that's correct. If you want a precise one,

18 it's calculable.

19 MR. COXWORTHY:

20 Q. Sure.

21 GREENE, Q.C.:

22 Q. And I will point out that the response to

23 PUB-NALCOR 255 does give the impact at

24 different capital structures and different

25 ROE's for the impact on dividends and over

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1 the period we're talking about.

2 MR. COXWORTHY:

3 Q. Thank you, Ms. Greene. If we could move on

4 to page 82 of the Liberty Report, and Table

5 V.6, you were asked questions by Mr. Eaton

6 yesterday about this table, and again I

7 don't know that it's necessary to turn to

8 the particular passage, but I am just going

9 to – Mr. Eaton, in relation to the table

10 said, "When you take all of that in

11 consideration, right, every one of these

12 numbers could be adjusted for some factor or

13 another", and you didn't agree with that

14 proposition?

15 MR. ANTONUK:

16 A. Well, maybe I should read it because I don't

17 remember that.

18 MR. COXWORTHY:

19 Q. Well, I'll direct you to your evidence if

20 you wish.

21 MR. ANTONUK:

22 A. Thanks.

23 MR. COXWORTHY:

24 Q. Page 156. You did go on to say why you

25 didn't agree with that.

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1 MR. ANTONUK:

2 A. 156?

3 MR. COXWORTHY:

4 Q. Yes, starting at line 10.

5 MR. ANTONUK:

6 A. Okay. I was so emphatic; I should have

7 remembered it. I now do.

8 MR. COXWORTHY:

9 Q. You were emphatic yesterday, Mr. Antonuk.

10 Are you less emphatic about that today?

11 MR. ANTONUK:

12 A. No, I just didn't remember it.

13 MR. COXWORTHY:

14 Q. Well, I just wanted to ask you some

15 questions about some of the numbers on Table

16 V.6 in that regard, and how we should

17 understand them, understanding that

18 obviously there were differences from Crown

19 Corporation to Crown Corporation, but how

20 meaningful are those differences in terms of

21 using this information as a sanity check for

22 your observations that flow out of this

23 table? So I wanted to go to Table V.7 below

24 and in relatively smaller type, I'm not sure

25 if that was deliberate or not, but you

<p style="text-align: right;">Page 145</p> <p>1 provide the ratios with respect to with or 2 without including the output of Churchill 3 Falls in the bottom two lines. I guess, I'd 4 ask you to comment on why is it important 5 for the Board, and anyone who's looking at 6 this, to understand the difference of those 7 ratios with or without Churchill Falls? 8 MR. ANTONUK: 9 A. Oh, a very large unit can produce a very big 10 change in output, and that diminishes the 11 value of comparing it this way because 12 employee needs aren't a function of output 13 on large hydro projects. If they were, then 14 I think you'd say if you use the Churchill 15 Falls ratio, it would conclusively prove 16 that Muskrat Falls is grossly overstaffed, 17 which is not our conclusion. So I wanted to 18 get another measure and I don't think the 19 measure is without value, but I think when 20 you consider the existence of an out-size 21 unit like Churchill Falls, you at least need 22 to bound the numbers by saying "with" and 23 "without". 24 (12:15 p.m.) 25 MR. COXWORTHY:</p>	<p style="text-align: right;">Page 147</p> <p>1 way, I would have made the team do that. So 2 this was my way of looking at a way of 3 saying, you know, is there anything I see in 4 these numbers that tells me that we were too 5 heavy handed. 6 MR. COXWORTHY: 7 Q. And you haven't changed your conclusion in 8 that regard that you have not been too heavy 9 handed? 10 MR. ANTONUK: 11 A. No. 12 MR. COXWORTHY: 13 Q. If we could turn to, and this is again in 14 your report, page 94, and Figure VII.3, Rate 15 Impacts of Financial Mitigation 16 Opportunities, and I think this is just an 17 example. You refer to domestic rate 18 mitigation by year, and there's been other 19 references to domestic rates, and I just 20 wanted to clarify or confirm my 21 understanding, does that exclude industrial 22 rates or does that include industrial rates? 23 When I say "industrial", I mean rates of the 24 industrial customers of Hydro. 25 MR. LETZELTER:</p>
<p style="text-align: right;">Page 146</p> <p>1 Q. Sure. So when we're looking at Table V.7, 2 what comparators are the more valid ones for 3 the Board to consider? Is it the ones 4 "with" or "without" the Churchill Falls in 5 terms of the point you're trying to make 6 between – the sanity check that you're 7 trying to exercise? 8 MR. ANTONUK: 9 A. I'd do it a different way. I'd say that the 10 existence of that large out size unit has a 11 much more dramatic impact on the results 12 than any changes that might – or any 13 differences that might exist with respect to 14 employees, customers, or the other factors. 15 So I tend to use that to say I would place 16 less emphasis on the GWh factor as a whole. 17 MR. COXWORTHY: 18 Q. Okay. 19 MR. ANTONUK: 20 A. By the way, again we don't place primary 21 evidence on any of them. You know, what we 22 would have done had any of these ratios come 23 into closer balance with means and average, 24 we would have gone back and done our direct 25 analysis again. I'll put it a different</p>	<p style="text-align: right;">Page 148</p> <p>1 A. Yes, one of the benchmarks we were looking 2 to impact was the domestic rates, so that 3 was the target we were trying to adjust for 4 mitigation. 5 MR. COXWORTHY: 6 Q. And I don't mean that question as an implied 7 criticism. You may not have had the data or 8 all of the data to factor in industrial 9 rates. 10 DR. LETZELTER: 11 A. No, we used a module within our mitigation 12 model that was based on Nalcor's own model 13 for assessing the impact of revenue 14 requirement adjustments on rates, but it's 15 not a rate making or a policy decision on 16 our part. We just allowed the mitigation 17 dollars to flow through that model to 18 understand the general approximate impacts 19 to that domestic. 20 MR. COXWORTHY: 21 Q. And that model just happened to be a 22 domestic rate model? 23 DR. LETZELTER: 24 A. The model also showed industrial class 25 impacts as well, but we were focused on the</p>

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1 impact to the domestic rates.
 2 MR. COXWORTHY:
 3 Q. To the extent you recall or can comment, did
 4 the results for industrial rates differ when
 5 you ran – for instance, for this table here,
 6 would they differ?
 7 DR. LETZELTER:
 8 A. Yes.
 9 MR. COXWORTHY:
 10 Q. Significantly, materially, if you were
 11 looking at it from the perspective of an
 12 industrial customer?
 13 DR. LETZELTER:
 14 A. I would say they were significant, but I
 15 can't point to specific numbers without
 16 going into the model because we really
 17 didn't focus on that.
 18 MR. COXWORTHY:
 19 Q. And why not?
 20 DR. LETZELTER:
 21 A. Frankly, we did as directed, and the key
 22 point for us to look at was the domestic
 23 rate. The model is something that can be
 24 used going forward to look at the impact of
 25 rates on different customer groups.

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1 MR. COXWORTHY:
 2 Q. That takes me back to a comment that Mr.
 3 Antonuk made in his evidence yesterday.
 4 It's at page 28, and again I don't know if
 5 we need to turn to it, but you talk about, I
 6 think, we operate the model in two ways.
 7 One is to show total revenue requirements,
 8 dollars and cents per kilowatt hour, we did
 9 not do segregation by customer class. We
 10 did total revenue requirement, and then you
 11 go on to say that Synapse will say things
 12 about individual classes. You haven't done
 13 that. You haven't done any segregation by
 14 customer class, is that correct?
 15 DR. LETZELTER:
 16 A. Not in terms of the overall mitigation in
 17 terms of dollars, no.
 18 MR. COXWORTHY:
 19 Q. Is someone going to need to do that in this
 20 rate mitigation exercise? If it wasn't
 21 within your scope, if it wasn't what you
 22 were directed to do, does it need to be done
 23 to understand rate mitigation vis-à-vis the
 24 industrial customers and what may be
 25 possible, necessary?

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1 MR. ANTONUK:
 2 A. I think once a level of mitigated revenue
 3 requirements are determined, the Commission
 4 is going to face on an ongoing basis the
 5 need to how to proportion the recovery of
 6 them, but our point being that we didn't
 7 really seek to do that.
 8 DR. LETZELTER:
 9 A. By saying we're not showing the impacts to
 10 the industrial class does not in any way
 11 mean that we took the full mitigation and
 12 applied it to the domestic.
 13 MR. COXWORTHY:
 14 Q. I was hoping not, but thank you for that
 15 confirmation.
 16 MR. ANTONUK:
 17 A. There was no effort to leave you out in the
 18 cold.
 19 MR. COXWORTHY:
 20 Q. I think with that, those are all my
 21 questions. Thank you very much, gentlemen.
 22 CHAIR:
 23 Q. Thank you, Mr. Coxworthy. Ms. Greene, do
 24 you have any follow-up that you need to take
 25 the panel through?

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1 GREENE, Q.C.:
 2 Q. No, thank you, Madam Chair, I have no re-
 3 direct or no additional questions.
 4 CHAIR:
 5 Q. Thank you. Any questions?
 6 MS. NEWMAN:
 7 Q. No questions.
 8 CHAIR:
 9 Q. And I don't have any questions, so I guess
 10 with that, we can bring this day to a close.
 11 I thank you, panel. You've been two full
 12 days at least or the better part of two full
 13 days, and I wish you safe travels home. I'm
 14 assuming we'll see at least one of you
 15 again, I think, soon.
 16 MR. ANTONUK:
 17 A. Possibly.
 18 CHAIR:
 19 Q. So with that, I guess, we're adjourned for
 20 today. We're reconvening at 9 a.m. on
 21 Monday, and Synapse will be sitting where
 22 Liberty is today. Have a good weekend,
 23 everybody.
 24 (UPON CONCLUDING AT 12:22 p.m.)
 25

CERTIFICATE

I, Judy Moss, hereby certify that the foregoing is a true and correct transcript in the matter of Reference to the Board, Rate Mitigation Options and Impacts, Muskrat Falls Project, heard on the 4th day of October, 2019 before the Newfoundland and Labrador 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 4th day of October, 2019

Judy Moss

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