

Hearing Transcript

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

October 17, 2019

PRESENT:

The Board:

Board Members

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

Board Counsel / Staff

Maureen Greene, Q.C., Reference Counsel
Sara Kean, Assistant Board Secretary

Parties:

Nalcor Energy /

Newfoundland and Labrador Hydro
David Eaton, Q.C., Counsel – Nalcor
Geoff Young, Q.C., Counsel – NL Hydro

Newfoundland Power

Kelly Hopkins, Counsel
Liam O'Brien, Counsel

Consumer Advocate

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

Island Industrial Customer Group

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

Witnesses:

Island Industrial Customer Group

InterGroup Consultants Ltd., Patrick Bowman

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1 (9:00 a.m.)
 2 CHAIR:
 3 Q. Good morning, everybody. Welcome back, Mr.
 4 Bowman. Mr. Coxworthy, I'll turn it over to
 5 you to introduce your presenter.
 6 MR. COXWORTHY:
 7 Q. Thank you, Madam Chair. As you've just
 8 recognized, Mr. Patrick Bowman is being
 9 called this morning as our witness for the
 10 Island Industrial Customer Group. Although
 11 he's appeared before this Board before, I
 12 note he's with InterGroup Consultants, and I
 13 will ask him to give just a brief summary of
 14 his experience in the area of regulation of
 15 public utilities.
 16 MR. BOWMAN:
 17 A. Good morning, Chair, and members of the
 18 panel. I am a principal with InterGroup
 19 Consultants. I have been working in this
 20 field for 21 years, and in the province here
 21 since the 2001 rate bearing. I've prepared
 22 evidence in this jurisdiction six times. I
 23 work in about ten different jurisdictions in
 24 Canada, provinces, and territories, and some
 25 work in the US and international. Focus has

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1 been on Crown owned and hydraulic utilities
 2 primarily working for utilities, at times
 3 industrial customers, small consumers,
 4 sometimes for regulators and also for
 5 governments in respect of energy policy.
 6 Specific to the issues at hand today in
 7 regard to mitigation and rate shocks that
 8 arise from large new developments, I've been
 9 involved in a number of cases including the
 10 Mayo B Hydro Project and the Mayo-Dawson
 11 Transmission Line Projects in Yukon, each of
 12 which similarly involve bringing on large
 13 capital projects. In Manitoba, recent
 14 proceedings related to bringing on the
 15 Keeyask Hydro Electric Project and the
 16 Bipole III Transmission Line. In Northwest
 17 Territories, the Blue Fish Dam Replacement
 18 Project, which similarly drove significant
 19 rate impacts, as well as helping the NWT
 20 Government develop a hydro strategy which
 21 would deal with how to avoid rate impacts
 22 when large new projects come on, and as part
 23 of that, I was involved in investigating a
 24 number of historical projects across Canada
 25 and how they were brought into cost base and

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1 rates for utilities without causing rate
 2 shock, and I'm currently involved in a
 3 proceeding in Alberta that is partially
 4 driven by major HVDC transmission build out,
 5 and rate impacts arising from that.
 6 MR. COXWORTHY:
 7 Q. Thank you, Mr. Bowman. I understand that
 8 there are some corrections to the version of
 9 your presentation that was circulated last
 10 Friday that you would draw our attention to?
 11 MR. BOWMAN:
 12 A. Yes, that's correct. The corrections are
 13 entirely on what is noted as Slide 20, and
 14 they relate to the Synapse Revision One that
 15 was produced. A few of the numbers in our
 16 presentation were not updated to the
 17 Revision One numbers, and so they are
 18 updated on the slides that will be used on
 19 the screen this morning, but in the version
 20 that was distributed, they were not yet
 21 corrected. One is under a bullet that says,
 22 "The net adverse impact of the CDM to
 23 Revenue is 41 million". The version that
 24 was distributed had a different number
 25 there. The other is in the paragraph below

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1 the bullets where there's a reference to CDM
 2 that should read "34 million", it now does.
 3 It previously read 40 million. One word was
 4 changed where it had said "underline", the
 5 correct word is "undermine" in the second
 6 line. Those are the only changes that were
 7 made.
 8 MR. COXWORTHY:
 9 Q. Thank you, Mr. Bowman. Mr. Bowman, perhaps
 10 you could take us through your presentation.
 11 MR. BOWMAN:
 12 A. Yes, thank you. In regard to this
 13 proceeding, the submission that was prepared
 14 for September 20th and the recommendations
 15 prepared were prepared by me or under my
 16 direction. I was retained by the Island
 17 Industrial Customer Group which represents
 18 approximately 10 percent of the firm load on
 19 the island, approximately 43 million in
 20 total allocated cost, and the concerns that
 21 the IIC Group has consistently had relayed
 22 to us as we've been involved for coming up
 23 on 20 years with this group, is the fact
 24 that they have large capital investments in
 25 the province, they're effectively captive

<p style="text-align: right;">Page 5</p> <p>1 and rely on Hydro for their supplies. They 2 must have a long term perspective, given 3 their captive nature and the fact that their 4 investments have a long term focus, and 5 they're exposed to continued power purchases 6 from Hydro. This leads to concerns related 7 to long term stability and predictability of 8 rates and fair allocation of costs. This 9 issue will come up when we discuss CDM later 10 in this presentation. Flexible power 11 options which will come up somewhat in 12 discussions about industrial customer 13 opportunities specifically for things such 14 as capacity costs, economic development, and 15 the fact of the matter is that rates are 16 quite critical to this group, not just 17 bills, and that is, in part, due to their 18 current loads which they must pay the rates, 19 but also considering future opportunities or 20 related to other future industrial customers 21 that are not yet here. Rates are what people 22 will notice. We thought it important to 23 relay the estimates that we have about the 24 impacts that will occur to this group 25 without mitigation. The rate impacts that</p>	<p style="text-align: right;">Page 7</p> <p>1 if we can bring that up on the screen. 2 There we are. This document, the page 3 that's highlighted here is page 22 of the 4 document, and it is a summary of average 5 rates paid across Canada and for selected 6 American cities for different sizes of 7 customers. The customers that I'm 8 discussing would be in the final column 9 listed as "Large Power", particularly the 10 final column. To give you an idea, that is 11 approximately the size of the middle 12 consuming customer, the group that I'm 13 dealing with. It's within the range of 14 that, and if you look down the column, 15 you'll see the range of types of prices paid 16 by industrial customers across Canada. St. 17 John's is listed there at 5.61, which is a 18 little bit different than the number I 19 quoted, but that's due to the mix of demand 20 and energy assumed and the timing. This was 21 an April 1st rate, but you'll see that 22 compared to the 5 cent rate, absent 23 mitigation we're talking somewhere in the 24 order of 12 cents, and one just has to look 25 up and down the column there to see the jump</p>
<p style="text-align: right;">Page 6</p> <p>1 have been estimated are, I would say, 2 extreme. The average rate coming out of the 3 last General Rate Application was around 4 5.22 cents for this group. The rate for any 5 given customer will be slightly different 6 because of their mix of capacity of energy, 7 for example, or for their specifically 8 assigned charges. The last estimate we have 9 was that that rate could rise to 12.44 cents 10 after the projects are fully in service, 11 which is an increase of almost 140 percent. 12 This occurs on top of rate increases that 13 they've seen, approximately 30 percent since 14 2013, or 50 percent over the last decade. 15 There's going to be some discussion in this 16 presentation about CDM options that could 17 further drive rate impacts up to 0.5 cents, 18 which may seem small in the 12.44 that we're 19 discussing here, but that's an extra 10 20 percent compared to the bills that people 21 are already paying. To help underline the 22 point of the impacts, we distributed a 23 document that just recently came out from 24 Hydro-Quebec which does a comparison of 25 bills across the country, and I don't know</p>	<p style="text-align: right;">Page 8</p> <p>1 that would occur in the relative prices 2 compared to other jurisdictions, even across 3 Canada, much less when one adds in the 4 American cities, which are all in Canadian 5 dollars, by the way. I've provided a slide 6 here, Slide 4, which copies in the summary 7 of the areas I intend to address from the 8 evidence. As I'll be speaking to each of 9 these, I don't intend to dwell on it on this 10 slide, but there were five areas that it 11 seemed merited comment out of the Liberty 12 and Synapse Reports. One of the first 13 things that we spent some time on was the 14 question of what is mitigation, what is 15 meant by the scope of task that could be 16 captured by mitigation. We focused on the 17 task which was options to reduce the impact 18 of the project on electricity rates, which 19 was specifically cited in the Reference 20 Letter, highlight electricity rates for the 21 importance that rates matter, particularly 22 with regard to the opportunity to do further 23 electrification and grow loads. The 24 document that's pasted in there is an 25 excerpt from a government document produced</p>

<p style="text-align: right;">Page 9</p> <p>1 in April, 2019, which was a preliminary plan 2 for how to deal with mitigation. I was 3 pointed to this document as context by the 4 clients that I deal with. It’s referencing 5 mitigation related to the year 2021, as one 6 will notice there, and the understanding is 7 that it was meant to provide a road map 8 about how the mitigation plan might unfold, 9 which was produced prior to, of course, this 10 Board doing its work. The highlights that 11 were brought to my attention were the fact 12 that the Newfoundland and Labrador 13 investment, government investment, was 14 highlighted at 249.1 million in effectively 15 foregone provincial benefits compared to 16 what would have been assumed. These are not 17 necessarily from subsidies, these are from 18 lowering the cost of profits that are built 19 into the project, and the other item that is 20 highlighted here is down the table at row 8, 21 which is add value to energy surplus at 35.5 22 million, and if one goes into the detail of 23 that row, it is about effectively attracting 24 new industrial customers and new industrial 25 loads, and that seemed an important part of</p>	<p style="text-align: right;">Page 11</p> <p>1 projects. Many of those will have already 2 occurred and will already be in place by the 3 time this project has been dealt with on 4 rates. Liberty’s assessment was that there 5 is substantial and growing amount of 6 potential for support from foregoing 7 government benefits and returns otherwise 8 built into the financial model. To 9 highlight Liberty’s conclusions, I 10 reproduced the graph from their evidence 11 report, and this does not lead to any 12 radical recommendation, but that Liberty’s 13 work seems to be thorough and sensible and 14 that those dividends and water rentals and 15 other items, excess energy, highlighted in 16 this graph should be pursued as part of 17 targeting rate mitigation. The other thing 18 I’ll note, though, is the previous page that 19 had the initial plan put out by government 20 had highlighted the potential for 249.1 21 million coming from the Newfoundland and 22 Labrador contribution to mitigation in 2021. 23 Liberty is still well short of that, so I 24 think although these are large amounts, 25 they’re not sensational and there would</p>
<p style="text-align: right;">Page 10</p> <p>1 the mix and my understanding is it continues 2 to provide a significant opportunity if one 3 is able to achieve it. The clients 4 highlighted to me that they weren’t sure how 5 this fit with what was happening today, 6 whether there’s already the commitment that 7 rates won’t go up and this is about 8 detailing that, or whether this is an 9 aspirational target and the current 10 proceeding is about figuring out whether we 11 can do it. I, obviously, don’t have a view 12 on that, but I will use aspects of this as 13 the road map as we go through the following 14 slide. Moving on to the first topic area 15 that was important to discuss, and which is 16 one of the biggest items in the mitigation 17 plan, is foregoing government benefits and 18 returns. This slide provides somewhat of a 19 description of the context that we were 20 relying on in preparing the submission, 21 highlighting that governments benefit may 22 ways from developing major projects, some of 23 them tied to dividends and returns, but not 24 all. There’s also significant things such 25 as taxes earned from workers completing the</p>	<p style="text-align: right;">Page 12</p> <p>1 still be a question to be raised if 2 opportunity existed to where does 249.1 come 3 from and why does this number still fall 4 quite short of that. A separate topic 5 raised by Liberty relates to the regulated 6 company itself, Hydro, and the question of 7 dividends and an equity target. Currently 8 Hydro is operating with a 25 percent equity 9 target and is securing a return on equity to 10 build equity in the company with no 11 dividends expected until it reaches the 25 12 percent equity target. This chart shows the 13 dividends that would be payable over time 14 with a different target. In this case, a 20 15 percent target, and it shows the dividends 16 that could be made available to mitigation 17 start to come in much larger and much sooner 18 at a 20 percent target, at the expense of 19 later years, which is noted by Liberty. The 20 20 percent target was not advocated by 21 Liberty. It was not included in the 22 previous graph, but it was something that 23 was highlighted as having a significant 24 potential. 25 (9:15 a.m.)</p>

<p style="text-align: right;">Page 13</p> <p>1 It's important to note that Liberty 2 highlighted this as a timing difference, but 3 timing is effectively what matters in the 4 question of mitigation. It's relatively 5 clear that the Muskrat Falls and the overall 6 project costs will be paid over time. The 7 mitigation impact is what happens in the 8 early years and how one deals with the 9 timing of when the costs arise. So to the 10 extent that timing may be understood as 11 something that's dismissive of this 12 opportunity, I don't think it should be 13 viewed as dismissive. It's a significant 14 opportunity, it's a significant amount of 15 money, it's over 100 million dollars in 16 mitigation potential and it should be 17 pursued. To underline that point, I'm also 18 dealing with a similar project coming on 19 line in Manitoba, the Keeyask Generating 20 Station, which quite closely followed on a 21 major transmission development. In 22 Manitoba, there was a major hearing before 23 the project went into service in 24 approximately 2013, and there were financial 25 plans produced and which have continued to</p>	<p style="text-align: right;">Page 15</p> <p>1 losses on the books, which may or may not 2 occur, but it has been part of the plan. 3 It's a key part of being able to manage the 4 rate impacts at a stable level, somewhere in 5 the order of 3.5 to 4 percent a year, and 6 it's able to be incorporated into an overall 7 long term plan because they can show how the 8 numbers turn around over time. Now I 9 express concerns about what I understand to 10 be Liberty's caution regarding lower equity 11 ratios and the potential to impact credit 12 ratings. I raise this topic mostly because 13 the area of credit rating and credit 14 worthiness is a very specialized area of 15 practice and I would encourage, before 16 conclusions are made there, that people have 17 all of the input that's needed from people 18 who practice in this area. I've been 19 involved in some of it, but it is not core 20 to my expertise, but I would emphasize that 21 the evidence that has been provided in 22 Manitoba specifically and others, is that 23 equity is not normally the first concern 24 when one is dealing with credit ratings or 25 credit worthiness. Equity is a number on a</p>
<p style="text-align: right;">Page 14</p> <p>1 be produced over annual financial plans 2 prepared by Manitoba Hydro, long term plans 3 which has Manitoba Hydro's equity ratio 4 currently scheduled to drop to about 12 5 percent and at times it was in those plans 6 dropping to 9 percent as the project is 7 absorbed into the rates. Now the situation 8 is a little bit different in the case of 9 Manitoba Hydro. There the asset is a part 10 of the rate base, so some of the return 11 equity ratio effect is a denominator effect, 12 it's adding a very large asset base. So 13 while the numerator, the amount of equity is 14 growing slowly, or in some cases even going 15 down, a lot of that erosion occurs because 16 you're adding a very large amount to the 17 denominator, but it's worth highlighting 18 that Manitoba Hydro's plan has routinely 19 shown years of small net losses during the 20 period where "digesting the whale" as it's 21 sometimes been called during the time that 22 this project is being brought on line, and 23 people are trying to find a way not to shock 24 rate payers. While that leads to a little 25 bit of erosion in the equity level and net</p>	<p style="text-align: right;">Page 16</p> <p>1 balance sheet. It does not represent the 2 cash flows that are able to repay the 3 lender. Credit ratings are about whether a 4 lender can read whether they're going to be 5 repaid. Equity can't pay your bills. Cash 6 flows are needed to pay your bills. The 7 Manitoba PUB came to the same conclusions, 8 and I actually provided quotes from that in 9 the submission I've prepared on page 16. 10 The second thing is that because the credit 11 rating agencies are focused on this issue of 12 cash flows to be able to pay the bills, the 13 revenue base of the utility is critical, and 14 one will see that if you read through the 15 credit rating reports that are provided in 16 IR-PUB-Nalcor 213, particularly Attachment 17 11, which is DBRS. You'll see that the 18 first thing cited by the credit rating 19 agencies is the problems from pressure on 20 rates because failing to deal with the 21 pressure on rates will undermine the sales 22 and the loads, which is the source of cash 23 that the utility can use to repay the debt. 24 So if you're looking at the situation and 25 saying am I better off with more equity or</p>

<p style="text-align: right;">Page 17</p> <p>1 am I better off with more mitigation, the 2 first thing they would highlight is sales, 3 prices, and maintaining your loads, that 4 mitigation is more important than equity. 5 The other thing that I highlight is that 6 self-supporting status is sometimes held out 7 as a sort of a gold standard or the area one 8 does not want to broach, and that is fair at 9 a general level, but once we're into this 10 type of terrain, that needs to be understood 11 at a more detailed level. Self-supporting 12 status is not necessarily the impact that is 13 assumed. It's not necessarily intuitive. 14 Specifically, a number of utilities have had 15 their self-supporting status removed by 16 Standard & Poor's due to methodology change. 17 It didn't necessarily lead to downgrades to 18 any of the provincial governments. I'm 19 talking about Manitoba, for example, and 20 SaskPower, and New Brunswick. That was due 21 to a methodology change by Standard & 22 Poor's, but these utilities, at least 23 Manitoba Hydro has already confirmed it will 24 probably never achieve self-supporting 25 status under Standard & Poor's ever again</p>	<p style="text-align: right;">Page 19</p> <p>1 scope of the regulator, and I raise that in 2 regard to comments that have been made about 3 what aspects of the power system here are 4 regulated versus non-regulated. In general, 5 these rating agencies will look to a strong 6 regulator with a broad scope as supportive 7 of self-supporting status. So broader scope 8 for the regulator can help secure that 9 objective of self-supporting status. The 10 last thing I was going to comment on this is 11 it's generally understood in financial 12 markets that the key indicator of credit 13 quality is the prices you're able to get for 14 your debt. It's not necessarily your credit 15 rating. Credit rating is often a lagging 16 indicator. So if someone was concerned 17 about this topic and wanted to monitor, the 18 thing to monitor is the prices that Hydro is 19 able to get for debt that it issues, or the 20 prices that the province is able to get, and 21 whether those are showing erosion, much more 22 than whether the credit rating agencies have 23 yet responded. As a result of that summary, 24 I would say that absent direct and 25 compelling evidence of difficulties</p>
<p style="text-align: right;">Page 18</p> <p>1 because of the way Standard and Poor's 2 measures it, and the fact that Manitoba 3 Hydro is not structured in that manner. 4 Standard and Poor's is measuring it as if 5 it's a stand-alone company, and Manitoba 6 Hydro operates closer to what we sometimes 7 call "a glorified co-op". It's not going to 8 build equity on the backs of customers just 9 to have equity or just to have – just to pay 10 down debt that is otherwise a cost effective 11 way of financing assets. I have more 12 comments on this in the paper. I don't know 13 that I intend to dwell on it much longer, 14 but I did want to highlight that when one 15 digs into the credit rating agencies, there 16 is a methodology that is used by these 17 rating agencies. The methodology has a 18 number of assessments in it. Among the 19 assessments are for determining whether an 20 entity – what its rating is and whether it's 21 self-supporting, among the assessments is 22 the strength and scope of the regulator. So 23 if someone is concerned about self- 24 supporting status, among the things that can 25 be done is to maintain the strength and</p>	<p style="text-align: right;">Page 20</p> <p>1 accessing credit markets, the equity target 2 should be revised to 20 percent or lower as 3 part of a long term plan that shows how 4 Hydro can meet its bills, can continue to 5 sustain a positive cash flow and an equity 6 ratio over time. It can be a long time. 7 Manitoba Hydro, as I said, is producing ten 8 year and twenty year financial plans for 9 showing how it can reach equity targets, and 10 the benefit in the form of either lower 11 dividends or a lowered ROE target, which is 12 actually preferable, should be part of rate 13 mitigation to customers, given that that's a 14 material amount, 111 million. I also have a 15 recommendation there that in support of the 16 evidence of self-sufficiency, regulatory 17 independence expansion should be supported. 18 I don't intend to get into the details of 19 the corporate structure of the entities 20 where LCP resides and energy marketing and 21 the like, but the broad scope of the 22 regulator is one thing that can be done to 23 show support for the fact that an overall 24 sensible financial scheme will be 25 established and maintained and to provide</p>

<p style="text-align: right;">Page 21</p> <p>1 support for those credit rating agencies. 2 The second topic that was – received 3 comment in the submission is in regard to 4 increased cost efficiency. On this slide, I 5 highlight that there was an assessment of 6 asset transfers. Liberty concluded asset 7 transfers between Hydro and NP would be 8 complex and that NP has higher carrying 9 costs for capital investments, and as a 10 result, any asset transfers must yield 11 operational or efficiency benefits to 12 outweigh a cost of capital disadvantage. 13 I agree with their assessment and I 14 agree that there does not appear to be 15 material benefits available from asset 16 transfers and I wouldn't think it would be 17 prioritized as a mitigation action. 18 Liberty highlights that normal capital 19 spending, if we can call it that, outside of 20 the major developments needs careful review. 21 They highlight half a billion dollars in 22 planned spending over five years by Hydro 23 and NP. I agree and I would understand that 24 that type of review would be planned to 25 occur and I would highlight that it should</p>	<p style="text-align: right;">Page 23</p> <p>1 rendering project or something that would 2 increase the output of a plant or life 3 extension or those types of things. And 4 Hydro would have that outlook because its 5 costs would be affected by the marginal 6 value of that energy. The exports, the 7 swings in the exports that would occur. 8 Newfoundland Power, however, would be 9 facing a rate structure that is a bit 10 insulated from that marginal cost because 11 they buy their power from Hydro at a 12 different price, at a wholesale rate, which 13 absent mitigation would be going 14 significantly up and the potential would 15 occur for Newfoundland Power to assess its 16 resource planning projects at the price of 17 wholesale power, would avoid buying from 18 Hydro, and that would not be the appropriate 19 economic outcome and so, I'd encourage there 20 to be a structure put in place that 21 Newfoundland Power's resource planning 22 decisions are also assessed based on the 23 overall Island marginal costs, the value of 24 that power at export. 25 So, for example, if Newfoundland Power,</p>
<p style="text-align: right;">Page 22</p> <p>1 occur in a particularly cautious way at this 2 time, given the rate impacts that would 3 otherwise be occurring. 4 One specific item not raised by Liberty 5 and I raise here because it hasn't been 6 mentioned and it may not be -- ultimately be 7 a concern, but there wasn't an opportunity 8 to explore Liberty's conclusions or reply to 9 them through RFIs, is that to the extent 10 that capital plan includes projects that 11 have a resource planning aspect, meaning 12 projects that bring online added energy or 13 that change the output of existing plants. 14 We should be careful to ensure that that 15 other added energy is valued at the marginal 16 value of that energy. 17 We're currently in an environmental or 18 going to be in an environment where there's 19 significant surplus energy and that surplus 20 is not particularly valuable, due to the 21 prices that are able to be secured from the 22 export markets, and my understanding of 23 Hydro's approach to assessing its capital 24 projects is it would look to that value if 25 it's considering something like a re-</p>	<p style="text-align: right;">Page 24</p> <p>1 one of its hydro plants has the opportunity 2 for life extension versus mothballing or for 3 re-rendering or something that would bring 4 online more energy, the value of that energy 5 shouldn't be considered at the wholesale 6 rate. It should be considered at what it 7 does to the overall Island. In other words, 8 what it does to the ability to secure 9 exports overall. And if that lower price 10 leads to a different decision on capital 11 developments that decision should be driven 12 by the overall Island marginal value. 13 I've now moved on to slide 13. Liberty 14 provides an assessment of LCP operating 15 costs, as well as other items in regard to 16 cost efficiency. There are some conclusions 17 in Liberty about the phase-in period to 18 reach steady state operating costs and other 19 efficiencies that can be achieved. I don't 20 attempt to summarize it all on this slide, 21 but in general, I would encourage the Board 22 to take note of those recommended cost 23 efficiency initiatives and ensure that Hydro 24 reports on those in the next GRA and the 25 progress that has been made.</p>

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1 Moving to slide 14, I have comments in
 2 the report about the specific topic of
 3 depreciation. It's concerning to see that
 4 depreciation is not a bigger opportunity at
 5 this time because it's normally a key aspect
 6 of considering major new projects and how to
 7 manage the rate impacts of them.
 8 Effectively, it's how quickly do you pay
 9 down the assets links to your potential for
 10 principal payments on debt as well how you
 11 recognize the cost of an asset and the value
 12 of the asset in rates.
 13 (9:30 a.m.)
 14 It's not uncommon to find ways to
 15 structure either debt or depreciation to
 16 help cushion, help manage the impacts of
 17 large new projects coming online and
 18 effectively, in this case, as I understand
 19 it, those options are foreclosed by the
 20 financing structure that's put in place.
 21 I accept – on this slide, I note that
 22 Liberty raises two reasons why depreciation
 23 does not receive greater attention. One is
 24 because it's a non-cash effect.
 25 Effectively, if one lowers the depreciation,

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1 you don't generate any more cash. You just
 2 lower accounting costs. And if you've
 3 already found a way to tap all of the cash
 4 flow towards mitigation efforts, you don't
 5 necessarily further benefit mitigation by
 6 simply changing numbers on a sheet of paper.
 7 That's true, and I accept that.
 8 And the second reason they raise it is
 9 because the structure of the agreements that
 10 were – go beyond Liberty's scope effectively
 11 are tied to debt repayment and an asset
 12 service life that would otherwise need to be
 13 renegotiated and Liberty's scope did not
 14 include the details of how one might
 15 renegotiate those things. And I accept that
 16 conclusion as well.
 17 And as a result, I don't think there is
 18 a – is easy to provide a clear
 19 recommendation on depreciation alternatives,
 20 but I would encourage parties who are
 21 considering renegotiation to include the
 22 potential for a different means of
 23 recognizing the cost of the assets, of
 24 depreciating them and paying them down
 25 during this early period when the rate

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1 impacts are this significant.
 2 I do provide some examples in the
 3 submission about different ways that has
 4 been done. I don't know the extent to which
 5 those could be on the table, but I would
 6 understand those discussions to be occurring
 7 outside this room, but I wouldn't think – I
 8 wouldn't think it would be out of place to
 9 encourage those discussions to consider the
 10 pace of paying down the assets as part of
 11 the options that may be considered for
 12 mitigation.
 13 Moving on to Synapse. Synapse's report
 14 was focused on topics related to loads and
 15 customer use and maximizing exports. There
 16 was a primary question posed to Synapse, as
 17 I understand it, definitely posed by Synapse
 18 in the report that they were meant to
 19 answer, which is it more advantageous to
 20 maximize domestic load or to maximize
 21 exports. I think that on balance, reading
 22 Synapse's report, the conclusion is quite
 23 clear that it's almost always more
 24 advantageous to maximize domestic loads.
 25 Sales in the Province that can be for

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1 beneficial uses, whether that's expansion of
 2 industries, whether that is displacement of
 3 oil, whether that is new uses that customers
 4 would come up with, almost always aid in the
 5 efforts we're here to discuss, which is how
 6 to deal with rates, according to the
 7 reference.
 8 There are very few exceptions, which is
 9 if that added load only rises because you
 10 heavily discount the rates or if that added
 11 load only arises at the worst of the peak
 12 times because there is pressures on cost at
 13 times of the highest domestic peaks.
 14 I also raise a concern that when one
 15 goes through the Synapse report, it appears
 16 to be misaligned with the reference scope
 17 which was about rates. I think Synapse
 18 excessively focuses on bills, and I'll spend
 19 a minute or two why I think that's a
 20 problem. I'll say that's not always a
 21 problem, but what Synapse has done is not
 22 outside the industry norm, but 140 percent
 23 rate increases are not the industry norm and
 24 so I think we're in a different situation
 25 here and that's why one might come up with a

<p style="text-align: right;">Page 29</p> <p>1 bit of a need for a different focus than I 2 think Synapse has taken in certain areas. 3 One thing that Synapse did not address 4 in any detail was – which is a high priority 5 item for Industrials – is recognition of the 6 rate disruption and usage pattern of 7 Industrials, competitiveness factors and the 8 importance of power rates to 9 competitiveness, not just on external 10 competition, meaning the value of the 11 product produced by Industrials, but also 12 internal competition, which can relate to 13 whether an Industrial plant within a larger 14 company is able to compete for capital to 15 keep its plant up to date and operating. 16 We'll often hear this from Industrials 17 we deal with across the country. They're 18 part of global – national or global 19 enterprises and they're constantly dealing 20 with internal competition in their companies 21 and they are constantly fighting for limited 22 supply of capital dollars to renew the plant 23 to keep up to date, and failing to be able 24 to justify the capital dollars means that 25 the plants that are here effectively are –</p>	<p style="text-align: right;">Page 31</p> <p>1 opportunity that arises from the fact that 2 absent mitigation you'd be dealing with 3 higher rates, 12 cents. Even with 4 mitigation, you might be dealing with five 5 to six cents. Whereas not using that power 6 domestically means it can be sold to export 7 markets that may yield you 3.3 cents or 3 8 and a half cents. 9 And the question is, if we're shipping 10 this power outside the Province at 3 and a 11 half cents or 3.3 cents, are there uses for 12 it here in regards to building the 13 Industrial base here that we're not 14 capturing because we're trying to charge the 15 customers here more like five or six or 16 possibly 12 cents. Are we really in a place 17 where we say buy it for 12 or we'll sell it 18 for three, but you can't have it for three? 19 And that's a problem because it's 20 inconsistent with what's laid out in the 21 Government plan. It's a problem because it 22 means you're not doing the best for 23 competitiveness and development in the 24 Province and it's a – it misses a potential 25 significant opportunity.</p>
<p style="text-align: right;">Page 30</p> <p>1 will overtime become obsolete; will overtime 2 not have the reinvestment needed for them to 3 continue a long life and it's a type of 4 pressure on their future existence. 5 I put it's understandable why Synapse 6 didn't deal with this in a larger way 7 because it is a very challenging topic and a 8 very large topic. Synapse used some 9 discussion of elasticities and how customers 10 might rely – sorry, how customers might 11 respond to rate changes. And they do note 12 that Industrials have some of the highest 13 elasticities, but those elasticity studies 14 don't deal with rate impacts at the scale 15 we're talking about here. And so I think 16 that Synapse was in a challenging spot in 17 regard to that. 18 One example of an area where I believe 19 a rate mitigation focus is merited and was 20 highlighted in the Government plan, and I 21 cited early on, was how to go about 22 electrification, expanding the load, 23 investing in new Industrial customers or in 24 regards to possible added uses by existing 25 Industrial customers and the problem and the</p>	<p style="text-align: right;">Page 32</p> <p>1 I can see discussion of that in the 2 Synapse document. To the extent that 3 Synapse dealt with the topic, they appear to 4 be suggesting that one would not want to 5 yield from the full price unless a customer 6 was coming to you with a bona fide threat of 7 closure. They lead it in a section on load 8 retention rates. It's the only one that 9 talks about Industrial rate options and I 10 thought that was a bit narrow and 11 disappointing, and I wouldn't want to see 12 that dropped, the opportunity to discuss 13 further what could be done with 14 electrification and with expansion of 15 Industrial loads and so, I've encouraged 16 that that topic stay alive in some form, 17 whether that's Government conducting a 18 review of Industrial competitiveness and 19 load retention and bringing in energy 20 intensive loads. 21 But I don't think that there's been 22 enough information here for us to know how 23 that could occur, how to capture the 35 and 24 a half million dollars in added load 25 benefits that the Government plan, original</p>

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1 plan was relying on. And I wouldn't think
 2 that that is a topic that it's time to stop
 3 talking about.
 4 In regards to electrification, from
 5 what I could see Synapse did a relatively
 6 thorough job. I would note their plan is
 7 based on scenarios, not precise program
 8 designs, but they do provide numerical
 9 representations of the effects of different
 10 programs.
 11 The information that I'll provide in
 12 this slide is updated compared to Section
 13 6.1 and 6.2 that is in the submission that
 14 was prepared September 20th, based on
 15 Synapse's revised original one to their
 16 information, but the numbers don't change
 17 significantly. So, the conclusions still
 18 hold about electrification.
 19 There was a document distributed which
 20 was just the excerpt from Synapse's revised
 21 report that I thought it was worth going
 22 through the table, just to highlight their –
 23 this is best – it's coming up on the screen
 24 now. But highlight where these numbers are
 25 coming from and why electrification is shown

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1 to be so beneficial.
 2 This is from the – the document on the
 3 screen now is from Revision 1 of Synapse's
 4 report and it's from the executive summary.
 5 It's one of the more interesting tables,
 6 from my perspective. It focuses on a subset
 7 of scenarios that Synapse thought it
 8 important to highlight and electrification
 9 is particularly highlighted there at Case
 10 10, the high electrification scenario.
 11 And as you move across this table, it's
 12 all in millions of dollars and it is showing
 13 two different time points, 2025 and 2030.
 14 I'll focus on 2025, but if you want to look
 15 at the 2030, you'll see that the impacts are
 16 actually even more significant. And I'll
 17 say that the conclusion out of this table is
 18 that high electrification is highly
 19 beneficial.
 20 For 2025, it's important – added
 21 electrification is bringing 54 million
 22 dollars in incremental revenues to Hydro,
 23 sorry, it's 51 million in the corrected
 24 version. And we get that by saying that
 25 Hydro would sell 65 million dollars in added

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1 power with 13 million in lost export
 2 revenues. So that its sales overall has
 3 gone up on the order of 50 million dollars.
 4 In order to achieve that 50 million
 5 dollars in added sales for the same quantity
 6 of power, overall same quantity of power
 7 generated, Hydro will have to incur 20
 8 million in costs. Three million to run the
 9 programs and 17 million to deal with the
 10 fact that that added load drives a higher
 11 need for capacity. So, by the time we're
 12 done on this table, the revenue requirement,
 13 the amount required to be recovered from
 14 rate payers is benefited 33 million dollars.
 15 We require 33 million less from all the
 16 existing rate payers.
 17 That 33 million, if we go to the page
 18 before this, page seven of the Synapse,
 19 Revision 1, that 33 million you'll see
 20 highlighted again. This is Table 1 of the
 21 Synapse executive summary. Again, high
 22 electrification is row ten. You'll see that
 23 same 33 million benefit. That 33 million
 24 benefit allows you to have rates that are
 25 half a cent, .49, half a cent lower than

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1 they would have been.
 2 In other words, the customers who
 3 electrified had the opportunity to displace
 4 oil, see positive bill effects, which
 5 Synapse has the rest of this table
 6 highlighting. But even if you have no role
 7 in electrification, if you're a customer
 8 who's just using power the way you've always
 9 used it, you will still see rate benefits
 10 from the fact that other customers
 11 electrified and bought more power and bought
 12 at a higher price than the export market
 13 would have provided.
 14 So, this is what would be considered a
 15 type of win-win situation. Electrification
 16 benefits the participating customers. It
 17 also benefits the customers who don't
 18 participate. And as a result,
 19 electrification is, as set out by Synapse,
 20 subject to program design, is highly
 21 beneficial and it should be pursued.
 22 There's another scenario that we don't
 23 have to switch back to, but which takes the
 24 same electrification and it adds some time-
 25 of-use and demand response aspects to help

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1 avoid that peak. If you remember when we
 2 went through that electrification scenario,
 3 we were getting added revenue from the
 4 sales, but those sales were also driving a
 5 higher peak, which led to 17 million dollars
 6 in capacity costs.
 7 An add-on to electrification is finding
 8 a way to avoid that 17 million in capacity
 9 costs and Synapse effectively concludes you
 10 can avoid ten million of that added capacity
 11 costs by spending four million on demand
 12 response type programs and time-of-use
 13 rates, particularly where you're using
 14 electric vehicles. As a result that .49
 15 cent rate benefit becomes a .6 cent rate
 16 benefit, which is, you know, a significant
 17 improvement for spending four million to
 18 save ten.
 19 As a result, the demand response option
 20 should also be pursued and I would highly –
 21 with that, the importance of the Industrial
 22 curtailment and capacity assistance programs
 23 being shown to be highly economic.
 24 (9:45 a.m.)
 25 When Synapse comes on to CDM, we end up

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1 with a much more challenging economic
 2 profile, and I'm going to walk through this,
 3 but I effectively do this twice to show two
 4 different ways of looking at the numbers
 5 that are here, but to emphasize what some of
 6 the statements that have been made mean.
 7 So, first looking at CDM the same way
 8 as we just looked at high electrification,
 9 if we can go back to Table 2 from Synapse's
 10 Revision 1 of their executive summary.
 11 Pursuing high CDM means spending on
 12 programs or incentives to get customers to
 13 use less power. As a result of that, sales
 14 will decrease and this shows that Hydro's
 15 sales or the consolidated sales go down by
 16 55 million dollars in 2025 from high CDM.
 17 Now, that power that's freed up is able
 18 to be exported, and as you move across the
 19 table, you'll see that that exported power
 20 could yield 14 million in export revenues.
 21 So, you've got a net impact of loss revenue
 22 of 41 million dollars.
 23 In order to achieve that CDM, this
 24 shows that you would need to spend nine
 25 million, and that's an amortized cost, but

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1 nine million. But that because loads are
 2 down, there's a peak capacity saving of 16
 3 million. By the time you put those
 4 together, you end up with a net adverse
 5 impact to the utility revenue requirement
 6 from CDM that is shown there as 35 million.
 7 I quote it as 34, simple arithmetic, but
 8 it's, you know, 30 some odd million in
 9 change in utility revenues that represents
 10 costs that Hydro will incur that are no
 11 longer being recovered from the same sales
 12 when it's made at the same rate.
 13 And as a result, if we go back to Table
 14 1, top row, page six, high CDM, you see that
 15 35 million negative number change in utility
 16 revenues. That has to be addressed by a
 17 .549 rate increase on all the other sales
 18 made on the system.
 19 So, if somebody is not participating in
 20 the program or if they've already done their
 21 efficiency or if they're living in a
 22 situation where they can't do CDM or
 23 particularly from the clients that I deal
 24 with, if somebody's looking at a new
 25 expansion or a new customer is looking at

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1 coming here, those higher rates are what
 2 they're going to face. They're not going to
 3 see the bill savings that are being pursued
 4 by the participants. They're just going to
 5 face those higher rates.
 6 So this, at the outset, before we deal
 7 with the specific program design, is
 8 effectively a win-lose type of program.
 9 Participants can be winners. Non-
 10 participants or people who can't
 11 participate, afford to participate or who
 12 aren't here yet and will be eventually
 13 developing can end up as losers in this mix.
 14 Now, given the mitigation mandate is
 15 about lower rates and given we're dealing
 16 with an environment where we're dealing with
 17 extreme rate impacts and that's the focus,
 18 CDM should be looked at cautiously.
 19 There is a test for CDM that was not
 20 applied by Synapse in coming up with their
 21 design, which is looking only at those that
 22 can have a positive rate impact. In other
 23 words, within that mix of programs, you can
 24 run CDM which has a positive rate impact
 25 which doesn't lead to rate increases to

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1 other customers. And there's a test for
 2 that and it's known as the rate impact
 3 measure as an indication of win-win CDM.
 4 It is not always applied and I know
 5 that that evidence has been given, reading
 6 the transcript. There are other types of
 7 tests that have been recommended or applied
 8 by Synapse which are described as more
 9 industry standard. I don't disagree there
 10 are other types of tests. I will say that
 11 the rate impact measure is an industry
 12 standard. It's not always used as a primary
 13 one, but we're not always in a situation
 14 where customers are facing 140 percent rate
 15 impacts.
 16 The types of tests that others were
 17 discussing, for example, the program
 18 administrator costs test, which I believe
 19 was referenced by NP's panel, are a normal
 20 test for DSM as well, but they have a
 21 different focus.
 22 The Program Administrators' Cost Test
 23 will effectively look at the world through a
 24 lense of resource acquisition. It says, if
 25 I need to get more kilowatt hours compared

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1 to what it costs me to go get them from new
 2 developments, is CDM a cost-effective way of
 3 getting those extra kilowatt hours? It
 4 won't look at revenue at all. It doesn't
 5 even consider lost revenue from customers.
 6 It just says if I need a million kilowatt
 7 hours, I can go build something that
 8 supplies a million kilowatt hours or I can
 9 go pay customers to get my million kilowatt
 10 hours which is more cost effective. The
 11 reason that test doesn't necessarily apply
 12 today is because we're in a surplus. We're
 13 not going looking for those kilowatt hours.
 14 We're not—we don't have a supply-focused
 15 situation. We have a rate-impact focused
 16 situation and that type of test will not be
 17 considered. We'll not be looking at whether
 18 rates go down as a result of this because it
 19 basically assumes that the rates are going
 20 to have to cover this million kilowatt hours
 21 I need, but we're not in that situation. We
 22 don't need the million kilowatt hours. At
 23 its basic level, that's why the Program
 24 Administrators' Cost is not necessarily
 25

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1 well-suited to the current situation. It's
 2 also being applied a little bit in a
 3 modified fashion here because it's really
 4 supposed to look at the utility's costs, but
 5 we've defined "cost" to include changes in
 6 export revenue. It's not supposed to look
 7 at revenues. So, we've put in half the
 8 revenue picture because we put in the export
 9 revenue as the value of our cost of
 10 foregone, but we don't consider the domestic
 11 revenue. So, even at a basic level, the
 12 PAC, the C being cost, we've already sort of
 13 modified in looking to applying it in this
 14 situation. The key is that RIM Test can be
 15 a total solution for distributive effects.
 16 With a RIM, there's no need to solve showing
 17 distributive effects which I'm going to—it
 18 will be the last slide I deal with. And
 19 they're focused on rates, just like this
 20 inquiry is. Now, I said I would take one
 21 through looking at the picture again as to
 22 why these distributive effects are such a
 23 big deal. This is the same CDM case where
 24 I've just—I've rearranged the numbers and
 25

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1 I'll say that when one looks at CDM Tests,
 2 there are effectively three groups of tests
 3 that you can look at. There are
 4 consolidated tests. The consolidated tests
 5 look at what is the overall impact on the
 6 jurisdiction, ignoring customers' money and
 7 utility money. I'm just going to put all of
 8 this together and say what are the
 9 consolidated impacts on the jurisdiction?
 10 They can include social factors. They
 11 include other things. Total resource cost
 12 here, TRC tests for example is one that
 13 people talk about. Benefits--some benefit
 14 cost tests are that way. A second set of
 15 tests are participant tests and they say, is
 16 the participant better off by being part of
 17 this program? And you have to pass the
 18 participant test or else people won't
 19 participate at all. So, those types of
 20 tests are going to be looked at as to
 21 whether a program will work, but we're going
 22 to focus on the third set of tests which is
 23 the utility test. It's how does this work
 24 out for the utility and ultimately for its
 25

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1 cost to supply its loads? In this slide,
 2 you know, I will sort of walk through those
 3 tests and using the same set of numbers for
 4 the high CDM case. Remember that we said
 5 that from outside the jurisdiction, by
 6 running high CDM, we will get extra export
 7 revenues of 14-million dollars. We also
 8 said we would save 16 million in capacity
 9 savings. Both of those are bona fide
 10 benefits to the province. Actual dollars
 11 coming in from exports and actual avoided
 12 need to spend on capacity. So, there's 30-
 13 million dollars if we're only looking at the
 14 entire consolidated picture, there's 30-
 15 million dollars of benefits. We can achieve
 16 that 30-million dollars as the second bullet
 17 shows by spending 9 to run the program.
 18 Synapse uses this and talks about a three-
 19 to-one-benefit ratio. That's the types of
 20 numbers they're talking about. We spend 9;
 21 we save 30. We're all better off, right?
 22 As a whole, we're better off, and when you
 23 can pass a consolidated test like that,
 24 people would say, "Yes, that's a good
 25

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1 program and all we need to deal with now is
 2 who gets the benefits of us being better
 3 off." Distributive effects or program
 4 design or technological fixes, but here's
 5 why that's so challenging. In this case,
 6 that 21 million in net provincial benefits
 7 ends up arising as a 55-million-dollar-bill
 8 savings to the customers who participated in
 9 the CDM. So, the bill-savings that are
 10 being provided is two and a half times the
 11 benefit that they're actions caused.
 12 There's a 34-million-dollar gap and that's
 13 the question of where does that come from.
 14 And the answer is, right now, it comes from
 15 a half-a-cent rate increase to everybody
 16 else. So, when you hear the term "All we
 17 need is to deal with distributive effects or
 18 a technological fix," what people are
 19 basically saying is, "All we need to do is
 20 make sure that we don't get that 34 million
 21 from everybody else, that we get from the
 22 customers who saved." So that everyone else
 23 isn't harmed, we have to get it back from
 24 the customers who saved otherwise. That's
 25

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1 the only place where it can come from. So,
 2 how do you get the 34-million dollars back
 3 from the customers who participated? You
 4 have to find a way to effectively claw back
 5 from them 60 percent of what they thought
 6 they were going to save because they think
 7 in running the program and saving energy,
 8 they're going to save the 20-cent rate, but
 9 there's only somewhere in the order of 8
 10 cents of real benefits from them cutting
 11 back their loads, between that and the
 12 export and the capacity. And that's what
 13 the distributive challenge is and waving
 14 one's hand at it and saying that's just a
 15 program design element, I think undermines
 16 the extent to which that is a serious
 17 problem that has to be carefully looked at.
 18 Otherwise, you end up with these impacts of,
 19 like I said, half a percent rate, the impact
 20 on the rest of the rate payers which, as I
 21 noted, that's almost ten percent of what
 22 industrial customers are paying, their bills
 23 now. So, the conclusion there is pursue CDM
 24 where you can have a positive RIM Test,
 25

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1 where you can have a positive effect on
 2 rates. That should be done anyway. Be
 3 cautious when you don't because the program
 4 design elements can mean that you end up in—
 5 with small benefits, in this case 21-million
 6 dollars, and a very difficult time making
 7 sure that that doesn't end up costing non-
 8 participants or some of the other sub-groups
 9 that people talk about, whether that low-
 10 income people who can't participate in CDM,
 11 new industrial customers who weren't here
 12 yet. So, they're only looking at the fact
 13 that rates are higher and they're not going
 14 to be as competitive, those types of things.
 15 I will say we were not able to get all of
 16 the numbers to work exactly out of Synapse's
 17 report. So, when I quote eight cents, it's
 18 developed just for some ratios. We didn't
 19 have the opportunity to ask some RFIs, but I
 20 didn't see anything in there that suggested
 21 a problem. It's just that we don't have
 22 the—some of the detail. I believe that
 23 addresses everything in the presentation
 24 this morning.
 25

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1 MR. COXWORTHY:
 2 Q. Thank you, Mr. Bowman. That concludes the
 3 presentation for the Island Industrial
 4 Customer Group.
 5 CHAIR:
 6 Q. Thank you.
 7 MR. COXWORTHY:
 8 Q. Thank you, Madam Chair.
 9 CHAIR:
 10 Q. Thank you, Mr. Coxworthy. Thank you, Mr.
 11 Bowman. Hydro and Nalcor, do you have any
 12 questions?
 13 YOUNG, Q.C.:
 14 Q. Thank you, Madam Chair. Good morning, Mr.
 15 Bowman. Welcome back to sunny St. John's.
 16 A bit of reprieve from snowy Winnipeg, I
 17 guess. We live in dread here for our first
 18 winter storm. I'm just going to discuss two
 19 areas and I think my question has been cut
 20 short because your last topic you discussed
 21 in some detail. So, it's not going to me
 22 terribly long on that one, but my first area
 23 I'd like to discuss with you is—it starts on
 24 page 14. I don't think I need to turn you
 25

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1 to it. I'm going to read you a sentence
 2 from your report and then ask you to respond
 3 to a question with regard to it. And it's
 4 got to do with Hydro's equity targets and
 5 making adjustments, that sort. And your
 6 sentence is, "It's not clear that Liberty
 7 retained a specific credit rating or capital
 8 market expert to generate this conclusion
 9 which would be appropriate and necessary to
 10 make a defensible assessment in these
 11 areas." I think when you discussed your
 12 background, you don't consider yourself
 13 specifically a credit rating expert? Is
 14 that correct?
 15 MR. BOWMAN:
 16 A. Correct.
 17 YOUNG, Q.C.:
 18 Q. You're a bit more of a generalist than that?
 19 MR. BOWMAN:
 20 A. Correct.
 21 YOUNG, Q.C.:
 22 Q. So, you know, we've seen such experts
 23 testify in this room before and they
 24 typically do an analysis of—to get a sense
 25

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1 of the cost of equity. They look at the
 2 spreads between long Canada Bonds and
 3 discount of cash-flows and huge tables of
 4 comparable companies and utilities, but the
 5 commentary you've provided seems to come
 6 mostly from a single point in time and a
 7 recent Manitoba Hydro regulatory ruling. Is
 8 that basically correct as to the source of
 9 your discussion here?
 10 MR. BOWMAN:
 11 A. Well, yes. Can I comment on why? Is that –
 12 YOUNG, Q.C.:
 13 Q. Yes, sure, please.
 14 MR. BOWMAN:
 15 A. The main reason is because it's very recent
 16 because a lot of things that we're dealing
 17 with here are very similar to what Manitoba
 18 Hydro is facing in terms of a major new
 19 project coming online and because there's
 20 been a lot of development in the capital
 21 markets situation in the last few years that
 22 are very relevant to this. For example,
 23 Standard and Poor's changing its target for
 24 what it considers self-sufficiency, and as a
 25

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1 result, three or four utilities, Crown
 2 utilities across Canada, are being
 3 considered not self-sufficient.
 4 (10:00 a.m.)
 5 And beyond all that, mostly it's always
 6 been taken as a bit of sacrosanct that
 7 utilities need to be self-sufficient, and
 8 Crown utilities, to avoid putting any impact
 9 on the government and it's kind of the no-
 10 man's land over there that we just don't
 11 want to approach. These days, a number of
 12 utilities are approaching it. And so,
 13 there's been a lot more focus, particularly
 14 in Manitoba, about what does this really
 15 mean when we approach it? What does it mean
 16 that Standards and Poor's no longer consider
 17 that as self-supporting? Because there was
 18 always—that's the one thing you don't want
 19 to happen and now it's happened. So, what
 20 happened? How did that arise? Can we avoid
 21 it? So, there's been a lot more detailed
 22 focus at that level in the last few years,
 23 particularly, I'd say Manitoba is the best
 24 recent example, but about this, about this
 25

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1 question compared to, I think, the history
 2 across many of the jurisdictions or past
 3 years.
 4 YOUNG, Q.C.:
 5 Q. The other credit rating agencies, like we
 6 see a lot of Moody's and DBRS. Have they
 7 reached the same conclusions about those
 8 utilities not being self-sustaining?
 9 MR. BOWMAN:
 10 A. No.
 11 YOUNG, Q.C.:
 12 Q. Okay. So, it's really a change in, I guess,
 13 methodology of Standard and Poor's that
 14 bring us to this point?
 15 MR. BOWMAN:
 16 A. So, Standard and Poor's had a change in
 17 methodology which is critical and allowed us
 18 to test this theory about whether self—
 19 losing self-supporting status really was as
 20 bad as everyone said it would be. DBRS and
 21 Moody's are also though commenting on things
 22 like the erosion of (unintelligible) capital
 23 ratio. You see it in their reports. The
 24 language isn't that different than the
 25

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1 reports that you have filed here which says
 2 that we're facing challenging times. They
 3 do focus on things like 10 and 20-year
 4 financial plans that Manitoba Hydro can
 5 provide and it shows that even though it
 6 might drop to somewhere between 9 and 12
 7 percent equity and have planned net losses,
 8 even at average waterflows for a period of
 9 time. It shows that those things will turn
 10 around. So, they do focus on the long term
 11 and it hasn't led to downgrades, but of
 12 course, it has the normal line that says if
 13 conditions eroded or if facts change, we
 14 might downgrade.
 15 YOUNG, Q.C.:
 16 Q. And just further to that point, I noted when
 17 I had a look at the Manitoba report, and
 18 they seem to be looking at the appropriate
 19 equity thickness giving a sustained five-
 20 year drought potential. So, I guess my
 21 question is, when a rating agency or a
 22 regulator looks at a utility for this, it
 23 can't easily use information from other
 24 jurisdictions where that is based on very
 25

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1 specific tests and considerations?
 2 MR. BOWMAN:
 3 A. Right. And in particular, in Manitoba
 4 Hydro's case, Manitoba Hydro effectively
 5 self-insures drought by way of its equity.
 6 If it has a bad drought, it's going to lose
 7 money. Manitoba Hydro lost 400-million
 8 dollars in the drought in 2003. The whole
 9 system is designed for that though. That's
 10 why it effectively has equity, and so, their
 11 stress tests are all about what does a
 12 drought cause? Here, we have different
 13 things like an RSP that manages water.
 14 YOUNG, Q.C.:
 15 Q. Yes, but the need to access the capital
 16 markets is still present?
 17 MR. BOWMAN:
 18 A. Absolutely.
 19 YOUNG, Q.C.:
 20 Q. Yes. And you made a comment which I think
 21 if we agree, I think everybody agrees with,
 22 that the timing does matter for rate
 23 mitigation. You were talking about the
 24 period of time during which potentially a
 25

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1 change in the equity thickness could be
 2 endured and the CEO has spoken to that and
 3 the vice-president of Finance for Hydro, Ms.
 4 Hutchens, has spoken to that, with caveats.
 5 A certain amount of that can happen for a
 6 period of time before they get too
 7 concerned. After that, they do get
 8 concerned. Is that the kind of information
 9 that they also set in Manitoba and other
 10 places in your experience?
 11 MR. BOWMAN:
 12 A. Yes, and not to be too flippant about it,
 13 but these are also kinds of topics that are
 14 not just dealt with numerically, but also in
 15 a sense--I'm trying to find the right word.
 16 Like lyrically or culturally that when one—
 17 sometimes the numbers can turn against you
 18 and people will say, "Well, we still have
 19 certain confidence," but when a certain
 20 confidence is lost, even if the numbers
 21 start to go for you, the confidence doesn't
 22 come back quickly. And credit rating
 23 agencies take into account a certain
 24 qualitative aspect as well, as do lenders, a
 25

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1 certain qualitative aspect assessment of
 2 risk. And so, those things, not only can go
 3 against you on the numbers, but once they go
 4 against you on the numbers, they can have a
 5 certain hangover effect.
 6 YOUNG, Q.C.:
 7 Q. And further onto credit rating agencies, you
 8 said something which I had not heard before
 9 and I'm curious as to whether it's a widely-
 10 held view and that is that credit rating
 11 agencies are a lag indicator which is to say
 12 they look at a utility's or a company's
 13 difficulty in attaining low-cost debt and
 14 then they respond to it. And that seems to
 15 me to be, from the way most people see it,
 16 an upside-down thing. Most people would
 17 look at the credit rating agencies and then
 18 assign a debt cost arising from it, but you
 19 see it differently?
 20 MR. BOWMAN:
 21 A. Well, I encourage you to read the record
 22 from the specific Manitoba Hydro hearing as
 23 well, but I don't—I think at the time, it
 24 was an example of the non-intuitive
 25

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1 information that is coming out. When people
 2 are assessing being closer to this margin,
 3 that effectively, the people who are doing
 4 the lending aren't just sitting there
 5 reading a credit rating agency report and
 6 taking that as sacrosanct for what—where
 7 they're going to put their billions of
 8 dollars, right? These are sophisticated
 9 lenders. They're going to do their own
 10 assessment. They're probably going to be
 11 more sensitive than a credit rating agency.
 12 They're certainly going to be more up to
 13 date than a credit rating agency. In the
 14 case of Manitoba Hydro, there's points where
 15 they were borrowing ten-million dollars a
 16 day. Credit agencies are updated once a
 17 year. The people who are lending those
 18 amounts are doing their assessment and in
 19 real time. They're sophisticated. They
 20 directly talk to the utility in some detail
 21 and a lot of times, that information will
 22 flow much more quickly through the spreads
 23 that you're seeing than you'll ever see it
 24 written in black and white in a ratings
 25

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1 report.
 2 YOUNG, Q.C.:
 3 Q. So, the borrower phrase “follow the money”?
 4 MR. BOWMAN:
 5 A. Yeah, don't undermine—underestimate the
 6 ability of the people who are lending the
 7 money to do their own assessment and not
 8 just rely on Standard & Poor's
 9 (unintelligible) -
 10 YOUNG, Q.C.:
 11 Q. Thank you.
 12 MR. BOWMAN:
 13 A. - do the work for them.
 14 YOUNG, Q.C.:
 15 Q. A different area here I want to pursue, and
 16 it was last one you spoke of, and it's one
 17 that I think is going to bring us back to
 18 this room for a lot of discussions in the
 19 coming years and that's got to do with the
 20 CDM and the screening tests. And I posed a
 21 question to Ms. Langthorne of Newfoundland
 22 Power with regard to the use of, as you've
 23 proposed, the RIM Test, and I put it to her
 24 that essentially it's a conservative test in
 25

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1 that it can screen out a lot of CDM that can
 2 have positive impacts overall, but as you've
 3 described, there's winners and losers in
 4 that. And I'm just wondering, in the last
 5 discussion you had just as you finished your
 6 testimony this morning, your direct, you
 7 were talking about a balance or using it in
 8 combination with others. Do you have an
 9 example of where, from your regulatory
 10 experience, where it's been used with others
 11 to design programs? Because, and I will
 12 agree with you, by the way, we're facing a
 13 somewhat unique circumstance with a very
 14 large project coming on with high costs.
 15 MR. BOWMAN:
 16 A. Well, it's been frequently more than one
 17 test used. I was pulling up last night the
 18 Manitoba Hydro documents which we thought
 19 about sharing, but they have a copyright
 20 warning on them even though they've been
 21 filed in regulatory hearings, but they
 22 emphasize that they apply more than one
 23 test. If you can have a program or a
 24 portfolio program that have a positive RIM
 25

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1 result, a positive rate impact result, you
 2 can be relatively comfortable you can pursue
 3 those programs without harming anyone,
 4 having a win-win. If you don't, you have to
 5 look a little bit deeper to see whether
 6 you've got losers in that mix and how you're
 7 going to deal with that. Sometimes that's a
 8 program design element. For example, if the
 9 losers are simply people who can't
 10 participate because they're low income,
 11 well, the question is, how do we help those
 12 low-income people participate? Sometimes
 13 it's solvable, but often, it's a sign that
 14 you are driving up rates to participate in
 15 CDM. As I noted earlier today, that isn't
 16 even necessarily a problem if you're trying
 17 to acquire new power because acquiring new
 18 power might drive up your rates, too. CDM
 19 may be the cheapest source of new power
 20 which will drive up your rates, but not as
 21 much as the alternative of acquiring new
 22 power. That will fail a Rim Test, but it
 23 doesn't mean it's a bad decision because you
 24 need the power. But that's not where we are
 25

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1 today here either. So, there's a lot of
 2 situations where you can apply that test.
 3 It'll help you identify programs that should
 4 be slam-dunks, it can go forward and it's
 5 not a prohibition to other types of
 6 programs, but those other types of programs
 7 need to be considered for the distributive
 8 effects and that can often be extremely
 9 challenging as I noted with Synapse. And if
 10 I can just note one other thing there, one
 11 of the surprising things to me is the extent
 12 of enthusiasm, if I can put it that way, for
 13 CDM programing today on the system where the
 14 idea of running CDM programs is to get
 15 customers to do things they wouldn't
 16 otherwise do or wouldn't otherwise have
 17 incentive to do themselves. Well, a few
 18 years ago, ten years ago, pick your number,
 19 we had rates that were lower than they will
 20 be after this without mitigation and we had
 21 -benefits from conservation were higher
 22 because we could avoid Holyrood oil. Now,
 23 we're going into a situation where rates can
 24 be higher, absent mitigation, so customers
 25

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1 will already have a lot incentives to do
 2 things themselves without having to run a
 3 program and benefits will be lower because
 4 your exports are--the exports you can get
 5 are much lower, much less than Holyrood's
 6 oil was going to be. If anything, CDM would
 7 be less relevant in the future, CDM
 8 programing, (unintelligible). It will less
 9 relevant in the future than it would have
 10 been five or ten years ago. So, it seems
 11 surprising that now we're going to say, "Oh,
 12 there's this huge new opportunity from CDM."
 13 If anything, I would think the opportunity
 14 is less than it ever was.
 15 YOUNG, Q.C.:
 16 Q. It occurs to me, as you say, the Board might
 17 wish to apply judgment here. When you have
 18 a portfolio or suite of programs, and you
 19 might have some, I'm proposing this to you,
 20 you might have some that fail the RIM Test,
 21 still not that badly, but they provide
 22 generally significant energy savings, and
 23 they might be at times of peak, which makes
 24 them particularly attractive if those
 25

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1 opportunities are there. And you might have
 2 others that clearly pass the RIM Test.
 3 Would you see or have you seen places where
 4 they look at the overall impacts of a number
 5 of them and don't get too fussed about the
 6 fact that some might fail the RIM Test
 7 because overall benefits of the whole suite
 8 make sense?
 9 MR. BOWMAN:
 10 A. Yeah, absolutely. That's what I was talking
 11 about. These tests can be applied to a
 12 program or to a portfolio of programs. And
 13 often, the portfolio is—it's an art to
 14 design a portfolio that you assess because
 15 you need to take into consideration things
 16 such as, you know, quality of opportunity
 17 for different rate payers. Maybe there is
 18 a, you know, a regional aspect. You know,
 19 in Manitoba we face the situation where some
 20 customers have access to natural gas and
 21 some don't. So, if you design a program and
 22 you come up with some great numbers, but you
 23 look at it and you realize you've given a
 24 huge opportunity to half the province and
 25

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1 the other half has nothing, you have to have
 2 think about those types of effects. You can
 3 also see it in cases where, for example,
 4 going back to Manitoba Hydro's example, they
 5 may have 30 programs. One of those is
 6 affordable energy program that designed for
 7 low-income customers and on its own it'll
 8 never pass a RIM Test because you simply
 9 have to supply much supports for getting
 10 low-income customers to participate. They
 11 can't do it themselves even with a great
 12 return. And so, that one may fail the RIM
 13 Test, but it's an important part of getting
 14 a portfolio to have, you know, equity in it
 15 that's needed to get board support across
 16 multiple groups, but once you put it
 17 together with the portfolio, you still have
 18 a positive set of tests and so you design a
 19 portfolio in that manner. That's part of
 20 the art of designing this.

21 YOUNG, Q.C.:
 22 Q. And I guess my last question in this, in
 23 this connection, is with regard to the group
 24 that you represent, the Island Industrial
 25

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1 Customers, and broadly different
 2 characteristics from the bulk of customers
 3 who are likely to be able to avail of the
 4 CDM programs. So, if there isn't something
 5 there for the industrial customers, almost
 6 by definition, if there's less energy
 7 revenue, then the RIM Test, or sometimes
 8 called the "no losers test," could have a
 9 loser? Is that correct?

10 MR. BOWMAN:
 11 A. Well, if they can't participate, they could
 12 end up being a loser. I don't, you know,
 13 definitely don't dismiss the opportunity
 14 provided by industrial CDM. Well, for
 15 example, one we know of is the capacity
 16 assistance.

17 YOUNG, Q.C.:
 18 Q. Yes.

19 MR. BOWMAN:
 20 A. Those are massively beneficial programs
 21 particularly in the situation that we're
 22 talking about, but you know, again, just
 23 because I had the document out last night,
 24 Manitoba Hydro gets a lot more relative
 25

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1 conservation from its industrial customers
 2 than it ever does from residential. There
 3 much easier to access. The problem is that
 4 they're a very different design. They're
 5 very lumpy. For example, if someone is
 6 going a capital upgrade, you may have a huge
 7 opportunity to have them use a different
 8 technology, install some better equipment or
 9 something like that, but that only occurs
 10 that one time when they're doing the
 11 upgrade. That upgrade is then going to be
 12 in place for the next 20 years and you're
 13 stuck with that technology occurred. So,
 14 you want to capture those and I think that's
 15 occurred here. I think if you look back in
 16 the history of conservation here, there's
 17 one year that had a huge spike, about how
 18 much occurred and it was one industrial
 19 customer that had a plant upgrade or
 20 something of that nature going on and there
 21 was –

22 YOUNG, Q.C.:
 23 Q. Yes, they're less about programs; more about
 24 being attentive to opportunities as they
 25

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1 arise.

2 MR. BOWMAN:
 3 A. Yeah, yeah. Yeah, and often it's about
 4 showing--you know, helping people calculate
 5 a return and then, you know, they can go
 6 find the money.

7 YOUNG, Q.C.:
 8 Q. Right.

9 MR. BOWMAN:
 10 A. They don't need, you know—it's not about
 11 advertising or some of the other things that
 12 are—or training. You know, if you want to
 13 install a bunch of heat pumps in a province,
 14 you've got to have people who can install
 15 it. So, you need training. You need
 16 advertising. Industrial customers aren't
 17 that type of market. It's an entirely
 18 different focus, but the conservation
 19 opportunities can be significant, but
 20 they're—you don't have that many customers
 21 and so there may be very few for many years
 22 until you have the right one come along.

23 YOUNG, Q.C.:
 24 Q. Thank you, Mr. Bowman. Thank you, Madam.
 25

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1 Thank you, that's my only question.
 2 (10:15 a.m.)
 3 CHAIR:
 4 Q. Thank you, Mr. Young. Newfoundland Power?
 5 MR. O'BRIEN:
 6 Q. Thank you, Madam Chair. Good morning, Mr.
 7 Bowman. I only have one area for you, Mr.
 8 Young covered off the CDM quite well, I
 9 think, with your earlier testimony you
 10 touched on that. So I wonder if we could
 11 bring up, I want to look at Recommendation 5
 12 just briefly and it's page 12 of your
 13 slides. And so that was your recommendation
 14 with respect to avoid over investment by
 15 Newfoundland Power in assets that do not
 16 produce economic output, Newfoundland Power
 17 should be directed to evaluate resource
 18 planning decisions based on consolidated
 19 interconnected island system marginal costs.
 20 My understanding is that that's what
 21 Newfoundland Power does right now. And if
 22 that is the case, would you agree with me
 23 then that there's really no need for a
 24 recommendation for them to do something
 25 they're already doing?

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1 MR. BOWMAN:
 2 A. Yes, that's correct.
 3 MR. O'BRIEN:
 4 Q. Okay, that's the only area I have for you,
 5 Mr. Bowman.
 6 MR. BOWMAN:
 7 A. Yeah, had we had an opportunity for RFIs, I
 8 think we probably would have been able to
 9 clarify this.
 10 MR. O'BRIEN:
 11 Q. I got that impression that you really never
 12 had that opportunity to ask that, so I just
 13 wanted to confirm that, okay. Thank you,
 14 sir. I don't have any further questions,
 15 Madam Chair.
 16 CHAIR:
 17 Q. Thank you, Mr. O'Brien. Consumer Advocate?
 18 MR. FITZGERALD:
 19 Q. Thank you, Madam Chair. We both have a
 20 couple of questions for you this morning,
 21 Mr. Bowman. I'll start, in a general sense.
 22 If I could look at your Slide 5.
 23 MR. BOWMAN:
 24 A. Yes.
 25 MR. FITZGERALD:

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1 Q. And this is kind of a contextual or
 2 philosophical question, I suppose, but
 3 generally do you believe that the Muskrat
 4 Falls project costs had been prudently
 5 incurred in the regulatory sense?
 6 MR. BOWMAN:
 7 A. I wouldn't have been able to make that
 8 assessment, it wasn't part of the scope.
 9 MR. FITZGERALD:
 10 Q. Sure. I guess we've heard Mr. Marshall, I
 11 think he's on the record in 2016 describing
 12 the project as a boondoggle. We are looking
 13 at a 12.7 billion dollar project. Is it
 14 reasonable to infer that perhaps some of the
 15 costs weren't prudently incurred?
 16 MR. BOWMAN:
 17 A. I think at the first instance it passes a
 18 smell test that there is, that the costs are
 19 higher than may have been available from
 20 some alternative types of development, but I
 21 think one has to be a little bit careful
 22 when you're building infrastructures that
 23 changes the nature of the system, you know,
 24 something like getting connected to the
 25 North American grid may be a huge benefit 30

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1 or 40 or 50 years from now when one looks at
 2 the overall picture, those could be a
 3 massive leg up, and if you are really
 4 looking for long term, those transformations
 5 may be the thing that changes dramatically
 6 power prices forever on the island,
 7 effectively. Having said that, that's why I
 8 think the mitigation issues are massive
 9 because if those types of benefits exist in
 10 the very long term, the question is how to
 11 avoid hammering people today for what is,
 12 you know, a far in the future potential
 13 benefit that is very hard to quantify. So,
 14 you know, is it imprudent? It may not be
 15 imprudent over its life, but it is
 16 definitely of major concern in the first few
 17 years.
 18 MR. FITZGERALD:
 19 Q. Sure, fair enough and we've heard the 75
 20 year horizon and the 100 year horizon at one
 21 point, I think, but in the short term with
 22 what consumers are facing, you know, and I
 23 suppose to put the question another way and
 24 it's a hypothetical, I guess, but if the
 25 project had to have been given regulatory

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1 scrutiny, would 75 timelines be take in
 2 account in a regulatory sense to sanction a
 3 project like this?
 4 MR. BOWMAN:
 5 A. Well I think they would be taken into
 6 account, but I think there would be much
 7 more focus on the near term and mitigation
 8 aspects. I reference in my evidence the
 9 Manitoba Hydro’s HVdc system which is
 10 developed in the ‘70s and is probably the
 11 key aspect of why Manitoba has some of the
 12 lowest power costs across the country today.
 13 It never would have been built without the
 14 type of supports that it received, that I
 15 discussed, including on things like
 16 effectively depreciation. This line was, it
 17 could not have been carried by rate payers
 18 in that day, it would not have been, I’ll
 19 say in a colloquial sense, prudent. It
 20 would not have been prudent over any, you
 21 know, short-term or medium-term horizon of
 22 10 or 20 or even probably 30 years when it
 23 was first built, but now 50 years later,
 24 it’s the key piece of our infrastructure.
 25 People got together, though, and solved that

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1 A. It could be that subsidization would be one
 2 way to mitigate rates, but it’s not one that
 3 I think is necessary on its face if the
 4 range of options is broad enough.
 5 Unfortunately those ranges of options go
 6 into things like you just commented, that
 7 there’s legislation that provides a certain
 8 set of rules, there is negotiation with
 9 counterparties that is outside this room,
 10 within those other spheres. It’s not
 11 impossible to me that a thoroughly
 12 unsubsidized but carefully crafted project
 13 could not be designed in a way that didn’t
 14 shock ratepayers and as prudent. But, you
 15 know, many of those aspects are outside of
 16 this room and what you’re left with is if
 17 you lock in all of those aspects, you’re
 18 left with a very challenging situation of
 19 trying to figure out how to not hammer
 20 ratepayers absence of subsidization. And
 21 you may end up with requiring subsidies
 22 because a good many of those levers of
 23 control that other jurisdictions have used
 24 to bring on line new projects are not
 25 available.

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1 before it was ever put in place. They had
 2 the federal government come to the table
 3 through Atomic Energy of Canada who built it
 4 and leased it at a very low cost to Manitoba
 5 Hydro, for a long time, until Manitoba Hydro
 6 bought out the lease. Ratepayers paid every
 7 nickel of the project. There’s no subsidy,
 8 but there was a timing difference and the
 9 timing difference was supported by a level
 10 of government who could see the long-term
 11 infrastructure benefits; particular in that
 12 case, the feds.
 13 MR. FITZGERALD:
 14 Q. And that’s, I guess, the point that, you
 15 know, that’s important. You mentioned the
 16 word “subsidy”, in this case Mr. Marshall
 17 recently, when he was on the stand,
 18 indicated that the costs of Muskrat Falls
 19 are inescapable for ratepayers, the costs
 20 are hardwired to the ratepayers by
 21 legislation, and now we’re going through
 22 this exercise of studying rate mitigation,
 23 but I take it, would you agree that rate
 24 mitigation is not subsidization?
 25 MR. BOWMAN:

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1 MR. FITZGERALD:
 2 Q. Yes, and I guess you’re looking again fairly
 3 in a long-term sense that this all make
 4 sense 50 years from now, but, of course,
 5 we’re facing the current obligations on
 6 ratepayers and the ratepayers are paying now
 7 for deals made by the shareholder, if you
 8 will, by government. There is no way out
 9 for the ratepayers, so, you know, whereas
 10 the costs are hardwired, if you will, so as
 11 a subsidization, when you look at this
 12 table, you mention that the 249 million
 13 foregone provincial benefits not from
 14 subsidies, lowering of costs, so would you
 15 agree that the characterization of the money
 16 that comes from government for ratepayer
 17 relief is not a subsidy?
 18 MR. BOWMAN:
 19 A. Yes, that was, I emphasized that in the
 20 evidence that if the conclusion is reached
 21 that the project as developed was, you know,
 22 is not economic, then it would be reasonable
 23 to assume that the party that developed the
 24 project, the owner, would be foregoing
 25 profits and dividends on an uneconomic

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1 project that's not a subsidy, that's just
 2 somebody develops something that doesn't
 3 make profits. You know, a regulatory
 4 framework is designed to best mimic a
 5 competitive framework where competition
 6 can't work because of things like natural
 7 monopolies, so best mimicking a competitor
 8 framework means somebody who develops
 9 something takes on the risks that the thing
 10 they developed isn't economic and if that's
 11 where you're best mimicking, then that party
 12 doesn't get to collect dividends from it or
 13 doesn't get to collect surplus energy sales
 14 from a project being paid for by another
 15 party.
 16 MR. FITZGERALD:
 17 Q. Fair enough, so ratepayers are stuck with
 18 the bill, they're going to pay the bill, so
 19 any relief from government could not really
 20 be characterized as a subsidy.
 21 MR. BOWMAN:
 22 A. I think that's fair and I also wanted to
 23 emphasize that in part because if the
 24 discussion is about whether Hydro is self-
 25 supporting, somebody saying I'll lower your

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1 ROE so that your revenue requirement is
 2 lower and your rates are lower and that's a
 3 form of mitigation, would not be viewed by a
 4 credit rating agency in general, in my
 5 experience, as a subsidy. But someone
 6 saying I'm going to collect a big dividend
 7 and I'm going to write you a big cheque at
 8 the end of the year, the parent writing the
 9 crown a cheque at the end of the year, looks
 10 a lot more like a subsidy and the more that
 11 the parent is writing a cheque to the
 12 utility saying here's your money back, I
 13 think even just on the simple colloquial
 14 meaning of it, looks a lot more like that
 15 utility is not self supporting, it's
 16 requiring that cheque from the government
 17 every year.
 18 MR. FITZGERALD:
 19 Q. And I guess from your client's point of
 20 view, I guess, the Industrial customers, it
 21 probably is more relevant, I guess from
 22 Domestic customers as to how this rate
 23 relief is characterized, whether it's rate
 24 mitigation or subsidization, your
 25 competitors or your client's competitors

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1 outside this jurisdiction might take a dim
 2 view of a subsidized rate.
 3 MR. BOWMAN:
 4 A. I don't think I have done the assessment to
 5 be able to characterize that. It has come
 6 up in other jurisdictions I've been in, but
 7 I have not looked at it from that
 8 perspective in this proceeding.
 9 MR. FITZGERALD:
 10 Q. Sure. Just moving on to another brief
 11 topic, in your experience in examining other
 12 utilities, have you had any experience
 13 seeing how performance based rates may
 14 affect their systems?
 15 MR. BOWMAN:
 16 A. I have had some dealing with performance
 17 based rate making in a few jurisdictions
 18 that I've dealt with.
 19 MR. FITZGERALD:
 20 Q. And do you have any comment regarding the
 21 effectiveness of it?
 22 MR. BOWMAN:
 23 A. Performance based rate making is a model for
 24 setting rates where rather than the details
 25 of, for example, operating costs or whatever

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1 costs are included in the rate regime,
 2 rather than those being reviewed carefully
 3 by a regulator who tries to assess whether
 4 each one is prudent, instead you find a way
 5 to put the incentive on the utility
 6 themselves to keep those to a prudent level
 7 and if they do so, there's a degree of
 8 sharing where they can keep some of the
 9 added benefit of keeping their own costs
 10 down. It relies on the incentive within the
 11 utility to want to maximize their profits.
 12 It works fairly well for a private company
 13 that has an interest in maximizing their
 14 profits. I have not seen good examples of
 15 it working where a utility's priority is not
 16 necessarily maximizing their profits, which
 17 is why you won't find PBR very often applied
 18 to crown utilities because they don't
 19 necessarily have the same profit maximizing
 20 objective or drive, at least in general, as
 21 a private sector utility would. I would
 22 think that PBR may be something that is, you
 23 know, it's applied well at a distribution
 24 level, I'm dealing with proceedings in
 25 Alberta where PBR is being applied to

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1 distribution utilities. It may not work as
 2 well at a bulk power level, at the type of
 3 level that Hydro operates at, and if your
 4 interest is in what are the incentives on
 5 the utility, particularly for a crown,
 6 sometimes the best incentive on them to keep
 7 their costs down is avoiding having to come
 8 back for a rate increase and have a big
 9 public hearing. So sometimes the best
 10 incentive for them is not PBR but, you know,
 11 old school rate base rate of return
 12 regulation where, when the costs go up, they
 13 have to go through all of the costs and
 14 focus and procedures of a full regulatory
 15 review.
 16 MR. FITGERALD:
 17 Q. Okay, thank you, Mr. Bowman. I think Mr.
 18 Browne has some questions for you now.
 19 BROWNE, Q.C.:
 20 Q. Good morning, Mr. Bowman. There's been some
 21 discussion here of Nalcor Marketing Energy
 22 regarding greenhouse gas credits, are
 23 Industrial customers eligible for federal
 24 climate change initiatives based on
 25 greenhouse gas credits, do you know?

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1 MR. BOWMAN:
 2 A. I don't know, I don't have information on
 3 that.
 4 BROWNE, Q.C.:
 5 Q. So there's no study that you're aware of for
 6 Industrial customers on that particular
 7 issue?
 8 MR. BOWMAN:
 9 A. Nothing that I am aware of.
 10 BROWNE, Q.C.:
 11 Q. You stated in your evidence, you give
 12 comparative tables for electricity rates in
 13 various jurisdictions, residential rates,
 14 why are average prices across Canada in
 15 various jurisdictions relevant, why do these
 16 have significance?
 17 (10:30 a.m.)
 18 MR. BOWMAN:
 19 A. Well they're relevant to give a sense, this
 20 slide is not coming up on the screen, they
 21 were relevant to give a sense of what five
 22 cent power and twelve cent power looks like,
 23 I think. I don't know if that's always
 24 intuitive to people, so we thought this gave
 25 a useful picture about the extent to which,

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1 you know, this province is not just facing a
 2 rate change, it's facing a significant
 3 change in the competitive stacking order.
 4 BROWNE, Q.C.:
 5 Q. Some of these jurisdictions have alternative
 6 sources of heat energy that people can go
 7 to, as opposed to electric heat?
 8 MR. BOWMAN:
 9 A. Yes.
 10 BROWNE, Q.C.:
 11 Q. So does that make them less significant and
 12 less relevant if you're into a jurisdiction
 13 such as this one where 70 percent of
 14 Newfoundland Power's customers or 70 percent
 15 of the population I guess generally, are
 16 using electric heat.
 17 MR. BOWMAN:
 18 A. Well electric rates are a much more acute
 19 factor where you don't have alternative
 20 sources of supply. With companies that I
 21 deal with, for example, Manitoba Hydro's
 22 Industrial base, a significant part of it is
 23 out of the natural gas service area anyway,
 24 it's up in the mines, up North, for example,
 25 so sometimes it's not a jurisdiction by

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1 jurisdiction thing, it's a particular
 2 location, but definitely for, for example,
 3 if you're looking at the Residential
 4 comparison, the fact that some of these need
 5 to use that power for electric heat would be
 6 relevant when one is thinking about the
 7 overall impact on bills.
 8 BROWNE, Q.C.:
 9 Q. In terms of that some have presented here
 10 provincially, indeed at the Muskrat Falls
 11 Inquiry, stating that electricity prices in
 12 this jurisdiction are artificially low, do
 13 you have any evidence that electricity
 14 prices in this jurisdiction are artificially
 15 low?
 16 MR. BOWMAN:
 17 A. I haven't heard that testimony and I'd be
 18 interested to know where someone goes to
 19 come up with that conclusion. I can't think
 20 of many aspects of Hydro's revenue
 21 requirement that are artificially low or
 22 subsidized or not fully recovered from
 23 customers.
 24 BROWNE, Q.C.:
 25 Q. So you wouldn't agree with that comment that

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1 electricity prices in this jurisdiction are
 2 artificially based or artificially low?
 3 MR. BOWMAN:
 4 A. Well I would need to know where the
 5 assertion is coming from and what they're
 6 referencing because it's not apparent to me
 7 in any significant way where somebody would
 8 come up with the conclusion that they're
 9 artificially low. At most, for example in
 10 British Columbia, the BC Hydro for years had
 11 a notional income tax included in their
 12 structure because the government somehow
 13 came up with an idea that BC Hydro was
 14 uncompetitive to other alternatives because
 15 it didn't have to pay tax and other people
 16 did, so they sort of impute an income tax in
 17 it, so I guess someone might say they're
 18 artificially low because Hydro doesn't pay
 19 income tax. Beyond that, although I'll say
 20 that's pretty common across the country,
 21 there's a lot of crown utilities don't pay
 22 income tax, beyond that, I can't imagine a
 23 part of Hydro's cost structure that
 24 immediately comes to mind that isn't fully
 25 recovering the costs of producing the power.

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1 BROWNE, Q.C.:
 2 Q. Sure, and there was no evidence presented to
 3 backup the statement, it was just sort of an
 4 empty statement made in a submission. Do
 5 Industrial customers in this jurisdiction
 6 practise conservation and demand-side
 7 management?
 8 MR. BOWMAN:
 9 A. Well absolutely any customers responding to
 10 the economic signals it receives, Industrial
 11 customers are usually a bit more attuned to
 12 that than others because their bills are
 13 that much larger, so when they hire
 14 professional engineers to design elements of
 15 their plant, they will always look at what
 16 the appropriate design is and trade off
 17 things like, you know, low loss transformers
 18 verses regular loss transformers, for
 19 example, based on the price signals they're
 20 receiving. So in that sense, absolutely
 21 they're considering conservation and where
 22 there are savings and also things such as
 23 demand response programs where they're
 24 clearly working with Hydro to conserve
 25 resources at peak times.

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1 BROWNE, Q.C.:
 2 Q. Thank you very much, Mr. Bowman.
 3 CHAIR:
 4 Q. Does that conclude your questions, Mr.
 5 Browne?
 6 BROWNE, Q.C.:
 7 Q. (Mr. Browne nods in the affirmative).
 8 CHAIR:
 9 Q. Ms. Greene?
 10 GREENE, Q.C.:
 11 Q. Thank you. Good morning, Mr. Bowman. If
 12 you could go to Slide 10, please, of your
 13 presentation. In Recommendation No. 2, you
 14 recommend that Hydro's equity target should
 15 be revised to 20 percent or lower, and in
 16 your evidence you talked about the impact of
 17 a 20 percent target which would be a
 18 reduction from the current target of 25
 19 percent. One, have you done any analysis
 20 that would allow you to make a
 21 recommendation as to what that equity target
 22 should be?
 23 MR. BOWMAN:
 24 A. No, and I would say that if, as we've gone
 25 through this and listened to the evidence, I

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1 think even that recommendation I would sort
 2 of refine a bit and not necessarily suggest
 3 that a 25 percent long-term target be
 4 abandoned, but that one, may want to keep
 5 that as a roadmap target, but during this
 6 period where we're trying to absorb these
 7 rate impacts and deal with the mitigation,
 8 one might be satisfied not making that type
 9 of progress towards that target that's
 10 assumed in the graph that's on, I think the
 11 previous page. That may be achieved not
 12 necessarily by setting your targets lower,
 13 but by setting your ROE will be lower so you
 14 simply won't make ground on that during some
 15 period, five years or ten years or
 16 something.
 17 GREENE, Q.C.:
 18 Q. And I understood that, I guess I wanted to
 19 explore with you your recommendation was 20
 20 percent or lower, how do you think would be
 21 an appropriate way to determine what that
 22 interim ROE should be?
 23 MR. BOWMAN:
 24 A. Well I, in sort of further discussing this,
 25 I think if there were—if there were a change

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1 in policies such that the ROE was not set
 2 the same way, but the ROE was set in some
 3 way that had a benchmark to a different
 4 standard and I think probably we both recall
 5 that the ROE target in the past years was
 6 much lower than this before the policy was
 7 changed. I think 3 percent comes to mind.
 8 That may say that for the next few GRAs, if
 9 you like, Hydro will operate with a much
 10 lower return built into its rates and as a
 11 result, it simply won't make that much
 12 progress towards the 25 percent. Would it
 13 go backwards, it might go backwards if it's
 14 building a bunch of capital because your
 15 denominator is also growing, so you know, if
 16 it went from 19 now down to 17 or something,
 17 because your denominator grew and your 3
 18 percent wasn't enough to keep up with that,
 19 but that the picture turned around, as you
 20 had some period, like I said probably five
 21 to ten years out, where you go back to the
 22 ROE regime that exists now, if that's the
 23 sort of long-term intent, then I think you
 24 could look at that and say are we really
 25 troubled by 19 going to 17? You know,

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1 remember, I'm coming from a place where
 2 Manitoba Hydro is going down to 12 or at one
 3 point was thinking 9 as part of it absorbing
 4 a big project. So I just think that, I
 5 wouldn't—it's not that I would turn 25
 6 percent as a sacrosanct target, 20 percent
 7 as a sacrosanct target with the pedal to the
 8 floor trying to get there. I would say take
 9 the foot off the pedal, see where you end
 10 up, it it's a little lower than 20, if it's
 11 a little lower than even the 19 that is
 12 there now, so be it, as long as it shows
 13 that it turns around.
 14 GREENE, Q.C.:
 15 Q. And I was interested in how, did you have
 16 any recommendation how that analysis would
 17 be done which probably is a qualitative
 18 judgment, I suppose, to determine what the
 19 appropriate ROE target should be in the
 20 interim to assist with rate mitigation.
 21 You're not making a specific recommendation
 22 for the Board to recommend to government -
 23 MR. BOWMAN:
 24 A. No, and I'm not saying it should be 17
 25 verses 18 1/2. But I am saying that, you

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1 know, were it up to me to balance all the
 2 different things in here, I would be
 3 encouraging the Board or encouraging
 4 government to relieve the ROE standard
 5 that's in place to allow the Board to assess
 6 an ROE against some different standard, for
 7 example meeting some interest coverage
 8 targets, making sure Hydro can pay its
 9 bills, but not sort of heck of a lot more
 10 than that, for some period of time that
 11 could be defined that the period in which
 12 we're really focused on, key mitigation
 13 aspects, like I said, five to ten years.
 14 And Hydro could probably very easily run,
 15 I'm sure Hydro has the capital plans that
 16 show ten years of capital spending, it could
 17 very easily run its models out to there and
 18 show what happens to its equity ratio and
 19 what it takes to turn that around when
 20 that's done. We do it all the time with
 21 Manitoba Hydro.
 22 GREENE, Q.C.:
 23 Q. So do you see that as a role for the Board
 24 or a role for the government and Nalcor
 25 Hydro to determine how low, how long can we

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1 go?
 2 MR. BOWMAN:
 3 A. I would see it as a role, absolutely for the
 4 Board and partially because of the other
 5 criteria we discussed, which is Hydro's
 6 self-supporting status. If this Board has
 7 its hands tied, the degree of confidence
 8 that somebody can have in whether conditions
 9 on the ground will be responded to, will be
 10 lower because they're relying on policies
 11 that are written in stone or require
 12 political decisions. I think if you pull
 13 out the Standard & Poor's criteria document,
 14 it's a good example, and you look through
 15 it, they say that it's beneficial to the
 16 assessment of self supporting status that a
 17 utility has a competent regulator who has
 18 significant levers of control and gives
 19 lenders confidence that they will respond to
 20 conditions as they arise and so the less
 21 constraints you put on a board and the more
 22 that it builds credibility that the
 23 utility will continue to pay its bills and
 24 it will respond to conditions, I think the
 25 better it is for all involved.

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1 GREENE, Q.C.:

2 Q. So you would recommend that the government

3 repeal or remove the Order in Council

4 direction setting Hydro’s ROE and give the

5 ability back to the Board to make the

6 appropriate decision?

7 MR. BOWMAN:

8 A. Yeah, I think that’s fair.

9 GREENE, Q.C.:

10 Q. I also wanted to ask you a little bit about

11 Recommendation No. 3, which you really

12 haven’t talked about today. There you

13 recommend broadening the scope of regulation

14 and you refer to the unregulated aspects of

15 Nalcor, such as Lower Churchill Project and

16 Nalcor Energy Marketing, and I wanted to

17 talk to you about what you actually meant by

18 that recommendation. With respect first to

19 the Lower Churchill Project, what is the

20 nature of your recommendation? Right now,

21 all of the Lower Churchill Project is

22 unregulated and what are the Industrial

23 customers recommending first with respect to

24 the Lower Churchill Project?

25 MR. BOWMAN:

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1 A. Well this recommendation is housed in a

2 section on credit ratings and equity ratio

3 and it arose from the assessment of this

4 thing we just talked about, which is the

5 more confidence and more power that this

6 Board has, the more levers of control, the

7 better off you’re going to be for the

8 perception of independence outside the

9 province. But ignoring that, were it in

10 this section or were it in a section on

11 regulation, I think Liberty set out the case

12 very well that when you have a set of costs

13 being paid for by ratepayers who are

14 captive, you normally have a regulator who

15 ensures those costs are reasonable. Those

16 costs might be operating costs; they might

17 be ongoing capital additions, for example.

18 I can’t see an obvious reason those wouldn’t

19 be part of an overall regulatory assessment

20 for the Lower Churchill Project and any

21 aspect of assets providing services to

22 ratepayers.

23 GREENE, Q.C.:

24 Q. So with respect to that, that would be the

25 future operating and maintenance costs for

Page 95

1 the Lower Churchill Project as well as

2 future capital, would it?

3 MR. BOWMAN:

4 A. It would include at least those aspects.

5 When people say something is regulated, they

6 can mean a lot of different things. They

7 can mean assets regulated, they can mean

8 costs regulated, they can mean all sorts of

9 things. I don’t know that, you know, Hydro

10 is regulated, the regulated portions of

11 Hydro are a regular, there are a number of

12 aspects here and some others even more

13 broadly and things like issuing debt, for

14 example, I don’t know whether the Lower

15 Churchill Project and the parts of it

16 dealing with financing agreements that are

17 locked in stone and have complicated

18 counterparties and agreements that were

19 arrived at in the past, I don’t know that

20 there’s a lot of reason to have that, for

21 example, assessed by the Board or any sort

22 of issuance of short-term debts or something

23 of that nature, I don’t think those are the

24 key focus. Another aspect you might talk

25 about is sort of how the operations are

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1 done, you know, we know this Board will

2 receive reports on Hydro is managing its

3 water, for example, in its reservoirs and

4 the risk its taking on things, I haven’t

5 looked at whether that’s an aspect of the

6 Lower Churchill Project that merits having

7 regulatory review. I think O&M costs and

8 capital, normal capital, are pretty obvious

9 things that would be included. Beyond that,

10 I think there would need to be a bit more

11 thought.

12 GREENE, Q.C.:

13 Q. Okay, and with respect to Nalcor Energy

14 Marketing, what is the extent of your

15 recommendation there with respect to

16 regulation?

17 MR. BOWMAN:

18 A. Well I only reference it in regard to an

19 example of another place where ratepayers

20 are effectively paying the cost, but also

21 absorbing the risks. I think there was some

22 very—I did read the transcript in regards to

23 this topic and I think there was some very

24 good testimony given that emphasized that

25 one doesn’t need to—just because you have

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1 regulation of a topic doesn't mean that you
 2 need to be in the nitty-gritty of how fast
 3 paced events occur, if you like, just like
 4 this Board isn't in the nitty-gritty of how
 5 fast paced decisions on water are made in
 6 with regulation of Hydro. Manitoba Hydro
 7 manages an energy marketing aspects that are
 8 under the jurisdiction of the board. I
 9 can't recall us ever doing a prospective,
 10 much less retrospective review of the
 11 trades. There's some high-level reports on
 12 them, but there is review of risk management
 13 practices, the degree of risks that's taken,
 14 the degree of, you know, trading exposure,
 15 losses, risk. We had a fairly major hearing
 16 in Manitoba in about 2010 about risk
 17 management in hydro that included a lot of
 18 assessment about, you know, their decisions
 19 center into a trade to, you know, buy and
 20 sell, for example, and their approaches to
 21 that and the board has weighed in on those
 22 aspects and I think that's, you know, to the
 23 extent that all that is on ratepayers'
 24 backs, it's only reasonable that captive
 25 ratepayers have some aspect of regulatory,

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1 independent regulatory control that they can
 2 rely on.
 3 (10:45 a.m.)
 4 GREENE, Q.C.:
 5 Q. Nalcor has suggested that there's
 6 transparency and that is the, could be an
 7 adequate substitute, I take it from your
 8 response to my question that you wouldn't
 9 agree that that provision of information
 10 alone would be adequate to protect the
 11 interests of the ratepayers?
 12 MR. BOWMAN:
 13 A. No, and neither is the argument, I think,
 14 that it's a crown so it only operates in the
 15 public interest. I think if you applied
 16 those same standards, you'd say why are we
 17 regulating Hydro at all?
 18 GREENE, Q.C.:
 19 Q. Right, okay. I'd like now to turn to
 20 another topic and I want to go to page 5 of
 21 your report, page 5 of the InterGroup
 22 Report, and I wanted to refer to lines 26 to
 23 28 in particular. It's in the context of
 24 the significant increase that Industrial
 25 customers are facing, and you mentioned in

Page 99

1 lines 26 to 28, that rate shock can be
 2 considered to occur when increases exceed 15
 3 percent a year, and I wanted to ask in your
 4 experience have you, is there a threshold
 5 around an amount of a rate increase that
 6 caused concern to regulators so that they
 7 would take actions to try to smooth the rate
 8 impacts over a longer period of time. In
 9 this sentence that I took you to, you say
 10 that's a 15 percent, and I wanted to ask in
 11 your experience is that what you have seen
 12 applied by regulators in looking at rate
 13 smoothing mechanisms?
 14 MR. BOWMAN:
 15 A. Yes, we've seen a few different cases. It's
 16 a bit of a topic of beachheads, if you like,
 17 it's nice to have a beachhead which says,
 18 you know, there should be a fairly high
 19 threshold for a hydro-based utility to need
 20 rate increases above inflation, for example,
 21 you know, there's reasons, I think most of
 22 it is costs are locked in, so if there are
 23 increases above inflation, then you know,
 24 they would have a much higher standard to
 25 justify. You might think about some other

Page 100

1 levels above that that increase the focus,
 2 but there is a fair number of examples where
 3 people say getting above 10 to 15 and 15 is
 4 often referenced, 10 to 15 percent rate
 5 increases in a year is in the territory of
 6 rate shock and you might be seriously
 7 considering smoothing at that level that
 8 even if your revenue requirement is
 9 requiring, you need to go there looking at
 10 some more creative options to avoid needing
 11 to impose rates above that level is
 12 necessary to protect customers.
 13 GREENE, Q.C.:
 14 Q. The Liberty report indicates that if all of
 15 the rate mitigation that they identified is
 16 made available, the increase would still be,
 17 at least for Residential customers, we'll
 18 talk about your Industrial increase in a
 19 moment, would be at least 35—would still be
 20 in the range of 35 percent. That type of
 21 increase, in your view, would prompt or
 22 should prompt, if possible, a rate smoothing
 23 approach?
 24 MR. BOWMAN:
 25 A. Yeah, that's a very concerning level of rate

Page 101

1 impact.

2 GREENE, Q.C.:

3 Q. And you've mentioned it's at 15 percent here

4 in your report and in your response you

5 indicated you have seen discussion around an

6 increase in the 10 to 15 percent range in

7 one considered to be rate shock, did I

8 understand your –

9 MR. BOWMAN:

10 A. Yes, 15 is definitely the outer range of

11 that. There are a lot of jurisdictions that

12 have referenced 10 that I have run across in

13 my career, but the outer one that I recall

14 being used as a standard is 15 percent.

15 GREENE, Q.C.:

16 Q. And the last area that I wanted to question

17 you on was to deal with the Industrial rates

18 and there, while we have it, you indicate

19 what the proposed increase would be, the

20 5.22 cents in 2019 and my question there,

21 because your reference was to your source

22 was to the 2018 Cost of Service Application

23 which was filed back in 2018, but it does

24 not include the recent increase of October

25 1, is that correct?

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1 MR. BOWMAN:

2 A. My understanding is it wouldn't include the

3 recent increase or other RSP changes that

4 are expected now, but also the 12.44 is

5 based on a certain cost of service

6 methodology assumption which is not the same

7 as is ultimately coming to the Board as part

8 of a settlement, so it was just the one set

9 of numbers on the board, but, you know, we

10 already know that those are—they're not

11 going to be perfect; they're going to keep

12 changing.

13 GREENE, Q.C.:

14 Q. So do you have any indication what the

15 current rate is on October 1 that would be

16 comparable to your 5.22?

17 MR. BOWMAN:

18 A. I don't have it for the class, this is

19 averaged across the class. I have it for

20 one of the customers within the class

21 because they're low-profile matters, you

22 have them mixed with the amount of energy

23 and then when you solely divide by the

24 energy it matters their load factor. I can

25 run the number for you, but I don't have –

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1 GREENE, Q.C.:

2 Q. The increase overall was 11.2 cents, but the

3 average increase to Industrial customers as

4 of October 1, so can we—so it would be

5 higher by—and you're only using it for

6 illustrative purposes to indicate where we

7 are, so if you—so it's slightly higher now

8 than what you have in that report,

9 presumably.

10 MR. BOWMAN:

11 A. Yeah. Although, I have to admit I'm not

12 sure, now that I'm looking at it, I'm not

13 sure that this, the number that's cited here

14 did not take into account that expected 2019

15 final impact, so I would want to check to

16 confirm that this doesn't, it doesn't have

17 that built in.

18 GREENE, Q.C.:

19 Q. Okay. Now I wanted to turn to the

20 information, the helpful information that

21 you provided which was a report from Hydro

22 Quebec and here, Madam Chair, I would note

23 we haven't marked the exhibit and it might

24 be appropriate to mark it in case it needs

25 to be referred to in submissions or later in

Page 104

1 the report.

2 CHAIR:

3 Q. I will mark it as an information item.

4 GREENE, Q.C.:

5 Q. Exhibit 1 or PW, PB1.

6 CHAIR:

7 Q. Okay.

8 GREENE, Q.C.:

9 Q. And again, this was used to illustrate from

10 your perspective where the current

11 industrial rates are, you have already

12 addressed some of the questions that I had,

13 you indicate that your class of customers is

14 generally in the large power users in the

15 very last column, so we would be looking at

16 the current of 5.61 on this chart.

17 MR. BOWMAN:

18 A. Yeah, that's pretty close and that usage

19 level is not, you know, it's not far off the

20 sort of middle consuming customer of the

21 three.

22 GREENE, Q.C.:

23 Q. And you've indicated that without mitigation

24 your rate will rise to an excessive 12.4

25 cents a kilowatt hour which would bring you

Page 105

1 certainly to be the highest for the
 2 Industrial rates that are shown here on this
 3 page, is that correct?
 4 MR. BOWMAN:
 5 A. Yes.
 6 GREENE, Q.C.:
 7 Q. This is a reflection of rates as a rate for
 8 one, 2019, do you have any information as to
 9 where the future rates would go in other
 10 jurisdictions because the 12.4 would be a
 11 future rate for 2021, so to compare your
 12 forecast rate without mitigation in 2012, do
 13 we know where the rates would be in the
 14 other jurisdictions at that point in time?
 15 MR. BOWMAN:
 16 A. I don't know that any of them have rate
 17 approval through 2021 that I would know of.
 18 I do know that in respect of Manitoba, which
 19 is the jurisdiction I've most recently been
 20 working in, there is a significant effort to
 21 keep the rate impacts there below about 4
 22 percent a year, so that, you'll see 4.6
 23 percent there is the number and 4 percent a
 24 year is likely to be the outside range of
 25 what's going to be pretty consistent annual

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1 rate increases as these new projects are
 2 being absorbed. I know that when we're
 3 doing rate comparisons in Manitoba, the
 4 Industrial customers in other jurisdictions
 5 will often be sending over notes about
 6 commitments from other jurisdictions not to
 7 raise rates, for example, I don't believe
 8 Quebec raised rates this year and I think
 9 there's some sense that they be stable for
 10 some period of time.
 11 GREENE, Q.C.:
 12 Q. So in your opinion the 12.44 cents obviously
 13 would be if not, would be among the highest
 14 for the Industrial rates in Canada, is that
 15 correct?
 16 MR. BOWMAN:
 17 A. Yeah, I think it's a fair conclusion it will
 18 be among the highest.
 19 GREENE, Q.C.:
 20 Q. Thank you very much, Mr. Bowman. Those are
 21 all the questions that I have, Madam Chair.
 22 CHAIR:
 23 Q. Thank you, Ms. Greene. Mr. Coxworthy,
 24 anything on follow-up?
 25 MR. COXWORTHY:

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1 Q. No questions arising, Madam Chair, thank
 2 you.
 3 CHAIR:
 4 Q. Thank you. Any questions Commissioner
 5 Newman? No. And I don't have any questions
 6 either. Thank you so much, Mr. Bowman, nice
 7 to see you again. Our schedule for tomorrow
 8 is to reconvene at 9 a.m. We have six
 9 presentations from members of the public.
 10 The Board Secretary should have that
 11 schedule if you don't have it already, it
 12 should be provided to you fairly shortly and
 13 it will be available on the website today,
 14 so we'll reconvene to tomorrow morning at 9
 15 a.m. Thank you so much. Safe travels home,
 16 Mr. Bowman.
 17 Upon conclusion at 11:57 a.m.
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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 17th 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 17th day of October, 2019

Judy Moss

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