

Hearing Transcript

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

October 18, 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
Michael Ladha, 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

Denis Fleming, Counsel

Public Presenters:

Overton Colbourne, P.Eng, Private Citizen

Jabez Lane and Duane Warren, International Brotherhood of Electrical Workers, Local 1615

Andy Wells, Private Citizen

Vaughn Hammond, Director of Provincial Affairs, Newfoundland and Labrador, Canadian Federation of Independent Business

Jon Seary and Joe Butler, Drive Electric NL

William Brown, Private Citizen

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1 (9:03 a.m.)
 2 CHAIR:
 3 Q. Good morning, and welcome everyone to this
 4 public presentation session being held as
 5 part of the public hearing associated with
 6 the Board’s ongoing review of rate
 7 mitigation options. I’d like to say while
 8 many of us here today have spent the last
 9 few weeks together, there are some new
 10 faces. Mr. Colbourne, in particular this
 11 morning, I can see you there. I’m just
 12 going to do some introductions to make sure
 13 we’re all aware of who’s who. My name is
 14 Darlene Whalen, I’m Chair and CEO of the
 15 Board, and with me today are my colleagues,
 16 Commissioner Dwanda Newman, who is also our
 17 Vice-Chair, and Commissioner John O’Brien.
 18 I’d like to ask the parties who are present
 19 to introduce themselves as well starting
 20 with Hydro and Nalcor.
 21 EATON, Q.C.:
 22 Q. Good morning, Madam Chair. David Eaton for
 23 Nalcor, and with me Michael Ladha from
 24 Hydro.
 25 CHAIR:

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1 Q. Welcome, Mr. Ladha. Consumer Advocate.
 2 MR. BROWNE:
 3 Q. Dennis Browne, Consumer Advocate, and with
 4 me is Stephen Fitzgerald as counsel.
 5 CHAIR:
 6 Q. Newfoundland Power.
 7 MR. O’BRIEN:
 8 Q. Good morning, Liam O’Brien and Kelly Hopkins
 9 for Newfoundland Power.
 10 CHAIR:
 11 Q. And Industrial Customers.
 12 MR. FLEMING:
 13 Q. Good morning, Denis Fleming for the Island
 14 Industrial Customers.
 15 CHAIR:
 16 Q. Thank you very much. I’d also like to
 17 acknowledge Ms. Maureen Greene, who is Board
 18 Counsel, and Sarah Kean who is our Assistant
 19 Board Secretary. In terms of our schedule
 20 for today, I understand we have six
 21 presentations. We’ve allocated a time of
 22 between 20/30 minutes or so for each
 23 presentation session. Following each
 24 presentation, questions may be asked by the
 25 parties and/or the Board with your

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1 permission, of course. The plan is to
 2 proceed with the first three presentations,
 3 take a short break, and then we’ll come back
 4 for the last three. I would also note that
 5 these proceedings are being transcribed and
 6 the presentations will form part of the
 7 record for the proceeding. So we’ll just
 8 move on to the business of today, and I see
 9 Mr. Colbourne, you’re all set and ready to
 10 go, are you?
 11 MR. COLBOURNE:
 12 A. Yes, thank you.
 13 CHAIR:
 14 Q. I’d just ask that you introduce yourself and
 15 if you’re representing anyone, and when
 16 you’re ready you can just proceed. Thank
 17 you.
 18 MR. COLBOURNE:
 19 A. Thank you. My name is Overton Colbourne.
 20 I’m representing no group, simply here on my
 21 own behalf. Before I begin, I want to ask
 22 one simple question to the Board or to
 23 anybody in the room, and depending on its
 24 answer, it might save me an awful lot of
 25 embarrassment. Can anyone tell me with

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1 legal certainty how much money will be
 2 repaid to the banks in total over 57 year
 3 term of the debt on the Muskrat Falls
 4 Project? Thank you. My name, as I
 5 mentioned earlier, is Overton Colbourne. I
 6 am a professional engineer. I am not an
 7 economist, I am not an accountant, and as
 8 Mr. Eaton didn’t remind me verbally, but
 9 when I saw him, he reminded me of something
 10 that an old lawyer once said to me. He
 11 said, “He promised he would not practice
 12 engineering as long as I would not practice
 13 law”. The same holds for economies. With
 14 only 30 minutes, I’ll get immediately to my
 15 point. The utility rate payers on this
 16 island of Newfoundland and the tax payers of
 17 the whole province are facing the largest
 18 financial mess this province has ever faced.
 19 Since no one told me the number I requested
 20 earlier, if you should find it as I’m going
 21 through, interrupt me, shout it out, and
 22 that will determine whether I will proceed
 23 any further or not. Although we heard a lot
 24 about low budgets and cost overruns,
 25 aggressive schedule, actual schedule

<p style="text-align: right;">Page 5</p> <p>1 slippage, poor management decisions, a 2 litany of concern of special interest 3 groups, I have never heard a discussion of 4 the actual cost of the repayment of the 12.7 5 billion dollars, or whatever that number is 6 in loans over a term of 57 years. I have 7 asked, and at least one Cabinet Minister 8 actually believes that 12.7 billion is all 9 that must be repaid ever, that the only 10 interest to be paid is the interest during 11 construction. Imagine that, a Cabinet 12 Minister no less, but my comment is not on 13 the term of 57 years, the length of time 14 that 50 years ago my engineering economy 15 textbooks warned against in decision making. 16 That mistake is made, we have to live with 17 it or try to change it. Besides the amount 18 of the loan and the repayment period, the 19 other part of the problem is that there will 20 be insufficient revenue generated from the 21 project to meet the annual payments. Simply 22 put, that's the only problem; well, not 23 counting transmission line software. If you 24 look at these two numbers that I've shown 25 there on the slide, the annual repayment of</p>	<p style="text-align: right;">Page 7</p> <p>1 this province. It must remain in our own 2 hands as tax payers and rate payers. Some 3 people have naively commented to me that we 4 already own it. Well, we don't really, the 5 banks do, and I don't really want to own it 6 the way that it is said that I own the 7 highways and the bridges. Highways and 8 bridges don't make any money for me and they 9 wear out quickly. I want to own the 10 PowerHouse just like I own my own house and 11 any other assets. I want the PowerHouse to 12 make money for me and my heirs directly for 13 a long time, while at the same time 14 providing an immediate solution to the 15 province's debt problem in the bargain. It 16 can be done, I think, quite easily in 17 theory, anyway, but getting two 18 Newfoundlanders to hold their heads together 19 long enough might be a little bit harder. 20 With 5 billion dollars taken off the Muskrat 21 Falls debt, the 12.7 is immediately reduced 22 to 7.7, which I recall is fairly close to 23 the original estimates. In the early 24 analysis, it was said that the project would 25 pay for itself with its own revenues. I</p>
<p style="text-align: right;">Page 6</p> <p>1 576 million dollars is short by about 350 2 million dollars. Revenue is actually less 3 than half of what is needed just to meet the 4 mortgage. So there are two alternatives; 5 increase the revenue or decrease the debt. 6 I've not seen any solutions so far proposing 7 how revenue can be increased. I will 8 reserve comment until after I've heard it, 9 about the increasing use of electric 10 vehicles, kind of beyond me. So my solution 11 is decrease the debt and consequently the 12 repayment period. The only way to decrease 13 the debt is sell off some of the assets. I 14 propose sell the PowerHouse, I want to buy 15 it. Now for the rest of the discussion, I 16 will use the first person "I" and "My" to 17 refer to the purchase, but I can assure you 18 I'm not Bill Gates. I don't have 5 billion 19 dollars, but imagine if someone did. Take 5 20 billion dollars off the debt immediately 21 today. That debt becomes much more 22 manageable, but what I don't advocate, and I 23 will strongly emphasize "don't sell it to 24 the private utility company". It is and it 25 will be even more so much too valuable to</p>	<p style="text-align: right;">Page 8</p> <p>1 will not confuse in the rest of my 2 presentation the numbers with the so-called 3 equity that the Government claims to have in 4 the project. Equity with borrowed money is 5 equity in name only. The result on the 6 province's debt is still the same. 7 Similarly, I will not take into account 8 savings on Holyrood oil or even the 9 operating cost of the PowerHouse. I was 10 taught when comparing alternative solutions 11 there's no need to waste time evaluating 12 components that are common to all 13 alternatives. So we have to run the place, 14 we will save the oil, I won't talk about it. 15 Therefore, in the forthcoming analysis only 16 the differences will be compared. That is, a 17 12.7 billion dollar debt versus a 7.7 18 billion dollar debt. So by reducing the 19 debt, it stands to reason that the repayment 20 period can also be reduced. I have used 25 21 years just to provide a number for annual 22 payment calculations. Thirty years might 23 also be appropriate, but the concept remains 24 the same. It's a far cry from 57 years. 25 With a 7.7 billion dollar debt over 25</p>

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1 years, revenues from the sale of power, the
 2 shortfall in the annual payment in the first
 3 year is 240 million. With the 12.7 billion
 4 dollar debt over 57 years, in the first year
 5 the shortfall was 350 million. This rate
 6 mitigation plan presented to the public a
 7 few months ago assured the public that the
 8 350 million dollar shortfall could be
 9 accommodated. I will take that as a fact.
 10 So the 240 million dollar shortfall should
 11 be all that more simple. I haven't made the
 12 calculation, but it's likely that this will
 13 be saved through the oil savings and the
 14 profits from Bay d'Espoir and not affect the
 15 normal expenditures of the province. With
 16 annual increases in power purchase price,
 17 similar to what we've seen in the past few
 18 years, the annual shortfall will decrease
 19 each year. By year 15 in my plan, the
 20 revenue should be able to meet the annual
 21 debt repayment and by year 20 will exceed
 22 it. Later I will show how I propose, how it
 23 will – how anybody will invest, but brings
 24 me to the question why should anybody want
 25 to invest their own money in the PowerHouse

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1 if not start immediately to return to them a
 2 dividend. It might be argued that a few
 3 people will want to invest out of a sense of
 4 duty or patriotism. Patriotism described by
 5 Samuel Johnson as "The last refuge of a
 6 scoundrel". I prefer the definition of
 7 patriotism as "Holding elected officials
 8 accountable for their actions". So by
 9 investing one's own money voluntarily in
 10 this project, we are telling the government
 11 we are not satisfied with how the project
 12 has been handled or even their plan for
 13 handling it in the future, and that we, as
 14 investors and shareholders, want to be
 15 responsible for it, and pay for it, and reap
 16 the benefits.
 17 (9:15 a.m.)
 18 I propose for the first ten years no
 19 dividends paid out on the shareholders
 20 capital. That will make more money
 21 available for the repayment of the
 22 transmission line debt. For the second ten
 23 years, the dividend now has to be
 24 accumulated to me, but again not paid out.
 25 For the third decade, the accumulated

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1 dividends must then be paid out, and I
 2 propose we split the gross revenue 50/50.
 3 Bear in mind that the citizen shareholders
 4 have by now saved the government or Hydro or
 5 whoever you want to call it, 10 or 12
 6 billion dollars in interest payments.
 7 Thirty years is as long as any contract
 8 should be negotiated. Hydro projects are
 9 known to last much longer, often referred to
 10 as having a perpetual life. The first
 11 contract must have a renegotiation clause.
 12 It would be easy to say for the basis of my
 13 initial calculation, but a bit foolhardy to
 14 rely on it that the 50/50 arrangement
 15 forever. I think we should even go for 100
 16 percent of the revenue going to the
 17 shareholders. That's where we would start
 18 negotiations before year 30. So where is
 19 the advantage? First of all, the advantage
 20 accrues to the tax payer and rate payers of
 21 the province. Instead of repaying a total
 22 of my calculations, 29 billion dollars to
 23 the bank, I haven't heard anybody shout out
 24 a number any different, I will continue to
 25 use 29.4 billion as what we will have to pay

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1 to the banks if this scheme continues as we
 2 see it today. Perhaps even more when I read
 3 through, and I was reading through about –
 4 again I said I'm not an economist or an
 5 accountant. When I started reading the
 6 sinking fund payments, it actually makes it
 7 sound a little bit more than the 29.4. It
 8 might actually be 38. I really would like
 9 to know what the number is. Of course, the
 10 banks won't be pleased with what I'm
 11 proposing here. I hope the government hears
 12 it. I hope the government will show me that
 13 these loans cannot be renegotiated. If
 14 that's the case, I'll live with it. That a
 15 government would enter into loans that can't
 16 be renegotiated, they'd better tell me why
 17 they got into a situation where they can't
 18 renegotiate a loan. I took great comfort in
 19 Premier Dunderdale's testimony to Judge
 20 LeBlanc's inquiry. She said governments can
 21 do anything they want to do. That was her
 22 words. Therefore, the government can find a
 23 way to repay the loan early, if they want
 24 to. I think I have a solution. It
 25 certainly will need a lot of massaging – not

Page 13	<p>1 massage parlours. I think I have a 2 solution. It will need a lot of 3 (unintelligible). If we like, I will 4 discuss it with anyone, but I don't think I 5 need to go into what I have calculated here 6 at this time. I don't have time. At the 7 same time, over the first 30 years the rate 8 payers will have paid the equivalent of the 9 bank's interest to themselves, the 10 shareholders, or also the rate payers. My 11 calculations show that the amount paid to 12 each shareholder on a 100,000 dollar share 13 will be about double his annual utility bill 14 on an electrically heated home without a 15 mini-split. Some people will question no 16 dividends for ten years. Well, my 17 suggestion for the source of this 100,000 18 dollar share is from an RRSP, at least for 19 myself, anyway, I'm that age, and there's a 20 trillion dollars locked up in RRSPs today by 21 about 6 million Canadians. In the year a 22 Canadian turns 71, he is required to unlock 23 the RRSPs and convert them. If he's foolish 24 enough, he can cash it all in and pay the 25 taxes on it as if it was earned income in</p>	Page 15	<p>1 30,000 Newfoundlanders between the age of 65 2 and 70. There are more than a million 3 Canadians in that age bracket. If a person 4 went to a bank today and asked to withdraw 5 100,000 dollars from RRSP, the bank would 6 give them 70,000 dollars, as the bank is 7 required to withhold a 30 percent tax. When 8 tax times comes around next year, you might 9 even pay more depending on your tax bracket. 10 If you should die without having drawn the 11 RRSPs, I understand the RRSP funds would 12 then be considered income in the deceased's 13 final year, and if there was considerable 14 funds in that account, puts them in a very 15 high tax bracket, leaves nothing for his 16 heirs. So if you converted the 100,000 17 dollars to an annuity and withdrew it over 18 ten years, and I've been to the bank a week 19 ago, the tax paid will be about the same and 20 the banks will have made money off your 21 money. The government would still have 22 waited ten years to recover their portion 23 that they call tax. So my proposal is that 24 the annuity be immediately converted to a 25 share in Muskrat Falls PowerHouse. With a</p>
Page 14	<p>1 that year. A few days ago someone sitting 2 in this chair on my money told this inquiry 3 that this mess that we're facing today is 4 all the fault of the tax payers. A couple 5 of months ago his predecessor told Judge 6 LeBlanc exactly the same thing. It's our 7 own fault. Well, okay, if it's my fault, I 8 accept the blame, and I'm willing to pay my 9 share right now. Last week I went to the 10 bank, I established a RIF for 100,000 11 dollars. It's right there now for the 12 government to have right away. Take it, pay 13 off my part of the debt, and start paying me 14 a return on the production of electricity. 15 In order to refuse this offer, someone must 16 tell me why the government cannot repay this 17 debt early if it wants to. There are rules 18 concerns annuities, such as minimum annual 19 withdrawals. They generally favour the 20 recipient assuming he lives a normal 21 Canadian life span, and even a little bit 22 beyond. After age 90, though, the rules are 23 not so favourable. The government is 24 getting a little bit itchy about their taxes 25 and they want you to die. There are about</p>	Page 16	<p>1 stroke of his pen, Bill Morneau can change 2 the annuity rules to allow this investment 3 just as a few months ago the homeownership 4 rules were changed, which he stated was for 5 the benefit of the banks, CMHC, and the 6 building industry. If you can change the 7 rules for that, then you can change them to 8 benefit me. So the government will still 9 collect its taxes, and the dividend deferred 10 on the shares in the form of a dividend 11 deferred on the share for the first ten 12 years. PowerHouse debt will be wiped out, 13 meaning no interest to the bank. Revenue 14 from day one of operation of the PowerHouse 15 can be directed directly to the transmission 16 line debt alone. People willing to put 17 their money upfront to pay for the 18 PowerHouse and eliminate the massive 19 interest payments that would be repaid over 20 57 years, can do this by setting up a co-op 21 under existing Newfoundland and Labrador 22 legislation and pay their money forward to 23 the project. Hydro would continue to be the 24 legal owner of the project and the revenue 25 would immediately accrue to them without</p>

<p style="text-align: right;">Page 17</p> <p>1 giving it all to the banks. It might be 2 possible to raise funds to pay off the 3 entire debt, but I'm not suggesting that 4 now. Instead of all the revenue, and even 5 more being repaid to the banks, it would 6 immediately start paying returns to those 7 who have paid the debt for them. Setting up 8 the co-op is a simple thing. Added benefit 9 to having co-op shareholders is that it 10 forces the government to be open and 11 transparent about its future dealings 12 concerning Muskrat Falls. No more "done 13 deals". That date, 2041, is going to be a 14 very important date to Newfoundland and to 15 Muskrat Falls. It's all the more important 16 if it had 37 years remaining on its mortgage 17 or five years remaining on its mortgage. 18 Why would a person invest his RRSPs. Well, 19 statistics show that the majority of RRSPs 20 are not spent, anyway. They're left as 21 taxable inheritances. I would propose that 22 the investment be restricted. I'm not 23 proposing that everybody take their 24 retirement savings, as the Minister 25 facetiously that I read in her letter to me,</p>	<p style="text-align: right;">Page 19</p> <p>1 op to bail out Muskrat Falls. I am not 2 advocating a Go Fund Me page, but close to 3 it. There's an insert in every utility bill 4 in this province. Likely every utility in 5 the country has a similar insert. 6 Television commercials that promote the 7 illogical use of energy saving light 8 fixtures in an electrically heated home, 9 this insert can be used to promote the idea. 10 After 30 years or so – about 30 years ago 11 this same insert was used to promote the 12 purchase of Fortis shares. The biggest 13 obstacle to be overcome will be to change 14 the negative publicity. The idea will have 15 to be analyzed much more closely than I have 16 shown. I've had some response from 17 Ministers. The Minister has referred this 18 to this Board. I hope this Board will 19 regard this seriously and respond to the 20 Minister in the way that it will. So show 21 this as part of the rate mitigation plan. 22 The rate mitigation plan needs a proper 23 economic analysis. I know what it should 24 look like. I wouldn't dare attempt to 25 present it publicly. Show it in simple</p>
<p style="text-align: right;">Page 18</p> <p>1 the way that it wrote that we take our 2 retirement savings. Even if a little word 3 like "a portion of their retirement 4 savings", it would have changed the meaning 5 of that paragraph a lot. It would be 6 restricted to a portion of one's RRSPs, and, 7 of course, it doesn't have to be RRSPs. 8 That's only one suggestion. Cash would be 9 fine. The value of the dividends will 10 continue to increase for our children and 11 grandchildren. Where have we heard that 12 term before? After 25 years or so, the 13 government or Hydro, or whoever it would be, 14 can start to buy their shares back at their 15 current value by then from anybody who would 16 be silly enough to sell. Shareholders would 17 be able to buy and sell their shares to new 18 shareholders. The remaining shareholders 19 would continue to collect profit at the same 20 rate as Newfoundland Hydro, Newfoundland 21 Power, anybody else who sells power into 22 this grid. I would be a seller of power for 23 Muskrat Falls. "I", that is, as the 5 24 million dollar investor. Where will you 25 find 50,000 shareholders to invest in a co-</p>	<p style="text-align: right;">Page 20</p> <p>1 language, put it on a power bill insert. 2 Thank you, Madam. 3 CHAIR: 4 Q. Thank you, Mr. Colbourne. Are you open to 5 questions if there are any? 6 MR. COLBOURNE: 7 A. I will. 8 CHAIR: 9 Q. Any questions from the parties present? 10 MR. O'BRIEN: 11 Q. No. Thank you, Mr. Colbourne. 12 CHAIR: 13 Q. Ms. Greene. 14 GREENE, Q.C.: 15 Q. I have no questions. Thank you, Mr. 16 Colbourne. 17 CHAIR: 18 Q. Any questions from the panel? 19 VICE-CHAIR NEWMAN: 20 Q. No questions. 21 CHAIR: 22 Q. Okay, thank you so much, Mr. Colbourne. 23 It's very nice to see you again. 24 MR. COLBOURNE: 25 A. Thank you.</p>

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1 CHAIR:
 2 Q. We have our next presenters, Mr. Lane and
 3 Mr. Warren from the IBEW Local 1615. You
 4 can take your time and just come and get set
 5 up. Thank you. Good morning, gentlemen.
 6 Welcome.
 7 MR. LANE:
 8 A. Good morning.
 9 MR. WADDEN:
 10 Q. Good morning.
 11 CHAIR:
 12 Q. Just let you take the floor. You can just
 13 introduce yourselves and who you're
 14 representing and when you're ready, just
 15 carry on.
 16 MR. LANE:
 17 A. Madame Chair and the Board, I'd like to
 18 thank you for the opportunity to address
 19 this very important issue of rate mitigation
 20 on behalf of our members, but I think we're
 21 also talking on behalf of the rate payers as
 22 well and the taxpayers of the Province.
 23 My name is Jabez Lane. I'm the
 24 business manager of IBEW 1615. I represent
 25 workers at Newfoundland Hydro and Power

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1 Supply. I'm the business manager since
 2 January of 2014. Before that, I was
 3 president of the Local for 22 years. I had
 4 a career in the utility industry. In 1979,
 5 I worked for the Yukon – what's now the
 6 Yukon Power. It was Northern Canada Power
 7 Commission at the time. It was a Federal
 8 Crown Corporation. I worked there for a
 9 year as electrician operator.
 10 In 1980, I worked – began working for
 11 Newfoundland and Labrador Hydro and I worked
 12 there until 2014. So, I worked in the
 13 utility industry for 35 years. I worked out
 14 of Bishop's Falls for seven years as an
 15 electrician on the diesel systems in the
 16 Province, all over the island. I then moved
 17 to Holyrood for 25 years as an electrician
 18 at the Holyrood plant and my last two years
 19 or almost two years was as an electrician
 20 operator at Hardwoods Gas Turbine in
 21 Hardwoods. I think I have a fair idea of
 22 electrical system and I'll go through that a
 23 little bit later, but I'll turn it over to
 24 Duane.
 25 MR. WARREN:

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1 A. Hi. My name is Duane Warren. I am the
 2 president of IBEW 1615. I am also an
 3 electrician by trade. Right now, I
 4 presently am the instrumentation controls
 5 technologist with Newfoundland and Labrador
 6 Hydro at the new gas turbine facility in
 7 Holyrood.
 8 I am one of the blue collar maintenance
 9 workers that I think needs to be heard from
 10 at this hearing. I'm one of the linesmen,
 11 one of the electricians, one of the
 12 mechanics, one of the labourers that's out
 13 there in the front lines doing the work and
 14 I think that I've heard a lot from this
 15 hearing from – I've been following this
 16 hearing. I've heard a lot from the experts.
 17 I've heard a lot of data.
 18 But I think you need to hear from the
 19 actual people who are out there on the front
 20 lines, the actual – we can call them
 21 unionized employees, but I like to refer to
 22 them as the maintenance people, the people
 23 who are actually out there with their tools
 24 doing the work, realizing what needs to be
 25 done and jumping to action when something

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1 happens 4:00 in the morning on a cold,
 2 February night. So, I'm looking forward to
 3 having my say and I don't have as much
 4 experience as what Jabez does, but I have
 5 been an electrician and involved in this
 6 business for 25 years.
 7 MR. LANE:
 8 A. So, we're going to address four areas of the
 9 report: Transfer of assets to Newfoundland
 10 Power; consolidation of Power Supply and
 11 Newfoundland and Labrador Hydro;
 12 efficiencies with Nalcor; and Exploits
 13 generation.
 14 So, I'm going to start off by transfer
 15 of assets to Newfoundland Power. It's no
 16 surprise to me when they came back and
 17 recommended – Liberty recommended that no
 18 assets would be transferred. Our first
 19 report actually to the Board – or Liberty's
 20 first report, you know, we said that we saw
 21 no cost savings in transferring assets to
 22 Newfoundland Power, and like I say, I go
 23 back a long way.
 24 In 1994, for those young enough to
 25 remember that, it was the privatization by

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1 Clyde Wells, who just before he became
 2 premier actually I believe was Chair of
 3 Newfoundland Power’s board. He wanted to
 4 sell everything off. It was this union
 5 actually that started a campaign -- we
 6 turned it over to the private citizens after
 7 – that stopped the sale of that to
 8 Newfoundland Power at the time.
 9 Carry on another few years, in 2002,
 10 there was joint committees formed to look at
 11 efficiencies between Newfoundland Hydro and
 12 Newfoundland Power. I was really involved
 13 in that from the point of view I oversaw all
 14 the committee, as well as Bob Clarke who was
 15 business manager at the time, and as we
 16 expected, there wasn’t a whole lot that came
 17 out of that either.
 18 So, but Newfoundland Power keeps coming
 19 back, almost like a crackie that keeps
 20 biting at your heels. But, you know, as
 21 long as I’m here, I’m going to be – I know
 22 Byron very well, but Byron, I’m going to be
 23 – keep on pushing to keep the assets away
 24 from you. I know your CEO said that he
 25 wants the wires and poles in the Province,

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1 but as long as I’m around, I’ll be fighting
 2 for that, even if I’m retired or wherever
 3 I’m to. But, so, we totally agree with –
 4 and we’re not surprised that they came up
 5 with that solution, as a matter of fact.
 6 I’m going to talk a little bit on the
 7 consolidation and Duane will jump in here as
 8 well, but I guess, we never did agree with
 9 what’s going on right now with Power, the
 10 formation of Power Supply and we were very
 11 clear in our first submission to the Board
 12 as well that we didn’t agree, and we didn’t
 13 agree for this reason, and it came up here a
 14 little while ago, the difference between
 15 2015 and 2016. Nobody really clarified it
 16 in my opinion.
 17 In 2015, it was the – the plan was that
 18 it was going to be operated by Hydro, and
 19 that was the right plan, in my opinion,
 20 because Newfoundland and Labrador Hydro, if
 21 you look at the Avalon Peninsula, we were
 22 going to have a Avalon Peninsula district or
 23 whatever you want to call it, and if you
 24 look at the assets that’s on the Avalon
 25 Peninsula, you’ll find that we got the AC

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1 yard – and I’ll get into a slide there in a
 2 minute and maybe I can get somebody to bring
 3 up Slide 3, I believe it is, of Jim Haynes
 4 and Jennifer Williams’ presentation.
 5 It’s too bad we never got status at
 6 this hearing, because I would have asked
 7 some questions on this actually. Because if
 8 you look at under “Hydro currently provides
 9 services to Power Supply in several areas,
 10 including” and they got “maintenance of
 11 Soldier’s Pond terminal station”. That is
 12 not right. That is what it was going to be
 13 in 2015 because if you look at the whole –
 14 on Avalon Peninsula, we have major yards of
 15 Oxen Pond, Hardwoods, Holyrood, Western
 16 Avalon, Come by Chance. The expertise that
 17 we got in that is second to none. But what
 18 they did in Power Supply, they brought in
 19 somebody from Alberta to train people that’s
 20 spent millions of dollars, I would say
 21 millions, to train people when we had our
 22 own expertise on the Avalon Peninsula.
 23 The other thing was is that the other
 24 part of the yard, the sync condenser part,
 25 well, we got sync condensers in Holyrood.

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1 So, the plan was to use – and that’s called
 2 industrial experience, in my opinion. We
 3 had the industrial experience on this part
 4 of the Island, right on the Avalon
 5 Peninsula. So, the plan was – and I know
 6 the plan got off the track because we’re
 7 supposed to be operating right now, but the
 8 plan back in 2015 was to use some of that
 9 industrial experience from Holyrood up to
 10 Soldier’s Pond, and it was a good plan. And
 11 I tell you, it was the most efficient plan
 12 because what you would have had was the line
 13 workers on the Avalon Peninsula would have
 14 been married up with the crews from
 15 Whitbourne where we got a crew of line
 16 workers and they could have been used
 17 anywhere.
 18 I had discussions with Jim Haynes when
 19 he came back as president of Hydro and I was
 20 – I told Jim then, and you know, he never
 21 disagreed with me. And I appreciate people
 22 that are in positions under somebody else.
 23 You know, it’s only so much they can say.
 24 But I can guarantee you, if they could speak
 25 freely, I’m pretty well sure that they would

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1 agree with what I'm saying.
 2 So, what you got right now actually is
 3 you got a crew in Soldier's Pond and a crew
 4 in Muskrat Falls of maintenance people, line
 5 workers, electricians, nothing in between.
 6 Not one thing for 1500 kilometres between
 7 Soldier's Pond and Muskrat Falls. I mean,
 8 you got to be crazy, in my opinion, to even
 9 set something up that way, and I've told
 10 them.
 11 You know, at the round of bargaining
 12 when we were, in my opinion, forced to the
 13 table, I told them. I wanted Stan Marshall
 14 to come to the table so that we could tell
 15 him and he wouldn't come actually. So, he
 16 sent John MacIsaac, and basically we were
 17 told take it or leave it or we'll go and get
 18 the OEM contractor to contract all the work
 19 out. I hope it's not GE who's at the 200th
 20 version of software and haven't got it right
 21 yet. So, you know, if that's the people
 22 that they're talking about, then, you know,
 23 we got a lot better people than that that we
 24 could offer them, I can tell you right now.
 25 MR. WARREN:

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1 A. Just to break in there a little bit too.
 2 Talking about the linesmen and the
 3 electricians and everything, I've been
 4 talking to the people in Whitbourne and none
 5 of their, for the last two years, work has
 6 gone to Soldier's Pond. We have people,
 7 linesmen who are in Soldier's Pond right
 8 now, four linesmen, that travel hundreds of
 9 kilometres of transmission line, inspecting
 10 transmission line. Four lines-people that
 11 operate out of Soldier's Pond that travel
 12 hundreds of kilometres trying to maintain
 13 these lines, passing depots left, right and
 14 centre, Hydro's depots left, right and
 15 centre, on the road continuously, young
 16 people who have families who you're going to
 17 have big problems trying to keep them in
 18 those jobs because they're travelling these
 19 distances trying to take care of these lines
 20 and that's not going to work the way it is
 21 right now and we think consolidating both
 22 Power Supply and Newfoundland Hydro will
 23 solve these.
 24 You can take four of these people. You
 25 can put them in these depots and they can do

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1 the work from those depots. It just makes
 2 common sense. It just doesn't make any
 3 sense what they're doing right now.
 4 MR. LANE:
 5 A. I got a plan here that was supposed to have
 6 been implemented and it goes back to 2011,
 7 but the plan then was to have 14
 8 linepersons, and I thank the line-people.
 9 Eight of them were going to be based out of
 10 Bishop's Falls. So that means that there
 11 could have been four on the Avalon, two out
 12 of Bishop's, two out of Deer Lake maybe, and
 13 then two out of – on the Northern Peninsula.
 14 That's where our lines are. I just drove –
 15 me and Duane the other day drove from St.
 16 Anthony to Grand Falls and here's the
 17 Muskrat Falls line, Labrador Island Link.
 18 Here's the 230kV lines running parallel.
 19 Duane took pictures.
 20 MR. WARREN:
 21 A. I took pictures of it, yeah. It's
 22 unbelievable driving down the highway,
 23 turned over to the side of the road and took
 24 pictures of the two intersecting lines. One
 25 is taken care of by Power Supply. The other

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1 one is taken care of by Newfoundland and
 2 Labrador Hydro. It's ridiculous.
 3 MR. LANE:
 4 A. But when we brought this up, all we got was,
 5 in my opinion, bullying from the company.
 6 You know, we brought this up at negotiations
 7 and you know, we'll get into that in a
 8 little bit about negotiations, right. But,
 9 you know, and there's other signs that this
 10 should be together. There's other signs.
 11 Already Newfoundland and Labrador Hydro and
 12 Nalcor got operating and maintenance
 13 agreements between each other and we got a
 14 committee – could I bring up Slide – the
 15 next slide from Jim's – yeah, Slide No. 6
 16 from Jim's. Yeah.
 17 You got a joint operating committee
 18 between Hydro and Nalcor. I don't know how
 19 much time this takes up, but under our
 20 proposal, under what we talked about and
 21 back in 2015, you wouldn't need any of this
 22 because you got the same people operating
 23 it. Right now, you got to have committees
 24 set up between Power Supply and Hydro. And
 25 I go back to the bifurcation because that

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1 came up. I'm not saying that the project
 2 shouldn't be bifurcated, but there's a lot
 3 of difference in construction and operating
 4 and maintenance. I can guarantee you that.
 5 (9:45 a.m.)
 6 You construct in however many number of
 7 years and it's done. That's it. Operating
 8 and maintaining assets is completely
 9 different than constructing them. Maybe it
 10 was too much for one person to be overseeing
 11 Muskrat Falls Power and the Labrador Island
 12 Link. I don't argue that. What I argues is
 13 given the same person the operating and
 14 maintenance focus and I'm telling you,
 15 that's costing the rate payers right now and
 16 the taxpayers of the Province because they
 17 done that.
 18 Because I think under Hydro, under
 19 Hydro, we would have – we would be further
 20 advanced in the operating part of it. Right
 21 now, they're paying \$375,000 a year for one
 22 operator to operate Muskrat Falls because
 23 they weren't ready. Despite Hydro people
 24 wanting to do inno – not innovation team,
 25 the integration team wanted, about three or

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1 four years ago, to put people through to
 2 have them ready to operate this project.
 3 That wasn't done and I believe it's because
 4 of the people that they had in charge.
 5 Right now, they got a contract with
 6 Manitoba Hydro Inc. to operate and maintain
 7 that plant for the next two years. That
 8 should be our people, I can tell you right
 9 now. That should have been foresight enough
 10 to see that you needed operators. You got a
 11 plant, you got to operate it. And I know
 12 that some people in management were pushing
 13 and they were pushed back. I can tell you
 14 right now under the 2015 model, we would
 15 have had people ready to go in there and
 16 operate. There's no doubt about it.
 17 MR. WARREN:
 18 A. Absolutely. Just one example, quick example
 19 too of the two separate contracts that end
 20 up having to be developed between Power
 21 Supply union contracts and then Newfoundland
 22 and Labrador Hydro. We have maintained that
 23 both contracts are about 95 or more similar
 24 and even in negotiations, we have tried to
 25 stop duplication and asked to go to the

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1 table with both agreements at the same time
 2 and someone in the background is saying no.
 3 So, we spent a week negotiating on the
 4 contract with Newfoundland and Labrador
 5 Hydro. Then we duplicate that the next week
 6 with Power Supply. So, we're supposed to be
 7 four weeks into negotiations and we're
 8 actually only two weeks into negotiation and
 9 we're wasting the taxpayers' money by wages,
 10 by time spent at a negotiating table with
 11 duplication.
 12 MR. LANE:
 13 A. And it's completely opposite of what
 14 happened with Exploits generation actually
 15 because Exploits generation had their own
 16 Local because they came out of the paper
 17 mill, as everybody knows, so they had their
 18 own Local 512. So, they eventually
 19 amalgamated with us. They didn't want to
 20 amalgamate with us but at the end of the
 21 day, they did. But the company, one of the
 22 company's big points was that "we got to
 23 negotiate two collective agreements." You
 24 know, the cost of negotiating two collective
 25 agreements. Well, we're in – we're worse

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1 now, I can tell you right now, because with
 2 Exploits generation, there was probably only
 3 two or three. But we got two big committees
 4 now, fair size committees.
 5 Another thing I think I saw in some of
 6 the presentations here is that, you know, it
 7 would be a problem with the union. Yes, it
 8 would be – it's not a problem with the
 9 union, but it would cause us some concerns
 10 on how to manage seniority, but it's not –
 11 we would be able to do that, you know, in my
 12 opinion. You know, and it's better off for
 13 all the workers, in my opinion. You know,
 14 they got more flexibility of jobs. They got
 15 lots of things that we wanted before and was
 16 told point blank we had – we only had
 17 voluntary recognition at the time. We never
 18 had a certification order from the Board.
 19 We had no workers. So, I was in with a
 20 retired president and two people that maybe
 21 go to Muskrat Falls or maybe go to Soldier's
 22 Pond on the committee. So, we were told
 23 point blank, and I said this before
 24 actually, "if you don't take this, we'll
 25 contract out your work". That was told to

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1 us quite clearly by – I think it was relayed
 2 by the committee, but you know, I feel sorry
 3 for some of the committee people,
 4 negotiators, chief negotiators for the
 5 company because they takes their direction
 6 right from the top or close to the top.
 7 But anyway, to clue up on that, I
 8 guess, you know, we still believe that the
 9 right structure is – and we’ll go on to the
 10 structure actually. And this is what we
 11 have right now, which I sat in on the CEO’s
 12 evidence here, who seems to be quite happy
 13 with this structure. I’m not sure if the
 14 rate payers or some of the people that’s on
 15 fixed income would be as thrilled with it.
 16 Certainly, it’s 17 vice-presidents and
 17 others, and Stan seems to say – or Mr.
 18 Marshall seems to say that, you know, that’s
 19 okay. They’re doing types of work. You
 20 know, we’ve got – and I’ll go through the
 21 slides and I’ll show you where we’ve lost a
 22 lot of our members over the years. So, he’s
 23 not so concerned about that.
 24 MR. WARREN:
 25 A. With all due respect too, if we lose a

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1 generator in Exploits or power transmission
 2 line that trips or fails in February, it’s
 3 not the 17 VPs that will be out there
 4 restoring our power. It’s the tradespeople.
 5 So, those, maybe some of those tradespeople
 6 need to be taken and listened to.
 7 Listen to the rain coming down outside
 8 and the wind and the storm. I’m sorry, with
 9 all due respect to this big assortment here,
 10 the people who’s actually going to put your
 11 power back on, that’s the people who are out
 12 there right now in that weather.
 13 MR. LANE:
 14 A. But I don’t just criticize this without
 15 actually proposing something. So, a lot of
 16 people in the room will probably recognize
 17 this organizational chart. It was,
 18 basically, what it was back in the two-
 19 thousands and so I think can work. CF(L)Co,
 20 and I know that may change, but it’s 22
 21 years out or 21 years out, but this is how
 22 it worked for a long time. I thought it
 23 worked fairly well. So, you know, I’d even
 24 give them another vice-president actually if
 25 they needed it for a new—like talking about

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1 Gull Island and that kind of stuff.
 2 Actually, back in 1999, there was a person,
 3 I can’t remember his name right now, but he
 4 was over Labrador projects. That was—he was
 5 a VP. Jim somebody, I’m not quite sure, but
 6 so you know, maybe we need a person like
 7 that here as well. But you know, this is
 8 something that I give to the Board to look
 9 at and give some thought to because
 10 basically from the organizational charts,
 11 and if you go back and look at what we’ve
 12 got right now versus what we had back then,
 13 not a whole lot of change. You know, we’ve
 14 got the power plant in Muskrat and we’ve got
 15 the DC Line coming across the Island. And
 16 if you really looked at what the plan was at
 17 the time, it is, at some point in time, to
 18 shut one of our big oil-fired plants down
 19 which, you know, from that point of view,
 20 the Muskrat Falls plants just takes the
 21 place of Holyrood. So, what you’ve got is a
 22 line running across the Island, the DC Line
 23 running from 1500 kilometres across the
 24 Island. So, I don’t see a whole lot of new
 25 assets. As a matter of fact, you know, when

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1 you—and even if you kept Holyrood, you know,
 2 that structure, in our opinion, can still
 3 work. So, that’s it in that part. I don’t
 4 know how we’re doing with time. Have we got
 5 lots of time?
 6 CHAIR:
 7 Q. Not lots, but you have a little bit more.
 8 MR. LANE:
 9 A. Okay.
 10 CHAIR:
 11 Q. Carry on.
 12 MR. LANE:
 13 A. I want to talk a little bit about
 14 efficiencies within Nalcor. And, you know,
 15 IBEW agrees with efficient and effective
 16 organization providing least-cost reliable
 17 service for the rate payer. Where we
 18 diverge to some degree is how we achieve
 19 that, and based on past experience, it has
 20 been on the backs of union workers in our
 21 opinion. And we’ve got a chart here, a
 22 staffing chart, and it’s—some of it is the
 23 same as what Nalcor presented, especially
 24 from 2016 to 2022, but we went back a little
 25 bit further. So, from the financial reports

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1 of Nalcor and Hydro, back in 2009 there was
 2 1241 fulltime equivalent positions, and if
 3 you look at 2016, where they left off, there
 4 was 1463. That was an increase of 222
 5 fulltime equivalent positions. I went back
 6 and tried to find out how many of them were
 7 union and there 40 of them were union.
 8 Exploits Generation came on with 22. The
 9 combustion turbine in Holyrood, we added
 10 eight. The Energy Control Centre was
 11 expanded because of Muskrat Falls. That
 12 provided six more and we made up an
 13 emergency response team in Holyrood which
 14 added four. So, that was 40. There may
 15 have been a few more, but not a lot, here
 16 and there. But, so the rest of them are out
 17 of scope or certainly not unionized
 18 positions, but I do believe that some of
 19 these positions were put in place to reflect
 20 strengthening Newfoundland and Labrador
 21 Hydro's management team in preparation to
 22 operate Muskrat Falls. So, in the numbers,
 23 in my opinion, there is added layers of
 24 management. I think the director levels
 25

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1 came back and I think that we added more
 2 vice-presidents. That was all in
 3 preparation for operating Muskrat Falls,
 4 plus it was—I know there was orders from
 5 2014. I think they were told as well to
 6 make a, you know—Hydro had to go on its own.
 7 So, it may have been some of that, too, but
 8 these numbers from my recollection, some of
 9 them—I haven't got it on paper, but just I
 10 was involved fairly heavily back in that
 11 time, up until '16 when the new regime took
 12 over. So, I can recall them saying that at
 13 meetings that some of these numbers were to
 14 strengthen Nalcor/Hydro in preparation for—
 15 to operate Muskrat Falls. Overall, on the
 16 next page, in that same period of time, it
 17 went from 1241 up to 1654 at present. So,
 18 that's about 410 I think or 412 positions.
 19 Out of that number, we have about 83
 20 unionized positions out of the—so, the rest
 21 of them were—I don't know where they all
 22 came from. I haven't got the numbers, but I
 23 can only talk union and what we—I know that
 24 out of the 400 and something, 89 union
 25

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1 positions, and some of them, besides what I
 2 spoke about earlier, the other ones, some
 3 would have been Power Supply. We have like
 4 43 in Power Supply on our latest seniority
 5 list and there may have been a couple more
 6 like that are term that wouldn't show up on
 7 our list. But in the next slide here, this
 8 is interesting, on bargaining unit positions
 9 and I do go back to 1995. I know it's a
 10 ways back, but—and I heard at this inquiry
 11 that—hearing, not inquiry. I heard, I
 12 believe it was Ms. Greene, that said
 13 something about downsizing in 2000, but we
 14 also had a downsizing in 1995, another one
 15 in '96, and one in 2000, and the next one in
 16 2003 which took out over a hundred union
 17 positions at the time and we've been losing
 18 positions ever since.
 19 (10:00 a.m.)
 20 So, if you look, the interesting one to
 21 me is in Finance. We have 40 positions in
 22 Finance, mainly in Hydro Place. Right now,
 23 we have 17 permanent positions. And that's
 24 interesting because while we had one Finance
 25

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1 Department back in 1995, we have three now.
 2 We have Nalcor Finance, Power Supply Finance
 3 and Newfoundland and Labrador Hydro Finance
 4 Departments all with VPs or executive vice-
 5 presidents. If you look at office workers
 6 overall in Hydro Place, there was 73 back
 7 then. There's 42 right now. So, that's
 8 about a 40-percent reduction. If you look
 9 at overall office workers of 118 to 70,
 10 that's about a 40-percent reduction. In
 11 Accounting/Finance, it's almost a 60-percent
 12 reduction. So, that's 17 out of 200
 13 fulltime equivalents in Finance, 17 in the
 14 Accounting Department. We do have some more
 15 in other parts of the Finance, but purely
 16 accountants and accounting clerks, it's at
 17 17 versus 40. So, I'll just—while we've got
 18 a reduction in Hydro Place of almost 40
 19 percent office workers, you know, space at
 20 Hydro Place is a premium. It's a place to
 21 get—a job to get a place to put your
 22 briefcase down.
 23 MR. WARREN:
 24 A. In talking to some of these people, they're
 25

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1 super-stressed, their workloads have
 2 increased, they're jumping from job to job
 3 on a regular basis and to see a decrease
 4 from any of these positions that are like
 5 boots on the ground, as well as our office
 6 workers, that would be--tremendously affect
 7 our efficiencies when it comes to a normal
 8 workday.
 9 MR. LANE:
 10 A. I just want to look at the lines for a
 11 minute. So, our lines haven't decreased;
 12 they've actually increased. We've got--as
 13 everybody may know, we have a line from here
 14 to Bay D'Espoir. PL267, I believe that was
 15 build last year. So, that increased in
 16 capacity and, obviously, we've got other
 17 lines as well. I think there's one from
 18 Soldier's Pond now to Hardwoods and I think
 19 there was one built from Holyrood to
 20 Hardwoods as well, since 1995. So, our
 21 lines have increased, but our lines
 22 positions have gone down. Back in '95, we
 23 have 108. As of today, this year, we have
 24 78. So, that's a 25-percent reduction in
 25

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1 our positions and, oddly enough, we've been
 2 now just informed about two weeks ago that
 3 there of our—four, I believe, of our current
 4 line positions, that a five-percent
 5 reduction in our line positions, are not
 6 going to be filled. We've already been
 7 informed about that. So, but overall, in
 8 our operations, we're down around 25 percent
 9 from '95, but you know, our work has
 10 increased actually. You know, the number of
 11 assets that we've got have increased. And
 12 overall, both of our bargaining units, we've
 13 got 602 and we're—I want to make this clear,
 14 is that this doesn't include Exploits and
 15 some other are added. This is purely
 16 numbers that reflect the assets that we had
 17 in '95 compared to the assets that we have
 18 right now. We could have added numbers for
 19 Exploits, but I wanted to show that we went
 20 from 605 to 434 positions at—for a 28-
 21 percent reduction. And I do have a
 22 breakdown. I talked a little bit about '95
 23 and '96. In '95, we lost 31 positions; '96,
 24 we lost 22; 2002 and '03, on that borderline
 25

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1 was another 21. I'm unclear about 2000, but
 2 I do have a memo from a current—a former VP
 3 of Human Resources, but I couldn't really
 4 figure out the numbers, but I think it was
 5 about 30 positions at the time. I know that
 6 was a lot of our line people that they let
 7 go at the time, and drivers and
 8 groundworkers that assist the lines and all
 9 that kind of stuff. So anyway, you know, I
 10 guess my bottom-line here is that, you know,
 11 if there is efficiencies in Hydro and
 12 Nalcor, and you know, not within the
 13 bargaining unit (phonetic) and I think these
 14 number clearly show that, you know, we're at
 15 numbers that, you know, we can't get all the
 16 work done now. You know, the amounts of
 17 overtime that we've got to work and—is
 18 astronomical in order to get the work done.
 19 And contracting out is not always the
 20 cheapest way to do it either, I can guaranty
 21 you that. We can see that by Muskrat Falls
 22 and \$385,000 for an operator or 375 maybe.
 23 I stand to be corrected on that, but if
 24 somebody wants to tell me, they can, but the
 25

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1 numbers that I heard for the contract
 2 divided by eight is 375,000. So, clearly,
 3 we—you know, our—an operator with us would
 4 make about, I don't know, less than 100,000
 5 for sure and that's wages and plus benefits,
 6 but it would be nowhere near 375,000 for
 7 sure. So, anyway, Duane is going to take us
 8 through the Exploits Generation.
 9 MR. WARREN:
 10 A. One last thing. I know we've taken up a lot
 11 of your time and I'll try to make it as
 12 quick as possible, but one last thing that
 13 needs to be mentioned and that's our
 14 Exploits Generation. When we refer, as I
 15 said before, union people, it's the
 16 maintenance group, the blue-collar workers,
 17 the operators, electricians, millwrights,
 18 labourers. I'm not saying that we totally
 19 disagree with Liberty's restructuring of
 20 Exploits Generation. As you can see by the
 21 graph, Exploits Generation, when it was an
 22 operation by the AbitibiBowater Group, the
 23 paper company, it maintained 17 unionized
 24 positions and 3 managers. And comparing
 25

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1 apples to apples, it's not on here, but I
 2 did in a former—my former career was with
 3 Corner Brook Pulp and Paper. So, I know
 4 Deer Lake Power very well. And right now,
 5 Deer Lake Power has a similar company as far
 6 as age, staffing numbers. They have 18 now
 7 ununionized positions and 3 managers. As
 8 you can see by the current Exploits
 9 Generation structure, we have 22
 10 maintenance/operation staff, that's the
 11 blue-collar workers, and 16 at a scope
 12 positions, white-collar positions. There
 13 also, I just want to mention that most
 14 recently in June, that 22 has now dropped to
 15 21. So, we're getting closer to a 50/50.
 16 We are down to—we are right now, down one
 17 electrician. He's not being—hasn't been
 18 replaced. And just to talk to the
 19 electricians, the three electricians that
 20 try to maintain winter readiness over the
 21 summer, they have—their overtime has
 22 increased dramatically; two, three, four
 23 hundred hours overtime over the summer for
 24 those three electricians because they've
 25

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1 been undermanned or understaffed, I should
 2 say. There are many unique operation
 3 requirements, aging equipment, that require
 4 extra maintenance at these types of
 5 facilities. These maintenance teams are
 6 going to be extremely hard to reduce with
 7 modernization because of the older
 8 equipment. The generators are of those
 9 ages. You can't change the equipment. You
 10 can change the communication. You may be
 11 able to change how you operate them from a
 12 remote location or whatever, but there's too
 13 many other environmental—it's right on a
 14 salmon river. There's too many
 15 environmental things there. You cannot just
 16 replace a computer or buttons with—replace a
 17 person with buttons. The other thing I
 18 wanted to mention that, like I say, these
 19 people are going to be very to reduce and
 20 the numbers over the years has spoken for
 21 themselves. So, that's all I want to say on
 22 that point. I want to be quick. There's
 23 more that's going to be coming obviously in
 24 a written submission that we have, but –
 25

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1 MR. LANE:
 2 A. But I think one point, I don't know if Duane
 3 covered it.
 4 MR. WARREN:
 5 A. Go ahead.
 6 MR. LANE:
 7 A. With the 17 with Abitibi -
 8 MR. WARREN:
 9 A. Yes.
 10 MR. LANE:
 11 A. - they also had back-up from the mill
 12 employees. If they needed more employees at
 13 any point in time, they would draw them from
 14 the mill. Right? So, they had—you know,
 15 the mill had maybe 300 employees versus 17
 16 from—with Abitibi, right, the power
 17 production part of it. So, anyway.
 18 CHAIR:
 19 Q. Thank you. And you did say you were going
 20 to make a written submission as well?
 21 MR. WARREN:
 22 A. Yes, yeah.
 23 CHAIR:
 24 Q. Thank you.
 25

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1 MR. LANE:
 2 A. Yeah, our written submission will be more
 3 detailed than this.
 4 CHAIR:
 5 Q. Yes.
 6 MR. LANE:
 7 A. We'll probably be talking on some of the
 8 other issues as well, right? And—but –
 9 CHAIR:
 10 Q. Thank you. That will be appreciated. We've
 11 run a bit over time, but if there's any
 12 pressing questions, I'll entertain them.
 13 Consumer Advocate?
 14 BROWNE, Q.C.:
 15 Q. We have a question. Is it your evidence
 16 that bargaining-unit personnel have been
 17 displaced by non-bargaining unit work—
 18 personnel in management and office
 19 positions? Has that what's gone on?
 20 MR. LANE:
 21 A. I can't really tell if that's the case or
 22 not, but I know in Finance in particular in
 23 Hydro Finance, we had that department. So,
 24 it's the same type of work as Finance in
 25

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1 Power Supply. So, in Power Supply, we have
 2 two unionized positions in Finance. I
 3 believe it's two. In Hydro, we have 15,
 4 right? Now, some of them do work for each
 5 other as well. So, it's hard to tell. All
 6 I can say is that, you know, we have three
 7 Finance Departments and our numbers dropped
 8 by 60 percent in that, in the main part of
 9 the accounting part of it, right?
 10 BROWNE, Q.C.:
 11 Q. And Power Supply, is that a separate
 12 bargaining unit?
 13 MR. LANE:
 14 A. It is now, yeah.
 15 BROWNE, Q.C.:
 16 Q. So, we have Power Supply, one bargaining
 17 unit, and we have your bargaining unit as
 18 well?
 19 MR. LANE:
 20 A. Yeah, we have the original operations
 21 bargaining unit and we have an office
 22 workers bargaining unit for Newfoundland and
 23 Labrador Hydro. That is where all of these
 24 accounting people will lie. They all work
 25

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1 for Newfoundland and Labrador Hydro, but
 2 some of them are put over with--work
 3 actually for Power Supply through a shared-
 4 services arrangement.
 5 BROWNE, Q.C.:
 6 Q. And what's your position? Your position is
 7 that anything that has to do with Hydro
 8 should be out of Nalcor or a Nalcor
 9 affiliate and into Hydro?
 10 MR. LANE:
 11 A. Yeah.
 12 BROWNE, Q.C.:
 13 Q. That's your position basically, and you're
 14 saying there's more efficiencies there?
 15 MR. LANE:
 16 A. I think so, yeah.
 17 BROWNE, Q.C.:
 18 Q. Is there efficiencies for rate payers there?
 19 MR. LANE:
 20 A. Yeah, you probably—yeah. I never thought of
 21 it. Yeah, I think it would be.
 22 BROWNE, Q.C.:
 23 Q. Okay, thank you.
 24 CHAIR:
 25

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1 Q. Thank you, Mr. Browne. Newfoundland Power?
 2 MR. O'BRIEN:
 3 Q. No. No questions. Thank you, gentleman.
 4 MR. WARREN:
 5 A. Thank you.
 6 CHAIR:
 7 Q. Industrial Customers?
 8 MR. FLEMING:
 9 Q. No questions.
 10 CHAIR:
 11 Q. Ms. Greene?
 12 GREENE, Q.C.:
 13 Q. I have no questions, thank you.
 14 CHAIR:
 15 Q. Nothing from the Panel? No.
 16 MR. WARREN:
 17 A. Thank you. Thank you, very much.
 18 CHAIR:
 19 Q. Thank you, Mr. Lane and Mr. Warren.
 20 MR. LANE:
 21 A. Yeah.
 22 CHAIR:
 23 Q. It's most interesting. I look forward to
 24 your submission.
 25

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1 MR. WARREN:
 2 A. Okay, thank you.
 3 CHAIR:
 4 Q. Good morning, sir. Welcome back.
 5 MR. WELLS:
 6 A. It's nice to see you guys.
 7 CHAIR:
 8 Q. I'd like to say our next presenter needs no
 9 introduction, but I will ask him to
 10 introduce himself for the purpose of the
 11 record.
 12 MR. WELLS:
 13 A. My name is Andy Wells and I think I might
 14 represent sanity, but some people may say
 15 it's insanity. We'll see. First of all,
 16 Madam Chair, I want to congratulate you on
 17 your apotheosis to high office.
 18 CHAIR:
 19 Q. Thank you, sir.
 20 (10:15 a.m.)
 21 MR. WELLS:
 22 A. And I note also, the Vice-Chair, and Mr.
 23 O'Brien, good luck. I can tell you from
 24 personal experience, sir, you're going to
 25

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1 need it. They are a formidable team, but
 2 they are great people to work with and it
 3 was an honour and a privilege. I remember
 4 it well. To the first speaker, I didn't
 5 interrupt him this morning, but I did run
 6 some numbers when I was still up there,
 7 sitting up there, and just on a standard
 8 utility rate base rate of return, 60/40,
 9 yada, yada, don't need to get into the
 10 details. The bottom-line here is, folks,
 11 what we're talking about, and I ran it past
 12 some other people and I checked it out with
 13 the staff before I left. We're looking at a
 14 revenue requirement, as far as I can see,
 15 based on around 40-billion dollars, we're
 16 looking at a revenue, an additional revenue
 17 requirement, of between 800 and billion
 18 dollars a year. I looked at a—I looked at
 19 the assets and service then. It was around
 20 3-billion dollars. I think it maybe has
 21 gone to four now. I looked at the revenue
 22 stream then. It was around 800-million
 23 dollars. So, you had three, about three,
 24 three and a half billion dollars supporting—
 25

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1 supported by revenues of 800 million, and
 2 how they're proposing to take the rate—if
 3 you allocate all your costs, you're talking
 4 about adding 14-billion dollars to the rate
 5 base. Now, I put these numbers out to the
 6 media and I got no interest. Nobody was
 7 interested in it. I gave them to the
 8 Telegram. I got jerked around by the
 9 Telegram. Nobody carried them. The media
 10 hear, with respect to this whole thing,
 11 right from the get-go as far as I am
 12 concerned, has been at best mediocre and in
 13 some cases absolutely disgraceful. I'm
 14 going to try and get through this, Madam
 15 Chair, on time. I respect the, you know,
 16 the concern you had with getting your job
 17 done. It's beyond the scope of the Board,
 18 of course, to look at how this was caused.
 19 What happened here? How did we get involved
 20 in this mess, this 14 billion dollar mess
 21 and rising and I'm going to be very quick
 22 here because I got other substantive issues
 23 I want to deal with, but I'd like to quote a
 24 lawyer, a good lawyer, there is such a
 25

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1 thing, the great 19 Century Frederic Bastiat
 2 summed up Muskrat Falls quite succinctly.
 3 "It is impossible to introduce into society
 4 a greater change and a greater evil than
 5 this, the conversion of the law to an
 6 instrument of plunder." Muskrat Falls,
 7 ladies and gentlemen, has been a great
 8 success for the crowd that has run this
 9 Province since Confederation. Originally it
 10 was to be 6.2 billion dollars, plus IDC,
 11 it's now gone to 13 billion dollars, plus,
 12 plus, plus.
 13 Now I can sum it up and I'll move on
 14 immediately, one simple conversation I had
 15 years ago, 2011, eight years ago when I sat
 16 up there where these two people and
 17 Commissioner Oxford and we were doing our
 18 review, and I ran into Ed Roberts and
 19 Roberts came over to me and he said, "Andy",
 20 he said, "This Muskrat Falls Project is
 21 going to be a disaster." And I said, "Yes,
 22 it is", I said, and "you", I said, "as a
 23 prominent citizen could speak out."
 24 "Couldn't possibly", he said, "our firm is
 25

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1 acting." And that's the problem with the
 2 whole Muskrat Falls Project. This was not
 3 about power; this was about the crowd that
 4 has run this Province since Confederation,
 5 in my view, filling their pockets at great
 6 expense to the public and I think it's
 7 disgraceful.
 8 And according to Stan Marshall, the
 9 party is not over. Muskrat Falls is now two
 10 to three times behind schedule, two to three
 11 years behind schedule, but it's such a
 12 success story, according to Stan, it was a
 13 boondoggle 2016 but now it's somehow, you
 14 know, it's become a butterfly, rather than a
 15 grub, and it's now a great success story and
 16 they're going to move on to Gull Island, and
 17 I mean the fact that Gull Island gets
 18 discussed here shows the fantasy world that
 19 these people are living in. But it will be
 20 a new generation of actors will play their
 21 roles and some of them, of course, were at
 22 the Inquiry. There was 27 lawyers joined to
 23 the Inquiry, it was a riot, I mean, you can
 24 understand why your economy is in decline.
 25 But it's not just the lawyers, it's the

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1 consultants, bureaucrats, the politicians,
 2 the consultant companies, yada yada, and
 3 they've had a great field day and I guess
 4 they look forward to continuing to party
 5 with Gull Island. How that's going to
 6 happen escapes me and the numbers, I won't
 7 dwell on it here, but the numbers are
 8 ridiculous, I mean Gull Island is a non-
 9 starter for so many reasons.

10 The presentation I got here today is
 11 the work of a small group and we spent a lot
 12 of time at this and we got good data to back
 13 it up, and we're raising what we think are
 14 consequential issues, material to how we
 15 deal with this rate mitigation business.
 16 It's a serious problem. None of the matters
 17 contained herein, I put this out to the
 18 press, no interest. We got no coverage and
 19 I'm not offended, personally I couldn't care
 20 less, but the fact of the matter is these
 21 important issues which we tried to summarize
 22 to try and, if somebody was seriously
 23 interested in what the hell is going on
 24 here, here was a document that you could use
 25 to understand what is going on with respect

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1 to the Project, to the costs and where it's
 2 going with respect to rates and the gains
 3 that are being played by the players in this
 4 sordid drama.

5 So I want to move on to the points that
 6 we raised here. The first one I talk about
 7 is levelized unit energy cost. Nalcor
 8 estimated that in 2012 at 36 cents a
 9 kilowatt hour with a capital cost of 6.2
 10 billion. Now we asked them to update this
 11 number and the number, so you understand it,
 12 represents the total cost of Project capital
 13 and operating costs spread over 50 years and
 14 is used for comparative purposes. And the
 15 ATIPPA request was filed and Nalcor
 16 responded on February 12th, 2018, "It does
 17 not compute LUEC on an ongoing basis and
 18 therefore, has no comparable LUEC for the
 19 12.7 cost update." Simple extrapolation
 20 produces a LUEC in the range of 70 cents a
 21 kilowatt hour and I believe and on behalf of
 22 consumers we're entitled to know, Nalcor
 23 should be required to provide a LUEC for the
 24 revised costs. And the 70 cents per
 25 kilowatt hour, I just, you know, this got to

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1 be compared to the spot price on the, I
 2 guess it's the New England Hub is where the
 3 power is going to be sold. Power on a New
 4 England hub today is probably selling for
 5 two to three cents a kilowatt hour and when
 6 you factor in what the transmission costs,
 7 yada, yada, you know, they might be making a
 8 cent or a cent and a half, so every kilowatt
 9 hour that's going to be sold for the next 50
 10 years is going to cost taxpayers somewhere
 11 around 70 cents a kilowatt hour and it's,
 12 you know, it's useful to have, very
 13 interesting and it shows just how out of
 14 whack this project is.

15 The other point I make, Point 2, and
 16 nobody has brought this up and I condemn the
 17 Consumer Advocate for not bringing it up,
 18 for Newfoundland Power for not bringing it
 19 up, Project economics get better over time,
 20 that is what people have been told. This is
 21 false. Revenue requirements increase over
 22 time. The revenue requirement in the first
 23 full year of operation is \$726 million, that
 24 was a Government press release, April 15,
 25 2019. This rises. In 50 years as a

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1 consequence of the back end-loading of the
 2 Power Purchase Agreement, it rises to 2.2
 3 billion. There's a little chart there, you
 4 can see what we're talking about. The PPA
 5 covers the financial costs of the dam and
 6 the transmission assets. So year one, and
 7 it's 2021 and that's down the road now,
 8 apparently the project is probably, well
 9 Marshall said it was two to three years
 10 behind schedule, but the Government said it
 11 was going to be, what we got to mitigate is
 12 726 and in 2069 the total payments are 2.58
 13 billion, it's like having a mortgage payment
 14 that gets worse over time. And the PPA
 15 payments increase by a factor of 6.4, this
 16 is a tremendous, in my view, injustice, it's
 17 very inter-generationally unfair, a huge
 18 financial burden on the future, on the
 19 present, on the future for the benefit of
 20 the present. And if you look in utility
 21 regulation, as you guys know, you try and
 22 spread your costs equitably and equally over
 23 time. You're supposed to pay for what you
 24 consume and only pay that. You're not
 25 supposed to pay for future consumption. And

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1 we were told by politicians, Williams and
 2 Ball, that it gets better and this was
 3 sickenly misleading and I think the Board
 4 has got to clarify once and for all that it
 5 doesn't get better, it gets worse.
 6 The next point we raise is reliability
 7 issues and we were told at the Inquiry
 8 certainly that oh, well, reliability is
 9 going to get better over time. Reliability
 10 will be enhanced. On October 30, 2011, a
 11 System Planning document of Nalcor stated
 12 "the Maritime Link is equivalent to a 300
 13 megawatt generator with high availability
 14 for the Isolated Island System. It's a
 15 critical feature for the operation and
 16 reliability of the LIL. Of 70 percent of
 17 the power in this Province, the power demand
 18 is on the Avalon Peninsula." That's what
 19 they say here and they say, "Outages of one
 20 month or greater in remote areas are
 21 possible." That's what we're talking about
 22 here if this line goes down, a month or
 23 longer. So an ATIPP request was filed with
 24 Nalcor requesting answers to the two
 25 questions that are there, provide the

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1 reports from Nalcor which show the 300
 2 megawatt of Nova Scotia backup power via
 3 the Maritime Link is available if needed in
 4 an outage and has Nalcor asked Emera
 5 directly if they can supply the 300
 6 megawatts of backup power over the Maritime
 7 Link to Newfoundland if the LIL has an
 8 extended outage of over one month. And then
 9 Nalcor responds, and this is the kind of
 10 games that they have been playing with us,
 11 "There are no reports specifically
 12 addressing the 300 megawatt of backup supply
 13 via the Maritime Link in the event of an
 14 extended outage." And "No, Nalcor has not
 15 asked Emera directly if it can supply the
 16 300 megawatts of backup power over the
 17 Maritime Link in the event of an extended
 18 LIL outage."
 19 And the second point here relates to
 20 the concern of transmission capacity into
 21 the Avalon Peninsula for Nova Scotia power
 22 transmitted to Newfoundland by the Maritime
 23 Link and I can recall when I was up there
 24 with the panel, discussions on this very
 25 issue. In response to an ATIPP request of

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1 December 15, 2018, Nalcor response stated,
 2 "Please note that there are currently no
 3 records responsive to your request." And we
 4 asked, question was asked on October 29th,
 5 2018 as to why the matter was only studied
 6 now, and this is the response from Nalcor,
 7 "that with the retirement of generation on
 8 the Avalon Peninsula, the remaining capacity
 9 provided by the 230 kV transmission network
 10 will not be adequate to supply peak loads on
 11 the Avalon Peninsula with the LIL bi-pole
 12 out of service. In such a scenario, leading
 13 shedding would be required to ensure stable
 14 system operation." In other words, rolling
 15 blackouts in the event of a prolonged
 16 outage.
 17 Now this is what we're—this is what we
 18 can expect after spending 14 billion dollars
 19 on this project. So the following
 20 questions, I think, Madam Chair, should be
 21 addressed and should be answered. The
 22 people of Newfoundland are entitled to know
 23 why was the 300 megawatts included in the
 24 2011 report if there was no agreement with
 25 Emera, their partner on the LIL, I mean,

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1 these characters are getting together and
 2 meeting all the time. You'd think they'd be
 3 talking about this stuff. Apparently no.
 4 How was it that the System Planning
 5 Department did not know there was no
 6 transmission capacity into the Avalon?
 7 Seven fulltime employees apparently, and of
 8 course, there was various Nalcor witnesses
 9 that testified, it's beyond, let's say it's
 10 out of scope here, but there was Clift,
 11 Martin and Harrington testifying that
 12 reliability would be enhanced and Dark NL
 13 would not have happened.
 14 The next point we talk about is Nalcor
 15 has stated missing, and we call it the
 16 missing 76 megawatts of free power on the
 17 LIL. Nalcor has stated no cost Churchill
 18 Falls power was assumed for 50 years (PB-30-
 19 2018) for 76 megawatts to fill the LIL to
 20 900 megawatt capacity. 824 Muskrat Falls
 21 plus 76 recall.
 22 (10:30 a.m.)
 23 However, this recall power is committed to
 24 economic development in Labrador. The
 25 Dunderdale Government promoted the

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1 availability of this power as attraction for
 2 prospective mineral development in Labrador,
 3 and there's a report done by Mr. Locke, who
 4 did an economic analysis for the people of
 5 Newfoundland on the economic value of
 6 Nalcor, which is, I mean, anyway, Alice in
 7 Wonderland. Anyway, this power is not
 8 available for both activities and with the
 9 revival of economic peak, economic activity
 10 in Labrador, it would clearly not be
 11 available when needed for winter peak
 12 consumption.

13 So in response to an ATIPPA request as
 14 to whether the cost to purchase the 76
 15 megawatts to fill the LIL has been costed in
 16 Muskrat Falls power rates, Nalcor responded
 17 in PB-972-2018, "There is no public report
 18 which is responsive to your request." And I
 19 think they got a form up there with some
 20 slides on ATIPPA request, that's the first
 21 thing they put out, "There is no public
 22 report which is responsive to your request."
 23 Additional savings could have been found,
 24 this is another issue we think is important,
 25 the Bay D'Espoir transmission, this was

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1 filed, it was withdrawn. It could have
 2 transmit 176 megawatts of existing Hydro
 3 generation to the Avalon where it was
 4 needed, we'd allow for increased fuel
 5 efficiency and reduces the potential for
 6 spills at Hydro. And there's a report there
 7 that we had in 2011, this 176 megawatts
 8 represents 22 percent of the rate of
 9 capacity of Muskrat Falls at 824 and a
 10 current cost estimates for the latter is
 11 around 1.3 billion dollars. This power is
 12 now wasted while fuel is being burned at
 13 HGS. So why didn't Nalcor, you know, the
 14 question we had and again I guess it can't
 15 be considered by this Board, but why didn't
 16 Nalcor pursue these run-of-river hydro
 17 integrated with wind and peak capacity
 18 expansion of the Bay D'Espoir Line in 2011?
 19 Why was it delayed and what would the
 20 estimated cost verses savings of this
 21 project have been as compared to Muskrat
 22 Falls costs? These are big numbers. The
 23 numbers that are flying around here, you
 24 know, talking about millions of dollars in
 25 efficiencies, these are pixie dust, they're

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1 pennies. What we're talking about here is
 2 tens and tens of millions of dollars.
 3 Another point we think the Board must
 4 address is the implication of increased
 5 conservation and rising customer rates.
 6 Nalcor has forecast an Island
 7 Residential rate of 26.32 cents per kilowatt
 8 hour. It estimates, and this was in their
 9 2017 application, it estimates—and this is
 10 the essence of this point, 10 percent of
 11 energy demand would increase customer rates
 12 by a further—a reduction, I'm sorry, of 10
 13 percent of energy demand would increase
 14 customer rates by 8 percent. So the Board
 15 has got to examine the implications, the
 16 rate implications of the relationship
 17 between conservation measures and consequent
 18 rate increases because I think what we're
 19 facing here in this Province is what is
 20 known as utility death spiral, there's going
 21 to be increased efforts at conservation and
 22 as the conservation becomes more, as
 23 conservation measures rises, there's less
 24 consumption. The residual consumers got to
 25 pick up the costs, that's how that works.

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1 Stan Marshall in testimony at the Inquiry on
 2 July 2nd, 2019, said, "The best way to deal
 3 with uncertainty over Muskrat Falls is to
 4 keep the HGS operating for a few years."
 5 And this item 8 is important. System
 6 Reliability and the Closure of HGS
 7 Mitigation. The Inquiry must document the
 8 additional costs to taxpayers every year
 9 that HGS remains open.

10 I noticed there was testimony from
 11 Light & Power, now they're waffling on that
 12 now, apparently Alteen said may not be
 13 necessary. Well I think Light & Power, I
 14 think there's something going on here behind
 15 the scenes that we don't know anything about
 16 and I think the fact that Newfoundland Power
 17 wants to get back into action and buy some
 18 interest in the Muskrat Falls Project tells
 19 me, you know, there's stuff going on behind
 20 the scene that we, the unwashed, don't know
 21 anything about. But, we need—Marshall
 22 should explain first of all how concerns
 23 about system reliability will disappear
 24 after a few years and HGS is closed. As I
 25 said earlier, the issue of a prolonged

Page 73	<p>1 outage is a permanent concern. The LIL is</p> <p>2 there, it's going to operate, supposedly, we</p> <p>3 don't know, but there's always going to be a</p> <p>4 need if you're going to have a reliable</p> <p>5 system and avoid prolonged blackouts, you're</p> <p>6 going to have to have an HGS or equivalent.</p> <p>7 And I can recall vividly in 2011 when</p> <p>8 Muskrat Falls was first announced, an</p> <p>9 electrical engineer with many years of</p> <p>10 experience who shall go unnamed, told me, he</p> <p>11 said, "I don't know what they're talking</p> <p>12 about. All we need in Newfoundland to</p> <p>13 ensure the security of our system is 4 to</p> <p>14 600 megawatts of reliable power on the</p> <p>15 Avalon Peninsula where consumer demand,</p> <p>16 where population is concentrated and I think</p> <p>17 is half the population of Newfoundland now</p> <p>18 live on the Avalon and 70 percent of your</p> <p>19 demand." And here we are, eight years</p> <p>20 later, 14 billion dollars, actually is more,</p> <p>21 I'll come to that now in a second, 14</p> <p>22 billion dollars and more down a hole and</p> <p>23 we're still going to be faced with the fact,</p> <p>24 the reality that HGS or equivalent is going</p> <p>25 to be required. And I have note here, the</p>	Page 75	<p>1 is necessary? And I'll just note there</p> <p>2 because I'm actually not doing too bad with</p> <p>3 respecting time, Madam Chair.</p> <p>4 If you want to look at, from a utility</p> <p>5 perspective or an avoided cost perspective,</p> <p>6 what's the value of Muskrat Falls? I'll</p> <p>7 tell you what it is. It's the value of what</p> <p>8 it would cost to replace Holyrood. If</p> <p>9 Holyrood is going to cost a billion or a</p> <p>10 billion and a half, that's all Muskrat Falls</p> <p>11 is worth. I don't even think it's worth</p> <p>12 that. I think it's actually worthless, but</p> <p>13 the minimum we can say, if you look at it</p> <p>14 from a strictly utility avoided cost,</p> <p>15 opportunity cost kind of thing, it's worth</p> <p>16 the equivalent of what it would cost to</p> <p>17 replace Holyrood. And this is just a note,</p> <p>18 nothing illustrates the absurdity of the</p> <p>19 Muskrat Falls Project than the statement by</p> <p>20 Derrick Sturge to the Inquiry that he was</p> <p>21 out of the loop on Muskrat Falls cost</p> <p>22 estimates.</p> <p>23 Mr. Sturge was, is vice-president of</p> <p>24 finance and was responsible for the Federal</p> <p>25 Loan Guarantee. I mean, here is your vice-</p>
Page 74	<p>1 Board should also demand if you're going to</p> <p>2 get a serious analysis on the costs, the</p> <p>3 amount of money that we got to mitigate</p> <p>4 here, ladies and gentlemen, the Board must</p> <p>5 also request that Hydro provide an estimate</p> <p>6 of the Holyrood Generation Station</p> <p>7 replacement. My rough figure is probably a</p> <p>8 billion dollars, could be higher, but we</p> <p>9 need to know, just as we need to know the</p> <p>10 costs of having the HGS on standby, that</p> <p>11 should be factored in.</p> <p>12 We also need to know the costs of</p> <p>13 replacement. The reliability of our</p> <p>14 electrical power system is that in order to</p> <p>15 ensure reliability on the system and avoid</p> <p>16 the drastic consequences of a prolonged</p> <p>17 outage, 4 to 600 megawatts of reliable, that</p> <p>18 dirty word, two little words, fossil fuel</p> <p>19 backup power is required on the Avalon</p> <p>20 Peninsula. In other words, an HGS or</p> <p>21 equivalent, and this begs, of course, an</p> <p>22 obvious question that will not be answered</p> <p>23 by anybody, what was the rationale for the</p> <p>24 Muskrat Falls Project and the expenditure of</p> <p>25 some 14 billion dollars if HGS or equivalent</p>	Page 76	<p>1 president in finance and, of course, you got</p> <p>2 the statement by Bennett that the cost of</p> <p>3 Muskrat Falls they were deliberately</p> <p>4 inflated. You got the 600 million, we dealt</p> <p>5 with it when we had to deal with the</p> <p>6 Dunderdale, I call it the flat-screen</p> <p>7 application now because, as I say, she</p> <p>8 thought Muskrat Falls, we needed the Muskrat</p> <p>9 Falls because all Newfoundlanders were</p> <p>10 buying flat screens, but it shoves 600</p> <p>11 million dollars in for scubbers at Holyrood</p> <p>12 which was not necessary. But the other</p> <p>13 absurdity I note is the statements by, I</p> <p>14 think it was the Consumer Advocate, maybe</p> <p>15 I'm wrong Mr. Browne, "Nalcor needs more</p> <p>16 regulation." It's like telling an</p> <p>17 alcoholic, b'y you can't get your drinking</p> <p>18 under control, we got ten, I think ten</p> <p>19 organizations or ten structures examining</p> <p>20 Nalcor now, we need 11 to keep you off the</p> <p>21 booze and keep you on the wagon. I mean,</p> <p>22 the solution to the problems caused by</p> <p>23 Government apparently, this is the mentality</p> <p>24 in this Province and this is what has taken</p> <p>25 our economy down, the solution to the</p>

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1 problems caused by Government is more
 2 Government, more regulation and it doesn't
 3 work that way. I will not comment on Item
 4 11, "Astaldi Disqualified in British
 5 Columbia", but the fact that they decided to
 6 hire this company and not check out why they
 7 were rejected in other jurisdictions doesn't
 8 give me, with the other hosts of factors
 9 which have been merged, any confidence that
 10 this crowd can manage the Gull Island
 11 project. Item 12, "The Stan Marshall
 12 Boondoggle – Too Little Too Late", the
 13 hypocrisy of Stan Marshall and the hypocrisy
 14 of Peter Alteen, these people knew long
 15 before they spoke that this project was a
 16 Boondoggle. Marshall said in 2015 or 2016,
 17 I'm not sure, that the project was a
 18 boondoggle. He knew right from the start
 19 that this was the case. I know from
 20 personal recollection because on two
 21 occasions during this period, as chairman of
 22 the Board, I happened to be at meetings
 23 somewhere where Fortis executives told me
 24 that they thought it was a crazy project and
 25 if Stan Marshall had a new story in 2011,

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1 2012, so did NLP and so did Peter Alteen and
 2 so did Earl Ludlow, and if they had of
 3 spoken then and if they had of supported the
 4 Board when we were looking for our extension
 5 of time to do a proper job, I think if the
 6 president of Fortis had taken a public stand
 7 against the project, it probably would have
 8 stopped the project immediately. It
 9 certainly would have precipitated a badly
 10 needed public debate on the project, instead
 11 Fortis, like all other organizations, which
 12 should have called for robust public debate
 13 on this matter were silent.
 14 Now corporate self-interest took
 15 precedence over manifest concerns regarding
 16 the cost implications of Muskrat Falls.
 17 Everybody was acting, not just the lawyers,
 18 everybody, and I believe Newfoundland Power
 19 has sold its customers down the drain at
 20 these proceedings. Newfoundland Power,
 21 268,000 customers, 12,000 kilometers of
 22 distribution lines, transmission and
 23 distribution lines, they had no questions
 24 concerning rate mitigation measures that
 25 were necessary at this hearing, no

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1 questions. Can't make it up, can't make it
 2 up. Now here's the quote from Mr. Bennett.
 3 Bennett said, "Costs estimates for Muskrat
 4 Falls Project were deliberately lowballing
 5 helping Emera with its application to the
 6 Nova Scotia utility regulator." Well it's
 7 no wonder that Emera's shares are up 54
 8 percent in one year. No wonder, they're
 9 going to be picking our pockets because of
 10 this project.
 11 (10:45 a.m.)
 12 I think I've got all of the points in the
 13 typed part of the presentation; I just got
 14 some more comments respecting costs that
 15 must be identified and must be calculated
 16 and included in any rate mitigation
 17 measures.
 18 Now we have been told by Marshall, as I
 19 said, it's two to three years behind
 20 schedule. What does that mean with respect
 21 to the contractual relationships that Nalcor
 22 and the power requirements that Nalcor has
 23 with Emera. I understand there's a
 24 contractual requirement to pay 20 percent of
 25 the rate of capacity of the 824 megawatts

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1 annually to Emera in the event of delays in
 2 construction, what are the penalties going
 3 to be? As I said, we know now that it's two
 4 years behind schedule, what will be the
 5 financial implications and costs associated
 6 with this delay? There's also requirement
 7 under the LIL and this is where, I guess,
 8 Light & Power wants to get a piece of the
 9 action now, they want to take out, I suppose
 10 Newfoundland Hydro or whoever it is, the LIL
 11 Corporation and insert themselves in there
 12 because Emera is guaranteed an 8.5 percent
 13 rate of return and that kicks in at a
 14 certain date. If the project is three years
 15 behind schedule, there must be penalty
 16 provisions there. I hope I'm wrong, but I'd
 17 be very shocked if there wasn't penalty
 18 provisions and I use the 8.8 (sic.) percent
 19 because if the Board sets a rate of return
 20 for Newfoundland Power, that rate of return
 21 also applies, as I understand it, to the LIL
 22 Corporation. So Emera is guaranteed
 23 whatever Newfoundland Power gets and
 24 currently is 8.5 percent, so this is
 25 guaranteed by Nalcor and must be paid

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1 whether the LIL is operating or not. So
 2 these two costs must be estimated, included
 3 in any mitigation process.
 4 The other one, I missed one here, I can
 5 quickly go back to it, I can find it. Not
 6 the first time ever at this. "Increase in
 7 Capacity", yes, this is an important one
 8 too. What will the increase in capacity on
 9 the system be when Muskrat Falls comes on
 10 line? On February 15, 2018 Marshall said,
 11 "So replacing a thermal plant with a hydro
 12 plant, net you're probably only getting
 13 about 100 megawatts in terms of capacity."
 14 So, this thermal replacement and the
 15 deficiency of 76 megawatts that I believe,
 16 we believe exists, may well result in a zero
 17 increase in capacity. So I think as
 18 consumers we're entitled to know what is the
 19 increase, what will be the increase in
 20 capacity. It may very well be zero, and
 21 this is important, obviously, during the
 22 winter months. We've got lots of power for
 23 eight months of the year, it's when we get
 24 into the winter that we run into problems.
 25 So we need to know from Hydro—well, Hydro,

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1 Nalcor, there's no big difference in them,
 2 tell us what is your expected increase in
 3 capacity? What are we going to have
 4 available for the winter? As I say,
 5 Marshall said the thing is delayed, he said
 6 it's going to take two or three years to get
 7 the bugs out, so all these numbers are going
 8 to run and they're going to substantially
 9 increase, in our estimation, my estimation,
 10 the original 726 million that the Ball
 11 Government identified as the required sum to
 12 be mitigated. And Ball said, they all said
 13 that it was not going to be any increase in
 14 taxes or any increase in rates to pay for
 15 Muskrat Falls. Well, good luck with that.
 16 I've calculated it myself that, I mean,
 17 going back to my original numbers that I
 18 used when I started, when I was, as I said,
 19 still up there before Parsons, they escorted
 20 me out the door, I have a habit of getting
 21 fired from public utility boards, that's the
 22 way it works out in life. But I mean, we
 23 could be talking about a 30 or 40 percent
 24 increase in electricity rates and that's
 25 going to collapse the economy of

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1 Newfoundland and none of these numbers have
 2 been discussed here. And when I talk to
 3 people, I mean people are concerned about
 4 paying their bills and I look at what's
 5 going on here, some of the debates and
 6 discussions here, I said these people are—
 7 this is "Alice in Wonderland, they're not
 8 dealing with real numbers that are going to
 9 affect the lives of real people. So I guess
 10 I can conclude, I think I'm pretty well on
 11 schedule.
 12 Another point I want to raise, the
 13 rural deficit, now ratepayers don't know on
 14 the system that 10 percent of your
 15 electricity bill pays this rural deficit.
 16 So the little old lady who gets \$100.00 a
 17 month electricity bill is paying \$10.00 a
 18 month to support the rural deficit and that
 19 is manifestly unfair. If the Government
 20 wishes to have a welfare program or a
 21 subsidy program for people living in rural
 22 areas, then it should be, in our view,
 23 costed in taxation. It's a public subsidy
 24 to isolated diesel users in off-grid
 25 locations and as I say, the consumer is

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1 paying 110 percent of (unintelligible) power
 2 bill which is a very regressive form of
 3 taxation subsidy because it is paid
 4 regardless of income. You could have
 5 somebody in St. John's living on \$1,500.00 a
 6 month, paying a 10 percent subsidy to
 7 someone living on an income three or four
 8 times that in an isolated island situation.
 9 If Government wishes to subsidize rural off-
 10 grid consumers, it should do so by the tax
 11 system and not by electric power system.
 12 So I think I got it all covered. In
 13 order to get a full and complete handle and
 14 what we're facing here above the 726, 730
 15 million identified by Ball, the following
 16 items, I implore Board members because
 17 everybody here, sitting down there, failed
 18 to address these issues in a satisfactory
 19 way, the consumers, like the project right
 20 from the start, have been kept in the dark.
 21 We need a full and honest accounting of what
 22 is the total amount of the revenue
 23 requirement of Muskrat Falls. 750 has been
 24 supposedly identified by Government, the
 25 missing 76 has not, 76 megawatts has to be

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1 costed and if we're wrong, tell us where
 2 we're wrong. The loss of export sales,
 3 export sales are going to be adversely
 4 impacted by this 76 megawatts. It's got to
 5 be found somewhere, so that means you're
 6 going to have less power to sell and I mean,
 7 the discussions last week or the week before
 8 last on power sales and Muskrat Falls,
 9 whether they got too many staff, I mean, it
 10 was just dilatory, I had the same experience
 11 I had when we had to deal with the, as I say
 12 the Dunderdale reference and listen to the
 13 nonsense and the BS coming from the lawyers
 14 arguing trivial points with respects to
 15 costs, pixie dust economics. The loss of
 16 export sales because of the 76 megawatts has
 17 to be costed. The penalty payments to Emera
 18 if power to Nova Scotia is not available has
 19 to be costed. The penalty payments to Emera
 20 re Emera's rate of return on equity as a
 21 partner in the LIL has to be costed.
 22 The cost of the HGS standby operations,
 23 HGS, you can't just flick the switch, unlike
 24 a gas system. HGS has to be brought on in
 25 the event of a power interruption, HGS has

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1 to be brought on systematically. I
 2 understand it might take two or three days,
 3 assuming the system is working, up to full
 4 capacity and you got to have it in some kind
 5 of a standby situation, and the missing—I'm
 6 sorry, the costs of standby operations for
 7 HGS have to be costed and included in your
 8 mitigation numbers. The cost of replacing
 9 HGS which, in my view, is clearly necessary,
 10 must be costed out, should be included or it
 11 needs to be identified, so we, as consumers,
 12 know what we're dealing with here. I said
 13 we need to know what will be the capacity
 14 increase for winter peak, are we going to
 15 have any power during the winter months from
 16 Muskrat Falls.
 17 The cost implications of demand
 18 elasticity must be costed out. As I say, if
 19 demand goes down, the cost to residual
 20 consumers goes up, everybody is getting
 21 excited about heat pumps and electric cars,
 22 I mean the idea that electric cars have a
 23 significant contribution to make to
 24 mitigating Muskrat Falls I think it shows
 25 just what a fantasy world we're living in in

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1 this Province. My guess is that besides Mr.
 2 Ball's 730 million, the real amount that
 3 we're going to have to mitigate will be
 4 closer to one billion or one and a half
 5 billion. So Ball has got a problem. Mr.
 6 Ball has got a problem because he said there
 7 will be no taxes or no rates to increase—
 8 taxes and rates will not increase. So that
 9 is the enormity, in my view, and in the view
 10 of those of us who worked on this, what
 11 we're faced here. We've had a lot, there's
 12 been pixie dust economics and there's things
 13 being said which have not been properly
 14 challenged and discussions on dilatory
 15 trivial items, whether there's 17 while
 16 collar workers or there's 12, or whether,
 17 you know, how Nalcor markets the power.
 18 These are dilatory trivial issues. The
 19 issues here are hundreds of millions of
 20 dollars and I think the consumers of
 21 Newfoundland have been poorly served by
 22 these proceedings and I think it's shameful.
 23 As I stated, for instance Newfoundland
 24 Power had no questions on Hydro when Alteen
 25 was out saying, bravely saying when it was

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1 okay to do so, that this was a political
 2 project and, you know, where were they back
 3 in the day when we were trying to get our
 4 extension to do a proper review? Where were
 5 they then? They were nowhere, we got no
 6 support. Where was the Consumer Advocate
 7 then? Nowhere. I mean this whole project,
 8 I'll conclude, this whole project was not
 9 conceived as an electricity project, it was
 10 a make-rich scheme for the elite of
 11 Newfoundland, the bureaucratic elite, the
 12 political elite, the well-connected, the
 13 captains of industry that endorsed it and
 14 all the other hangers-on in the Conservative
 15 Party and the Liberal Party, the Board of
 16 Trade, all the rest of them, I mean it was
 17 sickening to watch. When you talk to
 18 people, as I say, I mentioned it to—I
 19 mentioned my story about Roberts, but there
 20 was other examples I could, you know, cite
 21 too of people who knew what was going on,
 22 said nothing because they knew they were
 23 going to make a pile of cash. So Muskrat
 24 Falls, the project was very successful for
 25 the small elite who run this Province, and I

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1 fear it's left, it's going to leave a lot of
 2 Newfoundlanders facing severe energy costs
 3 and energy poverty. And we're facing, we're
 4 facing not, I mean, this obsession of global
 5 warming, I mean, these people are totally
 6 insane, we're facing severe downturns in
 7 temperatures. We're going to have a colder
 8 climate and in Newfoundland I'm afraid, you
 9 know, we're going to be facing some severe
 10 problems. I think I—I don't want to upset
 11 you, so I'm going to stop.
 12 CHAIR:
 13 Q. No, you're not upsetting me at all, sir,
 14 it's just we're gone well over our time.
 15 It's nice to see you again.
 16 MR. WELLS:
 17 A. Okay. Thank you.
 18 CHAIR:
 19 Q. We're gone well over our break time, we'll
 20 take a fifteen minute break and we'll be
 21 ready to start CFIB as soon as we get back.
 22 Thank you.
 23 (RECESS – 11:00 A.M.)
 24 (RECONVENED – 11:17 A.M.)
 25 CHAIR:

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1 Q. Welcome, sir. Nice to see you again. I'll
 2 just ask you to introduce yourself and who
 3 you represent for the purpose of the record
 4 and when you're ready, you can proceed.
 5 MR. HAMMOND:
 6 A. Sure, thank you. My name is Vaughn Hammond,
 7 I'm director of Provincial Affairs in
 8 Newfoundland and Labrador for the
 9 Confederation of Independent Business. I
 10 guess I'm hoping that you're behind
 11 schedule, so I'm hoping that you can bring
 12 it back on schedule, but we'll see how it
 13 goes.
 14 CHAIR:
 15 Q. Just take your time, sir.
 16 MR. HAMMOND:
 17 A. No, that's okay. I guess just for overview
 18 for people who may or may not know, the CFIB
 19 represents in Newfoundland and Labrador 2000
 20 small and medium size business owners. Our
 21 membership is 100 percent voluntary, which
 22 essentially implies that we don't receive
 23 any government funding whatsoever. We
 24 represent all sectors of the economy within
 25 the Province, as well as all regions, but I

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1 will put a caveat that we don't have any
 2 members in Torngat, unfortunately, but it's
 3 something we're working on.
 4 We are non-partisan, as well as a non-
 5 for-profit organization and I guess the
 6 reason why I wanted to be able to present
 7 before you today is that largely within the
 8 discourse around rate mitigation and
 9 electricity rates and how the increase and
 10 stuff, it's largely focussed on the resident
 11 and we really haven't had and even from the
 12 perspective of hearings at the PUB as to
 13 what happens at, you know, the small and
 14 medium size owner perspective, which from
 15 your perspective is the General Service 2.1,
 16 General Service 2.3, General Service 2.4
 17 customers. So for that reason I'm happy to
 18 give given the opportunity to present to you
 19 today.
 20 I included this slide which I had to
 21 find a way in order to include it some way,
 22 so I figured it was at the beginning. What
 23 this table represents is essentially work
 24 that we did in 2017 around identifying what
 25 the cost to small business owners, small and

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1 medium size business owners would be. I
 2 included for illustrative purposes because,
 3 recognizing that there is a rate increase
 4 earlier this month, as well one back in
 5 April, so some of these numbers may have
 6 changed but it was a real labour intensive
 7 way to get this information, so I really,
 8 I'm really only presenting it for
 9 illustration. What it does identify,
 10 though, is clearly what the elements of
 11 electricity rates for a business owner are,
 12 and it's much different than a resident. So
 13 if you look at what a resident incurs in
 14 terms of their electricity rates, they don't
 15 have demand charges. So, I, as a resident,
 16 don't incur demand charges unlike our
 17 members do. Of those, those demand charges
 18 vary, of course, depending upon the general
 19 service. They tend to be a little bit, if
 20 memory serves, they tend to be a little bit
 21 the same but there are some variations, and
 22 it also depends upon season as well. But I
 23 give that to you for illustration purposes
 24 because it is something that you might want
 25 to keep in mind as we go forward.

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1 When I found out that I was going to be
 2 able to present here, I thought I was going
 3 to have to present on October 3rd, but
 4 fortunately I had a little bit more time.
 5 So what I did was I approached our
 6 membership. Usually the way that we do
 7 things is we use a survey to get our
 8 members' feedback in terms of what the
 9 issues are. And one of the things we asked
 10 them was how concerned are they about
 11 electricity rate increases associated with
 12 Muskrat Falls and 98 percent of them came
 13 back saying that they are somewhat or very
 14 concerned, which is something that should be
 15 a concern for all of us, quite frankly. The
 16 vast majority of businesses use electricity
 17 in this Province primarily for heating.
 18 Some of them, you know, a small percentage
 19 of them supplement or complement that
 20 electricity use with oil, some may use
 21 propane, but for all intents and purposes,
 22 the main way that they operate their
 23 businesses is through electricity use.
 24 From the perspective of the small
 25 business owner, electricity is largely an

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1 inelastic commodity, so in the context of
 2 this discussion that you're going through
 3 now, is that if rates, what that means is
 4 that if rates increased by a large amount,
 5 demand is largely unaffected by that and
 6 there's many reasons for it. It's largely
 7 around the whole idea that—and I'll get into
 8 a little bit later, but business processes
 9 are such that you can't change them without
 10 affecting your business or without affecting
 11 customer service for all intents and
 12 purposes. So if you're a manufacturer and/or
 13 a processor, you have to work when the work
 14 is there. If you're a food and
 15 accommodation, so think of a B&B, if you
 16 have customers that fill a room that night,
 17 they have to get up and they have to do
 18 their thing in the morning, so it's hard to
 19 shift demand if your customers demand a
 20 certain thing at a certain time, and that's
 21 some of the things that, you know, there's
 22 some variances within a business community,
 23 obviously, but largely I think from the
 24 perspective of small business owners it is,
 25 electricity is largely an inelastic

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1 commodity.
 2 I want to bring to your attention as
 3 well that business owners really need to
 4 understand the effects that Muskrat Falls
 5 will have on their operations. Fully three
 6 quarters, they agree that they're looking at
 7 it, they're beginning to understand it, it
 8 is starting to become front and centre for
 9 them, that's a concern as well because now
 10 they're trying to think about what their
 11 operations are going to look like from now
 12 until, you know, particularly if they're
 13 trying to think out, one, two, three years.
 14 They're starting to think about what Muskrat
 15 Falls rates will mean for their business as
 16 they plan, whether it's revenue generation
 17 or cost cuts or increase in prices, whatever
 18 the case might be. So from the perspective
 19 of the small business owner, they are
 20 beginning to understand what Muskrat Falls
 21 rates will mean for them.
 22 We also asked them if they were
 23 confident that any efforts to mitigate rates
 24 are going to protect their business. Nearly
 25 two-thirds, so a little over six and ten,

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1 say that they're not confident in—they
 2 strongly disagree or somewhat disagree with
 3 that notion. There's a reason for that as
 4 well and there's a lot of uncertainty around
 5 what rate mitigation looks like. They
 6 really don't know that their rates are going
 7 to go up, there's a lot of political noise
 8 around rate mitigation, that is kind of
 9 influencing how people view this and how
 10 they look at it. So I think the challenge
 11 for anything around rate mitigation is kind
 12 of addressing the uncertainty about what
 13 this will mean in the future and I think
 14 right now we're not there, frankly, but I'll
 15 address that further into the presentation
 16 as well.
 17 I don't think it's any secret for
 18 anybody who operates a business within, well
 19 for maybe one percent of the businesses, who
 20 knows, but the cost of business in recent
 21 years, say give or take three or five years,
 22 has risen, so whether it's, you know, the
 23 effect in tax increases, the effect of
 24 electricity rate increases, the effect of
 25 whatever it is, food costs, whatever the

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1 case may be, the cost of business in
 2 Newfoundland and Labrador has been rising in
 3 the last five years or so. So I wanted to
 4 know from the membership what they've done
 5 because I think what they've done in the
 6 past maybe indicative of what they're going
 7 to do in the future and what they have done
 8 in the past is looked at raising prices,
 9 primarily, but they've also looked at how—
 10 what their staffing complement will be. But
 11 I think from the perspective of, you know,
 12 rising rates or rising taxes, however this
 13 works out, it becomes the idea that rates go
 14 up, taxes go up and then prices also go up.
 15 So there's the combination of the three
 16 that's going to occur and that, I think,
 17 should be something to be considered as
 18 well.

19 When we asked them what they're doing
 20 in order to address energy sufficiency
 21 within their business, nearly 4 in 10 said
 22 that they haven't made any changes to
 23 address energy efficiency, so in order to
 24 address Muskrat Falls rates or anything
 25 that's going to come with that, there's not

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1 a lot of movement in terms of what they're
 2 doing to address these coming rates.
 3 They're doing some stuff on the margins, so
 4 don't get me wrong on that, so they're
 5 shutting lights down or they're operating
 6 equipment less than what they have to, if
 7 they need to. They've also, you know, some
 8 of them have put in heat pumps, kind of like
 9 a resident, so those kinds of efforts are
 10 being implemented, but the significant
 11 changes that a business owner needs to make
 12 in order to address the coming rates or
 13 whatever may happen, those changes aren't
 14 being made right now.

15 There's a reason why. It's
 16 affordability. Right now the money is not
 17 there for many of them. I talked about the
 18 rising cost of business, running a business.
 19 Well, there's also the issue that there's
 20 less revenues available. If you're a
 21 retailer in this Province right now, you're
 22 dealing with on-line sales or on-line
 23 retailers and you're dealing with large
 24 corporate retailers. There's a reason why,
 25 I think, you know, Costco has the largest

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1 warehouse in the Province and that's because
 2 there's demand. So small business owners
 3 are competing with that. Small business
 4 owners are also competing with Amazon,
 5 they're trying to keep their prices down in
 6 order to compete with Amazon and frankly,
 7 they're having challenges with that. So if
 8 the money is not there in order to address
 9 these changes, or the coming changes, that's
 10 a challenge for the business owner and I
 11 mean, for all intents and purposes, nearly
 12 90 percent of them say they can't afford to
 13 make the changes that they feel are
 14 necessary to address what they identify as a
 15 problem.

16 High financial cost, as well as return
 17 on investment takes too long, are the
 18 reasons why, so if the money is not there,
 19 the financial cost is there, they have to
 20 take out loans in order to address energy
 21 efficiency, then that's kind of eats into
 22 itself. The other challenge around the
 23 return on investment is that many business
 24 owners are looking at whether they're going
 25 to be in their properties for a period of

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1 time. Some may be looking, we have
 2 entrepreneurs that are of a certain age that
 3 are looking to get out, so they're looking
 4 at succession plans and those kinds of
 5 things. They may not think they're going to
 6 be around in three, four or five years in
 7 order to benefit from whatever investments
 8 they make on improvements in energy
 9 efficiency.

10 If you are a new business owner and
 11 you're trying to start up, so for instance,
 12 a member from downtown St. John's said
 13 listen, not listen, but they said I'm trying
 14 to start a new business right now, money is
 15 tight, how do I deal with this stuff? It's
 16 hard to know because you either have to try
 17 to build up your business or you have to try
 18 to deal with the cost of Muskrat Falls. The
 19 other challenges around that many business
 20 owners lease, so they're at the behest of
 21 property owners to improve their businesses
 22 as well, so the challenge becomes for them
 23 is that they see that they need to improve
 24 their business or that they can find energy
 25 efficiency measures to implement, but they

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1 also need their landlord to do that for
 2 them. In many respects, electricity prices
 3 are built into rents, so if you have a three
 4 to five-year rent or lease, it's a challenge
 5 trying to figure out what to do with those
 6 leases and it's a challenge also when the
 7 property owner has to pass on those rates to
 8 the leaseholder. So that's where, that's
 9 some of the barriers to energy efficiency.
 10 The other barrier that I think
 11 everybody should be aware of as well is that
 12 many business owners don't even know that
 13 the programs exist, you know, there's a low
 14 uptake on the conservation and demand energy
 15 management programs that are offered by the
 16 utilities. We keep saying that these
 17 programs are available. We kept telling our
 18 members that they're available, but still
 19 uptake is not what it could or should be and
 20 there may be reasons for that, which we'll
 21 get into later.
 22 I had a look at the Synapse Report and
 23 based upon my reading of it, the one thing
 24 that I took out of it, aside from the
 25 conservation demand management programs, is

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1 the talk around time of use and when we went
 2 to the membership, I identified time of use
 3 as essentially this is a method whereby your
 4 rates are different based upon season or
 5 even time of day, and we asked them how that
 6 would help them in terms of reducing their
 7 electricity costs and nearly 60 percent said
 8 they didn't agree that it was going to help
 9 them at all. There's a reason for that as
 10 well. Time of use for residents can work
 11 because if you, depending upon the day that
 12 you run your laundry or you run your
 13 dishwasher, you could probably benefit from
 14 that, but the resident also doesn't pay
 15 demand charges; whereas for a business
 16 owner, again I go back to the example that I
 17 used for, say, a B&B. They have no choice
 18 in the morning for a toaster, a shower, hot
 19 water tank, blah, blah, blah to be used, so
 20 their peak demand is going to go up anyway.
 21 So if they use time of use in order to
 22 reduce their energy charge, they way the
 23 demand charges work, it might offset those
 24 benefits that they would generate from using
 25 electricity at a different time. So I think

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1 that's something that needs to be considered
 2 as well when it comes to time of use
 3 because, yes, for the resident you can
 4 manage your energy use, but in terms of a
 5 business owner, the demand charges can
 6 actually affect how much you pay and when
 7 you pay it, and it may only be that fifteen
 8 minutes, that it goes to 15 kilowatts, but
 9 as soon as you go there, 15 kilowatts for
 10 that 15 minutes, that's what you pay for
 11 that month, regardless if you're below the
 12 10 kilowatts afterwards, so that's a
 13 challenge in and of itself.
 14 On the issue of cost of service, from
 15 our perspective the current revenue cost
 16 ratios are unfair. We recognize that over
 17 20 years ago the PUB has allowed for a 10
 18 to, or a plus or minus 10 percent variance,
 19 but for all intents and purposes, residents
 20 are paying less than the general service for
 21 the commercial users, and ultimately small
 22 and medium size businesses are paying more
 23 than larger businesses based upon those
 24 ratios. So I took from Newfoundland Power's
 25 General Rate Application for this year, I

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1 think it was, the chart that you see below
 2 and you can see the discrepancies for
 3 yourself. If we were to use those cost
 4 service ratios and apply it to unmitigated
 5 rates, so what I did was I found the Request
 6 for Information for PUB-Nalcor-029 for this
 7 hearing or for this process, I took those
 8 rates and assumed that the Domestic rates
 9 are actually, the costs shared, the revenue
 10 to cost ratio price. So I did the
 11 appropriate math which is pretty simple to
 12 do and what you see in the table above is
 13 the unmitigated rates that would affect
 14 General Service 2.1 to 2.4 customers based
 15 upon those revenue to cost ratios.
 16 If there were a change in the revenue
 17 to cost ratio by five percentage points, the
 18 result for the Commercial customers would be
 19 a savings that I've identified below. For
 20 General Service 2.1 it would be 1.1 cents
 21 per kilowatt hour, 1.32 cents per kilowatt
 22 hour for 2.3 customers, and 1.1 cents per
 23 kilowatt hour for 2.4 customers. And I
 24 guess if there are some mitigated rates that
 25 occur, then those numbers would go down a

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1 little bit, but again for illustrative
 2 purposes that is based upon the increase
 3 that you're seeing between 2019 to 2021,
 4 that's about 10 to 12 or 13 percent savings
 5 for the Commercial customer.
 6 So with that in mind, I called it an
 7 overview, but really it's observations more
 8 than anything else. What I wanted to
 9 highlight is that again the uncertainty that
 10 comes into rate mitigation is that there's
 11 no guarantee that the reviewed rate
 12 mitigation options are actually going to
 13 keep rates down. Even the Liberty Report
 14 states that there's a potential for 35
 15 percent increase in rates in 2021 based upon
 16 all the mitigation options that they
 17 reviewed.
 18 The Federal Government obviously has a
 19 role in this through the Federal Loan
 20 Guarantee and agreements that were created
 21 there, but unfortunately we haven't really
 22 had a commitment from the Federal Government
 23 what they would specifically do, so there's
 24 uncertainty there.
 25 Unless the regulatory and legislative

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1 framework around Muskrat Falls changes, any
 2 decisions on electricity rates will rest
 3 with Cabinet, so there's no, there's no way
 4 that the PUB can oversee those rates. I
 5 understand the Liberty Report raised
 6 questions about whether there should be a
 7 regulatory oversight on even future Muskrat
 8 Falls rates, but until there's actually, you
 9 know, the previous presenter, as colourful
 10 as he was, he raised the notion that, you
 11 know, there's a number of bodies that are
 12 overseeing or overlooking what Muskrat Falls
 13 is doing and whatnot, but unless there's a
 14 really refined way in terms of identifying
 15 how rates can be governed, and I get into a
 16 recommendation for those who had their
 17 presentation anyway, but there has to be
 18 some idea in terms of certainty and
 19 understanding that these are the rates and
 20 why those rates were arrived at. There's
 21 also uncertainty around what the magnitude
 22 of the economic and fiscal effect of any
 23 rate mitigation plan will be. One of the
 24 things that Government identified in 2017 in
 25 its budget was a Preliminary Rate Management

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1 Reserve which began in 210 million, I think
 2 in 2012, going to 245 and 245 the two years
 3 after. There was no mention of that in the
 4 Liberty Report, so where is that money and I
 5 think that's a question that even the Board
 6 could ask Nalcor, where is the Preliminary
 7 Rate Management Reserve money to offset the
 8 cost of electricity rates?
 9 Where possible electricity rate
 10 increases and tax increases are going to be
 11 passed on through higher consumer prices.
 12 As I noted, the reaction has been in the
 13 past to the cost, growing cost of business
 14 is to increase prices, so one can expect
 15 that for the most part there are going to be
 16 higher consumer prices related to whatever
 17 happens with the rate mitigation plan. The
 18 possible exceptions are going to be gas
 19 stations and convenience stores because
 20 their profit margins are administered by
 21 Government and approved by Government. Gas
 22 stations profit margins are determined by
 23 the PUB; tax prices of beer, liquor, tobacco
 24 and lottery, which are basically the
 25 mainstays of a convenience store, are

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1 determined by first ALC on the lottery and
 2 the Department of Finance determines or
 3 sorry, NLC determines beer and liquor prices
 4 and tobacco is determined by the Department
 5 of Finance. If you cannot pass on these
 6 increases through your consumer prices,
 7 there are going to be effects on employment
 8 and/or expansion of a business or a decline
 9 in some other way. So the question then
 10 becomes we really don't understand what the
 11 magnitude will be on the economy of rate
 12 mitigation. There are additional
 13 initiatives that exist to help small
 14 business that weren't addressed by Liberty,
 15 nor were they addressed by Synapse, that
 16 could include, even though Liberty did
 17 mention a little bit about it, but that
 18 could include removing the Provincial
 19 portion of HST on electricity rates. It
 20 could mean figuring out what the demand
 21 charges could be for a business owner, or it
 22 could also mean that the revenue to cost
 23 ratios should be amended as well.
 24 So based on that, what I want to be
 25 able to do is just provide the following

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1 recommendations which, yeah, I'll get into a
 2 little bit. So what I think the PUB should
 3 recommend to the Government is that there
 4 should be an economic and fiscal analysis of
 5 whatever rate mitigation plans are
 6 identified. However you slice and dice
 7 this, and I understand there's a Government
 8 number of 725 but I'm going based upon the
 9 PUB's first interim report, 740 million
 10 dollars is going to be needed in some way,
 11 shape or form in 2021, whether that's
 12 through tax increases, rate increase,
 13 whether it's through some other way that
 14 Government finds the money through oil or
 15 whatever the case might be. But in either
 16 way, there needs to be an understanding what
 17 the impact of rate mitigation, what the
 18 Government decides to do. We need to know
 19 what impact it has on the economy and on top
 20 of that, we need to know what impact it has
 21 on the fiscal position of the Province.
 22 They've already, the Minister of Finance has
 23 already stated what he stated around meeting
 24 their budgetary goals for 2023, but we need
 25 to understand going forward what that truly

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1 means.
 2 We would also recommend and this is
 3 something that I think the PUB can focus on
 4 perhaps in the next General Rate
 5 Application, whether it's through
 6 Newfoundland Labrador Hydro or Newfoundland
 7 Power, but it's to reduce the revenue to
 8 cost ratio to five percent. This change, in
 9 our view, wouldn't affect residential rates,
 10 but a commensurate reduction would help
 11 Commercial users, but the unmitigated rate
 12 is, again what I showed on the slide prior.
 13 Lower demand charges would also be helpful
 14 because if you are going to look at
 15 electricity rates going up and maybe
 16 creating a better understanding in terms of
 17 how small business owners can manage their
 18 demand, lower demand charges may actually
 19 help offset some of the increases in the
 20 energy changes. It can primarily help
 21 seasonal business owners who, you know,
 22 right now they've shut down, and yet they're
 23 still going to get a monthly bill that
 24 identifies their demand charge, as well as a
 25 lower charge for their energy charge because

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1 they need to keep stuff going. It would
 2 also help those who have complementary
 3 energy sources, like oil and/or propane. If
 4 there's a way that you can help alleviate
 5 some of the pressures on demand, without
 6 affecting demand too much, so if you can
 7 lower the cost of demand, you know, as I
 8 said for small business owners, that's an
 9 elastic commodity or an inelastic commodity.
 10 They're not going to change their demand
 11 that much, but what it actually can do is
 12 help them reduce their electricity bill.
 13 So those are two things that I think
 14 the PUB can look at. The revenue cost ratio
 15 one, I think there's a cost of service
 16 methodology application currently being
 17 reviewed, so you might want to consider that
 18 for that, but the lower demand charges may
 19 be something that comes up in a future GRA.
 20 The utilities can also look at reforming how
 21 conservation demand management programs are
 22 actually being used. Right now those
 23 programs are not being used by small
 24 businesses in a way that they can or should
 25 be. For all intents and purposes it's

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1 because it doesn't necessarily meet the
 2 overall cost that it takes to fully upgrade
 3 and become more energy efficient. Yes, it
 4 helps with lightbulbs and it helps with
 5 weather stripping and all that kind of stuff
 6 and it might help with a heat pump, but if
 7 you have a program, hopefully it can be
 8 designed in such a way that everyone has an
 9 opportunity to benefit from it and that, I
 10 think, is the key here, is that there's only
 11 a certain few number of business owners, I
 12 would submit to you primarily larger
 13 businesses that avail of these conservation
 14 demand management programs through Take
 15 Charge NL. So those are really the key
 16 recommendations that I want to bring forward
 17 and I think I have been within time, but if—
 18 so I will leave it at that and if there are
 19 any questions, then by all means.
 20 CHAIR:
 21 Q. Thank you. Any questions from Nalcor,
 22 Hydro, Consumer Advocate?
 23 BROWNE, Q.C.:
 24 Q. That last slide there, "Reform the
 25 Conservation and Demand Management Programs,

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1 small businesses are not taking advantage of
 2 these programs in a substantial way.” Why
 3 aren’t they taking advantage?
 4 MR. HAMMOND:
 5 A. Because as I noted, the cost that it takes
 6 to implement what is appropriate energy
 7 efficiency measures for their operation may
 8 be too expensive, and the rebates that are
 9 available through those programs, they’re
 10 frankly insignificant. I mean, for a small
 11 business what they’re doing when it comes to
 12 energy efficiency, they’re going to ACOA for
 13 a loan, they’re going to their bank for a
 14 loan, or they’re relying upon their retained
 15 earnings to make those changes if they can.
 16 So if really the utilities want to make
 17 these programs attractive – there’s money
 18 involved, don’t get me wrong, but if they
 19 want to make them attractive, they’ve going
 20 to have to make them in such a way or create
 21 them in such a way, or design them in such a
 22 way that makes them attractive to those
 23 larger projects that make a building more
 24 energy efficient. So that’s where it comes
 25 from.

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1 BROWNE, Q.C.:
 2 Q. Thank you, Mr. Hammond.
 3 CHAIR:
 4 Q. Thank you, Mr. Browne.
 5 MR. O’BRIEN:
 6 Q. No questions. Thank you, Mr. Hammond, for
 7 your presentation, appreciate it.
 8 CHAIR:
 9 Q. No questions?
 10 MR. FLEMING:
 11 Q. No questions.
 12 GREENE, Q.C.:
 13 Q. No questions.
 14 CHAIR:
 15 Q. Thank you, Mr. Hammond. Your perspective is
 16 an important one for us. Thanks for taking
 17 the time to do this today.
 18 MR. HAMMOND:
 19 A. Thank you for agreeing to let me do it.
 20 Thank you.
 21 CHAIR:
 22 Q. Our next presentation is Drive Electric NL,
 23 Mr. Seary and Mr. Butler. Whenever you’re
 24 ready, just introduce yourselves and who you
 25 represent for the purpose of the record, and

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1 the floor is yours.
 2 (11:45 a.m.)
 3 MR. SEARY:
 4 A. Sure. My name is John Seary. I’m the co-
 5 founder of Drive Electric NL. Thank you for
 6 giving us the opportunity to present.
 7 MR. BUTLER:
 8 A. My name is Joe Butler, and also the co-
 9 founder. I come from a business background,
 10 40 years as an owner from broadcasting to
 11 construction, and mainly in sales and
 12 marketing, but recently I’ve taken on a year
 13 long course in positive psychology which
 14 I’ll reference later. Thank you.
 15 MR. SEARY:
 16 A. My background is a business owner. I
 17 practice with a company that does IT
 18 management and business technology
 19 consulting. In fact, today is my 26th year
 20 in business, so I’m quite pleased with that.
 21 I also have an interest in energy efficiency
 22 in energy efficient construction and
 23 building management, and I’ve been
 24 researching electric vehicles for seven
 25 years now.

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1 MR. BUTLER:
 2 A. Drive Electric NL is a not for profit and it
 3 was founded to actively promote EV adoption
 4 in Newfoundland and Labrador, and we have
 5 worked with government and key organizations
 6 for the last two years. We’ve discussed EV
 7 adoption with municipalities and businesses,
 8 automotive dealers, literally hundreds of
 9 owners and potential owners. We see EV’s as
 10 benefiting both consumers and the province
 11 as a whole. The previous presenters have
 12 indicated EV adoption can be used as a means
 13 of rate mitigation, and our presentation
 14 will show how feasible it is in our
 15 province, and what is needed to enable EV
 16 adoption in a meaningful manner. I had a
 17 start maybe ten years ago with a Hybrid
 18 Prius, and since then an all electric Nissan
 19 Leaf, and more recently an electric BMW i3.
 20 So the question is why are we driving
 21 electric. Number one, they’re cheaper to
 22 operate. They’re probably 1/5th to 1/6th cost
 23 to operate, and John will show details a
 24 little later in the presentation. They last
 25 longer. For people who are concerned about

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1 the reliability, the batteries now are
 2 warranted up to ten years, 240,000
 3 kilometers, and number three, they're better
 4 for the environment. There's an age old
 5 argument, you know, do you want the economy
 6 or the environment. In this particular
 7 situation, you can have both, and each
 8 vehicle on average would reduce CO2
 9 reductions about five tons per year per
 10 vehicle. So we look at if half the vehicles
 11 got to electrical over the coming years,
 12 200,000, that would be a million tons of
 13 CO2. Even at today's pricing of carbon,
 14 that's 20 million dollars in value, and I
 15 think there's a place for the government to
 16 investigate that in the coming years to see
 17 if they can monetize that value. The other
 18 thing, and I'd be remiss in not – get away
 19 from the numbers for just one moment. We
 20 were at the march a few weeks ago, and many
 21 young people, a lot of those weren't even
 22 able to vote, but I think we've got to give
 23 them hope in the future that electricity
 24 rates will be affordable when they grow up,
 25 and also that we, as adults in the room, are

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1 acting in a positive manner on the
 2 environment.
 3 MR. SEARY:
 4 A. So in 2016, my wife and I moved to fully
 5 electric cars, full family, four children.
 6 I bought the Tesla that you see pictured
 7 there and it's a full size family size car
 8 that has six seats. It's also a four wheel
 9 drive, which was a stipulation for any
 10 vehicle that I would own. Adrienne bought a
 11 2014 Leaf. She bought it as a used car, but
 12 the used EV market is significant and
 13 valuable because there is supply
 14 constraints. So a lot of the electric
 15 vehicles that are on the road in this
 16 province right now were bought used and it's
 17 something to bear in mind if there's any
 18 incentive to buy a car. Our needs are
 19 similar to many families with two cars, and
 20 for people that are sort of thinking about
 21 getting into an electric car, and they have
 22 two cars, we usually suggest start with one
 23 and see what happens, and what's interesting
 24 to see what happens is that after a few
 25 weeks, nobody wants to drive the gas car any

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1 more. You have to wonder about that, but
 2 it's actually a very good sign because if we
 3 want people to drive electric cars, then
 4 having a one way shift is certainly
 5 beneficial. Besides daily driving for work,
 6 and I service a number of businesses all
 7 around this end of the province, and talk to
 8 many people that work in different places
 9 about them. I've taken the car for several
 10 major road trips, and I can't take the car
 11 right now across the province very easily
 12 and I'll show why that is shortly, but I
 13 have taken fairly extensive road trips out
 14 through Argentina and out to Montreal and
 15 down into the US states, and back and
 16 around, and it is a much improved driving
 17 experience. Besides driving the Tesla and
 18 the Leaf, I've also as part of my research,
 19 taken to try and drive other brands of
 20 electric cars as often as possible. Just
 21 about anything that's for sale in Canada
 22 right now, I've had the opportunity to take
 23 out and use and drive for several days or a
 24 week at a time to get a good feel for what's
 25 out there and understand does this actually

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1 work for people, and the answer is
 2 absolutely. So why are we here, why are we
 3 looking at this as a means of rate
 4 mitigation. The previous presenters, the
 5 two consultant reports, and we'll also refer
 6 to the Dunsky Report that was commissioned
 7 by Newfoundland Hydro and Newfoundland
 8 Power, there is a surplus of electric power
 9 from Muskrat Falls and we have been told
 10 it's about 2 terawatt hours, and the biggest
 11 problem that's facing what we're dealing
 12 with here is that we don't have a good
 13 market for that surplus and the rates that
 14 we've seen selling it out of the province
 15 has typically hovered around 3 cents per
 16 kilowatt hour, while here at home we're
 17 currently paying around 12 and projected to
 18 go to 13.5 cents, so about four times as
 19 much. It would make sense, wherever
 20 possible, to consume this power here in the
 21 province domestically. Electric vehicles
 22 typically consume about 5,000 kilowatt hours
 23 per year and these numbers come from Natural
 24 Resources Canada based on an average driving
 25 of 20,000 kilometers a year, but they're

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1 based up by our own measurements and
 2 calculations. There are 390,000 passenger
 3 cars on the road in this province and
 4 they're currently burning 900 million
 5 dollars a year of imported gasoline. That's
 6 from the Department of Finance. As we move
 7 to electric cars, we gradually use more of
 8 that surplus in-house. We use more of that
 9 surplus here in the province. It becomes a
 10 manufactured right here kind of solution.
 11 Instead of importing an expensive product,
 12 use what we produce domestically, and then
 13 the question is can we do that, can we make
 14 that migration. Two terawatt hours of
 15 surplus power would run 390,000 electric
 16 cars, but as everybody is not going to
 17 immediately switch over, we looked to see
 18 what other things can be electrified in the
 19 transportation sector. Small trucks,
 20 delivery vans, taxis, and buses are all
 21 candidates as these things become more and
 22 more viable over the coming years. That two
 23 terawatt hours of power translates into a
 24 value of around 270 million dollars of new
 25 revenue per year that goes towards rate

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1 mitigation, and that 270 million dollars a
 2 year, once it's in place, is robust,
 3 sustainable, and can also lend itself very
 4 well for off peak use which further reduces
 5 the expense of delivering the power. If you
 6 look at comparative ways, other ways of
 7 using that surplus power, large industries
 8 come to mind and they typically will demand
 9 a cheaper rate for the power. They also are
 10 subject to market fluctuations and at a
 11 moment's notice, we could find ourselves
 12 right back to where we are again, whereas
 13 with electric car market, once the people
 14 are driving electric, they're going to stay
 15 that way.
 16 MR. BUTLER:
 17 A. The question is, you know, can we move to
 18 electrified transportation quickly enough
 19 for rate mitigation. Will people want to
 20 own them. What measures would have the most
 21 impact in the adoption rate. Our
 22 presentation is to show how beneficial EV's
 23 are and what measures need to be taken to
 24 jump start the adoption process.
 25 MR. SEARY:

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1 A. So let's look and see why would anybody in
 2 this room want to drive an EV. I counted
 3 three EV's out in the parking lot right now.
 4 Did I miss anybody besides me, Joe, and my
 5 wife. So while I'm interested in energy
 6 efficiency, I'm an electronics engineering
 7 technologist as well, and I'm also a
 8 computer guy, so like any person like that
 9 out there, of course I'm going to meter all
 10 of my key loads and have been doing so for
 11 three years. So let's look at 2018 numbers.
 12 I ran a Tesla Model X for 23,000 kilometers.
 13 It took me 6,500 almost 6,600 kilowatts of
 14 power. Missing from that figure is the
 15 power that I used for a road trip in 2018
 16 which had less than \$100.00 worth of
 17 charging on chargers elsewhere, but that
 18 addition can be calculated in if you want.
 19 So my cost of charging at home, \$748.00 for
 20 the whole year of driving. If I was driving
 21 a similar minivan or some similar car like
 22 that, looking at the average miles per
 23 gallon, litres per 100 kilometers, my cost
 24 based on the 2018 average fuel price would
 25 be \$4,000.00 in round numbers. So every

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1 year I'm saving over \$3,000.00 in gas costs.
 2 Looking at Adrienne's Leaf, she did just
 3 under 8,000 kilometers in 2018 and she
 4 burned \$175.00 worth of power. Look at the
 5 lineups for the gas at Costco and tell me
 6 that Newfoundlanders aren't desperate to
 7 save money on gas. This is a very easy sell
 8 if we can create the environment that makes
 9 it possible to buy them. I have to make
 10 sure I don't miss a point, bear with me.
 11 There are some other costs in there that are
 12 not in this chart. To drive that distance
 13 in my car most other vehicles would require
 14 at least three oil changes. They're not
 15 free. The insurance is now showing a
 16 reduction for insuring electric vehicles and
 17 some people have mentioned to me it's over
 18 \$1,000.00 in certain parts of the country.
 19 I haven't been able to get the number from
 20 my insurance company yet, but it's listed
 21 there. There's also a slew of recommended
 22 maintenance things for gas cars, which some
 23 people who have had more time into this have
 24 calculated that they saved almost \$7,000.00
 25 per year switching to an electric vehicle

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1 from an equivalent gas car. Here's why
 2 we're here. Every year we are now
 3 contributing towards rate mitigation that
 4 total cost there from two cars is put
 5 towards rate mitigation that a gas car would
 6 not do. It averages out to about \$500.00
 7 per year for every electric vehicle on the
 8 road, \$500.00 a year towards rate mitigation
 9 and that's every year, year after year.

10 MR. BUTLER:
 11 A. Unfortunately, Newfoundland and Labrador is
 12 not conducive for EV ownership. Let's take
 13 a look and see what's stopping people from
 14 enjoying the same benefits as John has shown
 15 here and make it a contribution to all rate
 16 payers. The thing about driving electric is
 17 that we have a demand problem in the
 18 province, and the more demand is used, then
 19 the more we'd spread that cost back across
 20 all rate payers. So it's not just the
 21 benefits or driving electric, but what we
 22 can do for the province overall. So what
 23 stops you from buying an EV. Even though
 24 most of the charging is done at home, it's
 25 lack of public charging stations.

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1 Unfortunately, this is a new meaning of Mile
 2 Zero. If you look at these, these are only
 3 the level 3 DC fast chargers and this is an
 4 example in Eastern Canada. You'll find
 5 these in every state in the US, and every
 6 province in Canada, except Newfoundland.

7 MR. SEARY:
 8 A. With the surplus of hydro electric power
 9 coming online very, very shortly, and a lack
 10 of chargers that shows like this, Stan
 11 Marshall used the term "Newfie Joke", and I
 12 probably won't go that far, but it doesn't
 13 make any sense right now to not have efforts
 14 made to start EV adoption with at least a
 15 few public chargers.

16 MR. BUTLER:
 17 A. We recommend that the province follow the
 18 Dunsky recommendation of a 20 million dollar
 19 investment over ten years. That would
 20 provide fast chargers on all the major
 21 highways and Level 2, the 240 volt, I guess,
 22 oven, for lack of a better word, which I
 23 have at home, where you would normally park,
 24 so we would create an EV friendly
 25 environment. You could leave your business,

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1 house, and rings of anxiety, but you're
 2 never worried about where is the next fill
 3 up.

4 MR. SEARY:
 5 A. Another advantage of a properly thought out
 6 charger network is that it reduces the cost
 7 of the EV that you need to buy. So if
 8 you're looking for a car, you know, the
 9 first question everybody asks is how far can
 10 this go, and if you're looking for a car
 11 that does 400 and 500 kilometers, you can
 12 buy them, but you'll spend more, whereas you
 13 can get an older EV, you can get a cheaper
 14 EV that goes 140 kilometers and if there's a
 15 charger at the same sort of intervals that
 16 Natural Resources Canada likes to see, that
 17 allows you to still drive anywhere in the
 18 province. You've not passed on that
 19 investment in chargers and saves the
 20 individual consumer money and enables far
 21 more people to drive electric cars. So
 22 looking at this here, there's another little
 23 thing that pops up is the eco-tourism
 24 market, or I'm just going to call it the
 25 tourism market. People with these cars love

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1 to drive them, myself no exception, and
 2 every couple of months I get another inquiry
 3 that somehow reaches me from somebody else
 4 elsewhere in North America that says we want
 5 to do a driving tour of Newfoundland and the
 6 research they've done into what they're
 7 going to see in this province and places
 8 they're going to go with their car puts my
 9 knowledge of the province to shame, and
 10 their question is we're looking to do this,
 11 but it looks like we're going to have to
 12 finish in North Sydney. If you ask the
 13 Department of Tourism their target market
 14 right now, they will identify it as the EV
 15 driver, and sometimes they'll say the Tesla
 16 driver. They typically want to drive and
 17 explore the province in the areas that you
 18 won't fly in and out of. They have more
 19 vacation time available and probably a
 20 little more disposable income to do it, and
 21 right now they cannot do it unless they want
 22 to wait for an excessive amount of time at a
 23 few public Level 2 chargers that a few
 24 businesses have put up across the province.
 25 (12:00 p.m.)

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1 So, yes, we could have the tourists coming
 2 here and helping with their own rate
 3 mitigation problem in the summertime when
 4 our demand is at its lowest and we have the
 5 most surplus power. I say we welcome them
 6 with open arms. So what do these fast
 7 chargers look like. That's one that's in
 8 Nova Scotia there and the car pictured is
 9 very similar to Adrienne's. It's a simple
 10 unit. Nova Scotia Power installed 12 of
 11 these around Nova Scotia last year, 2018.
 12 The cost for installing one of those is
 13 upwards around 100 to 160,000 dollars
 14 depending on the groundwork required. It
 15 doesn't take long to install them. They can
 16 be put on an existing parking lot, and what
 17 we're looking at basically is something
 18 that's a fraction of the effort to put in
 19 compared to a gas station. Now bear in
 20 mind, this isn't a charger that's put in to
 21 service every single electric vehicle that's
 22 on the road. 99 percent of your charging is
 23 done at home. You come home, you plug it
 24 in. It's like your phone. You start each
 25 day with a full tank. You're not going to

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1 go looking for gas stations when you're
 2 starting the day with a full tank. These
 3 are only used to enable people to drive long
 4 distances. So it's not a daily use thing,
 5 but it's critical for EV adoption. A
 6 network of these across the province would
 7 be a start, but eventually you want to have
 8 them wherever you go. When you're stopped
 9 at these, the common question that's asked
 10 is how long are you stopped. You're stopped
 11 there for 15 to 30 minutes, depending on how
 12 much charge you need. So what you do is you
 13 pair these things with existing business,
 14 hey, look, we're supporting local business.
 15 You're stopped there for a charge and it's
 16 really nicely paired with a bakery that will
 17 make a sandwich, as an example. So
 18 something like a Mana Bakery, or Tim
 19 Horton's, Subway, anything like that, and
 20 we've seen signs pop up around these things
 21 that say if you're charging, come over, show
 22 your key, we'll give you a free coffee, and
 23 then you can buy a bakery item. That's a
 24 very common practice in the US where we see
 25 that sort of thing happening. After Nova

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1 Scotia Power put in their first fleet of
 2 electric chargers, look what started popping
 3 up. Private industry followed. Yes, here I
 4 am getting free electricity from Petro
 5 Canada. I didn't need to charge, but I just
 6 had to do that. Nova Scotia within a year
 7 of putting out their 12 chargers not only
 8 had a Petro Canada fast charger, but a full
 9 Tesla super charger installed just north of
 10 their airport. New Brunswick Power rolled
 11 out their fast charger network in 2017 and
 12 they have seen several of the Tesla chargers
 13 and we also see other organizations like
 14 Canadian Tire beginning to do the same
 15 thing. However, the first ones had to be
 16 put in by the utility. None of the
 17 businesses could be expected to roll these
 18 out when you only have 100 EV's on the road
 19 in your province.
 20 MR. BUTLER:
 21 A. So this raises a really interesting point I
 22 see from a marketing point of view. Petro
 23 Canada, you're looking at that station,
 24 that's Petro Canada's lot on one side. On
 25 the other side they have the gas pumps and

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1 they have the store. These are being
 2 installed on the highway corridor all the
 3 way from Nova Scotia to British Columbia
 4 where Petro Canada have stations. So
 5 they've – and Petro Canada is owned by
 6 Suncor, one of the largest oil companies in
 7 Canada, so they see the future, and what
 8 they've done is they're normalizing gas,
 9 diesel is fuel, electricity is fuel. So
 10 this is clearly the future, and they've
 11 moved on it already. So it's very
 12 interesting point where we are on that.
 13 Availability, this is –
 14 MR. SEARY:
 15 A. Looks like the map.
 16 MR. BUTLER:
 17 A. Pardon me?
 18 MR. SEARY:
 19 A. Looks like the map.
 20 MR. BUTLER:
 21 A. Looks like the map, unfortunately. On the
 22 left-hand side is availability of electric
 23 vehicles and plug in electric vehicles in
 24 Canada, and on the other side there's three
 25 for Newfoundland. I think that is very

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1 highly correlated to the chargers map. You
 2 can't expect the dealers to come in and
 3 bring in inventory to sell if people have no
 4 place to charge them.

5 MR. SEARY:
 6 A. The desire from vehicle owners, whether you
 7 actually do this or not, is the ability to
 8 drive anywhere at any time, and that's where
 9 the chargers across the province and around
 10 the province help. Right now, yes, you
 11 charge at home. You're limited to the range
 12 of your vehicle for driving around home.

13 MR. BUTLER:
 14 A. And it's clear, if you want to buy a car,
 15 especially new technology without local
 16 dealer support. So while the charging
 17 network is needed before sales have started
 18 in earnest, it is clear the province should
 19 also look at implementing a zero-emission
 20 vehicle mandate, and that's in other
 21 jurisdictions such as California, BC, and
 22 Quebec. I mean, what that would mean is
 23 that, for example, the first year for a
 24 manufacturer to sell vehicles in a given
 25 jurisdiction, then maybe 3 percent would

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1 have to be electric or plug in, and that
 2 rises maybe next year to 4 percent, and 5
 3 percent, so eventually the market takes hold
 4 itself. What it does is it kind of forces
 5 that there be inventory available for people
 6 to buy these vehicles. Without that
 7 inventory, without the availability of sit
 8 in it and drive it like you'd normally test
 9 drive any car, very few people will buy a
 10 car on spec without seeing it and being
 11 familiar with it. So the zero-emission
 12 mandate, if you want to look at the model in
 13 more detail, Quebec has one, BC has one, and
 14 California, but it's a way to at least
 15 provide inventory on the markets here in our
 16 jurisdiction in Newfoundland and Labrador.

17 MR. SEARY:
 18 A. One thing to note with the Quebec zero
 19 emission vehicle mandate, it's \$8,000.00 on
 20 new vehicles, that's on top of the \$5,000.00
 21 one that the federal government has in
 22 place, but they also had \$4,000.00 available
 23 as a rebate on used electric cars.
 24 California has a \$10,000.00 rebate to low
 25 income families for electric cars, and

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1 \$1,000.00 towards your home charger.
 2 Imagine what that would do here. There is
 3 an expense for dealers to bring in and start
 4 servicing these EVs. However, you know,
 5 it's something where the zero emission
 6 vehicle mandate, we'll need to follow to get
 7 everybody on board. One of the best cars
 8 that are sold is the Nissan Leaf and that's
 9 in the left column, not in the right.
 10 That's an affordable car and it fits right
 11 into the average cost of what people spend
 12 on a new car sale in Canada.

13 But with any new technology, and this
 14 is where I've had my experience, you need to
 15 be selling it and managing it and supporting
 16 it and be fluent on it. Otherwise, your
 17 customers are going to go to somebody who
 18 is, and if they don't see you doing that
 19 right here, they'll just shop elsewhere and
 20 shop out of province.

21 And this is what's happening to the
 22 dealers here in St. John's because this is a
 23 tractor trailer load of brand new Tesla's.
 24 That's the Paddy's Pond bridge in front of
 25 it. There's six Tesla's coming in on that

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1 tractor trailer last month and another one
 2 came in that same evening on the Argentinia
 3 ferry. That same – the following week, I
 4 did a training session with the people that
 5 sell the Chevy Volt and they described not a
 6 lot of interest in electric cars and then I
 7 showed them this slide. Because every one
 8 of those Tesla's cost more than their Volt.

9 So, the cars are coming in. People are
 10 interested. But we really need the dealers
 11 to understand that they have to be part of
 12 the solution and part of the supply and that
 13 if they decide that they don't want to be
 14 part of the solution and part of the supply
 15 that in a very short order, they'll be the
 16 ones that are trying to sell the original
 17 Motorola brick phone or the rotary phone or
 18 the landline and the rest of us have moved
 19 on to Netflix.

20 MR. BUTLER:
 21 A. Here's a picture. Education is the key and
 22 here's a picture of a few of the events that
 23 we've held ourselves. Now, we're just like
 24 say just a small volunteer group. And when
 25 people see the cars, they have tons of

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1 questions. We often have a question and
 2 answer period along with our ride-alongs.
 3 They actually get to experience the cars.
 4 But this effort needs to be scaled up. I
 5 think this has to be done in coordination
 6 with the dealers, with the utility.
 7 Nova Scotia has a program called “Your
 8 Next Ride”. Your Next Ride involves
 9 electric car and somebody bringing it out to
 10 some community events promoting in advance.
 11 There’s promotion around it and get people
 12 to feel, touch, ask questions and take away
 13 the misconceptions.
 14 So, that’s part of the things we would
 15 recommend as part of the educational piece
 16 here in Newfoundland to be able to scale
 17 this up. There’s no point just having the
 18 cars and people are – unless they’re
 19 educated about them and the benefits.
 20 And part of this thing, it’s up to
 21 Government to lead by example. The car down
 22 below is from the – the blue one is the
 23 Marine Institute and they charge it here in
 24 St. John’s and they use it when they go to a
 25 campus in Clarenville and then they charge

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1 it through a charger out there. So, cost of
 2 operation, clearly very low. Emissions,
 3 again a leadership role. So, we need the
 4 Government to lead by example.
 5 MR. SEARY:
 6 A. Part of our research has some of the things
 7 that have happened when key people in the
 8 organizations begin driving electric cars.
 9 New Brunswick Power rolled out their fast
 10 charger network in 2017. Now why did they
 11 manage to get theirs so quickly? I’ve been
 12 told that the president of New Brunswick
 13 Power drives a nice Tesla Model S. So, look
 14 at that.
 15 Petro Canada rolling out 68 fast
 16 chargers across Canada where they have
 17 stations. They don’t have stations here
 18 unfortunately, so Halifax to Vancouver, I
 19 guess they can say that’s coast to coast.
 20 It was revealed to me by somebody that one
 21 of the Board members from Petro Canada has
 22 two Teslas.
 23 Looking at slightly smaller
 24 organizations, I’ve seen a couple of
 25 companies around here where the business

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1 owner starts driving an EV and then you see
 2 a charger appear at work and so on.
 3 From my business, which employs about
 4 10 or 12 people, I’ve decided it makes sense
 5 and makes sense so much to do this that my
 6 employees can avail of a \$4,000 rebate on
 7 the purchase of an electric car with certain
 8 parameters. If they want to go that route
 9 that I will give them \$4,000 towards that
 10 cost. And the reason is pretty simple. The
 11 savings that they will have in gas and
 12 insurance and so on are all after tax
 13 expenses for them. If I give them \$4,000
 14 now, that’s the same as if I gave them a 6
 15 or \$7,000 a year raise permanently in
 16 perpetuity. So, I’m doing it at my
 17 business. What are the rest of you doing?
 18 Let’s all get into these cars.
 19 MR. BUTLER:
 20 A. Of course, there are some common
 21 misconceptions and we hear them all the
 22 time. One of the things is that the battery
 23 costs are high, and they have been. I mean,
 24 this slide shows from 2010, battery costs
 25 over \$1100 per kilowatt hour and that’s

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1 driven down in the 100s, you can see, and
 2 it’s still falling. But there is – cars are
 3 – for the equivalent car, I will admit the
 4 electric car is still more expensive than
 5 the internal combustion engine. The Federal
 6 Government has helped by offering up to a
 7 \$5,000 rebate when you buy a new electric
 8 car or new plug-in electric vehicle.
 9 One of the possibilities is that we
 10 could have a Provincial rebate such as
 11 Quebec has done, and I think it should be a
 12 temporary sliding scale to jumpstart the
 13 market. And what Quebec has done is they
 14 actually have an \$8,000 rebate on new, but a
 15 \$4,000 on used. Both the Nissan Leaf that I
 16 had and the BMW I currently have are pre-
 17 owned cars, and like I say, there’s
 18 availability. New ones are tough, but you
 19 can have this sliding scale and have them on
 20 both new and used. It would go a long ways
 21 to, you know, jumpstart that market.
 22 MR. SEARY:
 23 A. A lot of people ask “where do you charge?
 24 How does it work? What does it look like?”
 25 So, that unit on the wall is a standard

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1 electric car charger and they typically take
 2 a 40-amp circuit. 99 percent of your
 3 charging is done at home. You go home, you
 4 plug it in, you plug in your phone. It
 5 takes about the same amount of time. And
 6 it's charging while you're home and while
 7 you're having your supper. I'm usually
 8 finished charging within – by the time I
 9 finish supper, not that I ever really pay
 10 attention to it because it's always ready
 11 for me in the morning.
 12 However, the first time someone buys an
 13 electric car, they have to shell out another
 14 \$1,000 for a charger, unless they have the
 15 type of car that comes with a cord that
 16 plugs into a receptacle. And so, one thing
 17 that could be considered, and is done in
 18 other provinces like Ontario, is a rebate on
 19 the cost of putting in a charger. And what
 20 you've done then is you've outfitted yet
 21 another home to be friendly for EV owners.
 22 Something like, you know, \$700 towards a
 23 \$1,000 charger would work much like the heat
 24 pump program and would allow the utility who
 25 administers it to make sure that they're

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1 installed properly and done like that.
 2 Some of these chargers for an extra
 3 cost will also have a load management
 4 function in them and this would help then
 5 with your peak charging options. So, that
 6 would allow then the utility to have more of
 7 these out there and for that one upfront
 8 cost be able to do that load management
 9 function that's so needed.
 10 Some electric vehicles come with a cord
 11 that just simply plugs into the standard 40-
 12 amp 240-volt receptacle. It's the same
 13 outlet that your electric range would use.
 14 However, one thing that could be done, and
 15 it's not going to cost a lot, is to update
 16 the building code so that new home
 17 construction, the new multi-resident
 18 dwelling buildings, would have circuits
 19 brought out to where the cars park. So that
 20 when they do add a charger, most of the work
 21 is already done.
 22 (12:15 p.m.)
 23 Car charging is pretty simple. It's
 24 pretty simple. Loves doing that. Something
 25 else to think about how this works though,

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1 it's Friday. You guys are all going to go
 2 home. Don't forget to get some gas before
 3 you go home because the last thing you want
 4 to do is wake up Saturday morning and have
 5 to remember to go get gas. If you have
 6 teenagers and kids at home that are driving,
 7 there's always that argument about "you
 8 forgot to fill up the car". We will not
 9 have that problem in our household. After
 10 this is done, I can go straight home and I
 11 do not need to stop at a gas station. My
 12 gas station is at home. So, everybody that
 13 doesn't drive electric, they say "ah, that's
 14 really difficult. You got to remember to go
 15 and plug it in and so on" and I'm looking at
 16 it and saying no, it's quite the opposite.
 17 My energy source is at home and I'm using
 18 it.
 19 MR. BUTLER:
 20 A. This is starting to show as EV adoption
 21 matures. This is, instead of one fast
 22 charger, you can see there's multiple ones
 23 here and this is in Quebec. And Quebec has
 24 been promoting electric cars for quite a
 25 while. This past May, I attended the third

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1 annual electric vehicle show in Montreal and
 2 got to drive many of the EVs, the Hyundai's
 3 and Kia's, Honda, and so they're starting to
 4 get all the mainstream brands right now and
 5 the growth had been exponential in
 6 attendance at these shows because the
 7 interest is there.
 8 Norway, I've spent time in Norway on
 9 business and Norway is very interesting.
 10 It's a large oil producing country, as we
 11 all know, and very rich because of it. But
 12 ten years ago, they had one percent of the
 13 cars were electric. Last year, of all new
 14 car sales, 50 percent were electric cars.
 15 In September, this past month, the sales for
 16 electric cars in Norway was 65 percent.
 17 So, one of the – and then I go to
 18 Iceland, which started about five years and
 19 they had one percent. In the five years,
 20 they went to about a 25 percent adoption.
 21 This is a country now with less population
 22 than Newfoundland. And what all these
 23 jurisdictions have in common with
 24 Newfoundland, they all have a high degree of
 25 renewable energy, whether it be – mostly

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1 hydro in all those places, and then there's
 2 some wind, there's some geothermal in
 3 Iceland.
 4 So, one of the things we feel is that –
 5 I believe in the Dunskey report, they were
 6 saying maybe a 45 percent by 15 years out,
 7 2034. We think that is far too conservative
 8 because I think the curve goes and then it
 9 goes parabolical. It goes up very steeply
 10 as people get exposed to these new trends
 11 and business associates, et cetera.
 12 MR. SEARY:
 13 A. So, a lot of people have this notion that
 14 electric cars that are available are really,
 15 really tiny, limited range or very expensive
 16 Tesla's. That is changing rapidly and when
 17 I say rapidly, every six months this changes
 18 to be something even more broad and more
 19 achievable to the general population.
 20 Here's a, you know, quick glance at
 21 some of the EVs that are available in Canada
 22 and you see that they're all normal looking
 23 cars, fair size, enough space inside. A lot
 24 of them have the ability to tow. There's
 25 four-wheel drive options. There's small

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1 commuter car options and so on.
 2 Getting the population to move to
 3 electrified transportation is not going to
 4 be anywhere near as difficult as it was for
 5 places like Norway, Quebec at this stage
 6 because we're late into the game.
 7 For those that like driving the trucks,
 8 there are some exciting things coming and
 9 these are – when I say coming, I expect to
 10 see production models starting in the next
 11 12 months on these. But again, we need lead
 12 time to get our infrastructure in place so
 13 that when these hit the market, the question
 14 won't be “well, I'd love to buy one of those
 15 but I can't.” It will be “hey, great, and
 16 now I can use that charging infrastructure
 17 that's put in there.”
 18 That's a Ford F150, fully electric.
 19 There's the number one selling truck that's
 20 probably out in every single community
 21 across this province. Fully electric and
 22 contributing to rate mitigation. And when
 23 you hear that guy accelerate up the road
 24 late at night and waking up everybody, well,
 25 they won't wake up everybody, but he will be

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1 contributing to rate mitigation.
 2 The lower corner, left corner there is
 3 a Tesla Model Y which would be the
 4 equivalent of my car, but at a third of the
 5 cost. It seats up to seven. And the Atlas
 6 red truck there has a 35,000 pound towing
 7 capacity. There's going to be something out
 8 there that just about everybody that drives
 9 a vehicle and have decided that they have
 10 needs like this are going to want to have.
 11 So, this is going to be an easy sell, but we
 12 need to make sure that this province is
 13 ready to come on board as early as possible.
 14 You're up.
 15 MR. BUTLER:
 16 A. Yeah, sorry about that. So, basically, at
 17 this point, you know, to summarize, we
 18 recommend again that Dunskey – we follow the
 19 Dunskey 20 million dollar investment over ten
 20 years and in this past budget, the budget
 21 2019 in Newfoundland, there was two million
 22 dollars was provided or allotted for the
 23 high speed charger network for Hydro to
 24 investigate to see how they can do that. We
 25 treat that as the first two million, the

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1 first phase. We do two in any year, you
 2 know, approximately two million a year over
 3 ten years, there's your 20 million.
 4 But I really urge the Government to
 5 actually release those funds so Hydro can
 6 get on with their job. Because the lead
 7 time, even just, you know, to get these in
 8 would take maybe next year and you need to
 9 be able – the dealers need to be comfortable
 10 that there's a fast charging network and
 11 their lead time to order cars for the
 12 following season is probably six months or
 13 two year, particularly on new models of this
 14 nature.
 15 So, it's really important that the
 16 Government take their action and move – it's
 17 in the budget. Let's release it and get on
 18 with it. I think that's very important.
 19 And this money would cover charging network,
 20 education and also charger rebates.
 21 MR. SEARY:
 22 A. As a business, if I knew that I had a
 23 potential sale valued at 250-270 million
 24 dollars that would come to me in the next 10
 25 or 15 years, I would quite happily make an

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1 investment of 20 million dollars now to
 2 trigger that, and that’s very clearly laid
 3 out in the Dunsky report that shows that
 4 this is indeed possible.
 5 However, we can do nothing. We’ll get
 6 a little bit of EV uptake, but we would
 7 essentially lag behind the rest of the
 8 country. We’ll lag in the opportunities to
 9 avail of Federal funding to help with this
 10 that are currently offered now, but
 11 gradually with start to disappear as EV
 12 uptake continues. So, we really need to be
 13 moving with this now.
 14 MR. BUTLER:
 15 A. Besides the investment, recommend all
 16 efforts to encourage EV adoption be followed
 17 and that would be the zero emission mandate
 18 like we discussed. We’d like the Government
 19 to have the policy updated so that when they
 20 replace their fleet, the first option will
 21 be an EV option. That goes back to the
 22 leadership role. And there are many options
 23 coming on stream for them to do so.
 24 And also, look at the options for to
 25 electrify public transportation, the public

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1 buses, the school buses and with time-of-day
 2 pricing, we can easily move 85 percent of
 3 this to off-peak, overnight. So, really the
 4 peak shaving is – the concern is if this
 5 really takes off as we see it is, it’s not
 6 going to be a big concern in the peak areas,
 7 as long as you provide the right incentives,
 8 time-of-day, et cetera, and as we all know,
 9 there’s a big – there’s little demand
 10 overnight. So it’s a perfect match. So,
 11 this is the one that gives the perfect match
 12 with the demand curve.
 13 So, everything we present here today is
 14 not theory. We’ve either lived it
 15 ourselves, we’ve seen it in other
 16 jurisdictions and we see it very easy to
 17 transport here to a local market with a huge
 18 surplus. So, let’s see if we can, you know,
 19 sop up, you know, 250 million of that
 20 surplus with a – you know, a 20 million
 21 dollar investment will get us a long ways
 22 there.
 23 MR. SEARY:
 24 A. Something that we see that not just
 25 individuals will benefit with but businesses

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1 will as they move to electrified
 2 transportation. So, now that we’ve got you
 3 all convinced to buy an electric car in your
 4 next purchase, we have something to give
 5 each of you to stick to that back of that
 6 car when you use it.
 7 MR. BUTLER:
 8 A. We’re very optimistic you’re going to take
 9 our recommendations to heart. And we
 10 certainly welcome any questions, easy or
 11 hard, it doesn’t matter. If there are
 12 questions you wish to lob our way, we’re
 13 certainly up for that too.
 14 CHAIR:
 15 Q. Thank you very much. Any questions?
 16 EATON, Q.C.:
 17 Q. No. Thank you for the presentation. I have
 18 nothing.
 19 CHAIR:
 20 Q. Consumer Advocate.
 21 BROWNE, Q.C.:
 22 Q. I just have one question. When we were
 23 doing the automobile insurance review, taxi
 24 operators were – made presentations and I
 25 asked them in terms of electric car usage

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1 and they said it wasn’t practical for them
 2 right here in this city right now. Why is
 3 that?
 4 MR. SEARY:
 5 A. Yeah, I spoke to one of the taxi owners here
 6 about a year ago and he is still under the
 7 impression that anything with the range that
 8 he would need to operate as a taxi would be
 9 a six-figure purchase. So, that’s rapidly
 10 changed and changing, continues to change.
 11 But even then, go to Quebec City and order a
 12 Tesla taxi and you’ll see Christian Roy with
 13 his 2014 model S that has about 400,000
 14 kilometres on it now and he will tell you
 15 exactly how much money he’s saving in
 16 operating costs that have long paid for that
 17 car.
 18 So yeah, there’s an upfront cost and
 19 I’ve had that conversation with them. But
 20 now you can get something with four or five
 21 hundred kilometres range at a much lower
 22 price. The other thing that they would
 23 need to invest in is a level three charger,
 24 which are becoming more common and a little
 25 less expensive to install as well. There is

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1 an upfront cost, but their savings in the
 2 long term would quickly make it up and they
 3 could also offer it up as more of a luxury
 4 ride if they wanted to go that route.
 5 BROWNE, Q.C.:
 6 Q. Thank you.
 7 MR. O'BRIEN:
 8 Q. No questions. Thank you, gentlemen, for
 9 your presentation.
 10 MR. FLEMING:
 11 Q. No questions, thank you.
 12 GREENE, Q.C.:
 13 Q. No questions, thank you.
 14 MR. SEARY:
 15 A. Weather permitting, you can't be convinced
 16 until you ride in one. We would offer it up
 17 for everybody to join us in the parking lot.
 18 I don't know what it's doing out there, but
 19 we are also quite prepared to come back and
 20 show you the cars and let you see for
 21 yourself what we've been enjoying for the
 22 last four years.
 23 CHAIR:
 24 Q. Thank you. Thank you very much.
 25 COMMISSIONER O'BRIEN:

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1 Q. Thank you for your time.
 2 CHAIR:
 3 Q. It was most interesting.
 4 MR. BUTLER:
 5 A. Thank you.
 6 CHAIR:
 7 Q. We have – we may take you up on that offer
 8 at some point, not today.
 9 MR. SEARY:
 10 A. Okay. Please do.
 11 CHAIR:
 12 Q. We have one presentation remaining. Mr.
 13 Brown, yes.
 14 MR. W. BROWN:
 15 A. Do you want to keep going?
 16 CHAIR:
 17 Q. Do I want to keep going? That's entirely up
 18 to you, sir. We're here to listen.
 19 MR. W. BROWN:
 20 A. (Inaudible).
 21 CHAIR:
 22 Q. Okay. We've got about a half hour or so.
 23 MR. W. BROWN:
 24 A. (Inaudible).
 25 CHAIR:

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1 Q. I'll leave that up to you. We've allocated
 2 a half hour for you, so you can have that.
 3 Thank you.
 4 MR. W. BROWN:
 5 A. Does it matter which microphone?
 6 CHAIR:
 7 Q. Yeah, the -
 8 MR. W. BROWN:
 9 A. That one, okay. Thank you. Can everyone
 10 hear me?
 11 MR. O'BRIEN:
 12 Q. Yeah, you're good.
 13 MR. W. BROWN:
 14 A. Good?
 15 CHAIR:
 16 Q. Yes.
 17 MR. W. BROWN:
 18 A. All right. I guess I'd like to start off by
 19 thanking you, Chair and Vice-Chair and the
 20 Commissioner at the head table and any other
 21 commissioners in the audience for this
 22 opportunity and to, of course, the other
 23 members of the inquiry and my fellow
 24 Newfoundlanders. It's great to be here.
 25 My first slide shows that I'm asking a

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1 question and I don't know if it's been
 2 answered in here. Is there really a need
 3 for mitigation? I don't expect an answer.
 4 It's a question that I'm going to give my
 5 opinion on a little bit later on.
 6 In order to get there, I come from an
 7 engineering background and my degree was an
 8 Honours degree in control systems theory.
 9 In other words, I think of everything has a
 10 black box, for you engineers, means it's got
 11 a bunch of inputs and a bunch of outputs and
 12 it runs forever. What's inside the black
 13 box is a bunch of exponential rope or decay
 14 curves, a straight line being an exception.
 15 The sum of those curves yields whether or
 16 not I've got a stable system or a runaway
 17 system. For those engineers, the best
 18 runaway example is Galloping Gertie. It
 19 ended up in a windstorm that caused it to
 20 vibrate and the whole bridge in Seattle fell
 21 apart. That was about 100 years ago.
 22 So, any system can be unstable or
 23 stable. My thesis, when I had my Honours
 24 degree, was to send a rocket to the moon and
 25 back under total control of the rocket, no

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1 human intervention and maintain a stable
 2 course, and it got me an A, of course.
 3 Anyway, using that kind of technology,
 4 I put together a model and in the days when
 5 I first put models together, I had to use a
 6 language called Fortran, which was quite
 7 difficult to manipulate, but now we got
 8 spreadsheets. So, I put together a model
 9 for hydroelectric generation.
 10 While I was working, I did work on
 11 nuclear generation with Ontario Hydro at one
 12 time. They had a control system that had
 13 problems and myself and a couple of fellow
 14 engineers worked on it until we got it
 15 worked out. And other things – but
 16 eventually, everything I did inside that
 17 company was done with one of these models
 18 and the ultimate result was ROI, return on
 19 investment. Inside the company, 20 percent
 20 was needed or the project got archived. I
 21 won't say anything about what the company
 22 is.
 23 Anyway, I built a model, as I said. I
 24 tried it out on the Churchill Falls. That
 25 does that CFL, doesn't it, not CP? Yeah,

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1 CFL. And then I moved it onto MFL. I also
 2 did GIL and another thing called a battery
 3 or a storage facility, but we won't get into
 4 those today. Stop at the MFL.
 5 Then I combined the two of them and
 6 tested it to see if it worked. Everything
 7 worked just fine. What I mean by that is
 8 the system will – the systems combine CFL
 9 and MFL will pay for themselves. There is
 10 no need for mitigation.
 11 Now, this model goes out 100 years, and
 12 I just have one here. In order to test it,
 13 I took the Hoover Dam and I took it out 100
 14 years. This is what it looks like when it's
 15 100 years. Okay? All of those are years.
 16 I'm not going to get into that in this
 17 presentation today, just to illustrate that
 18 I'm not a neophyte in this field. Okay.
 19 So, given that that's the case, I then
 20 went and did the CPL one and what did she –
 21 moved ahead, did it? I didn't mean to move
 22 ahead. Okay, that's fine.
 23 So, in summary, the model, the next
 24 chart, that's a model of Muskrat Falls. If
 25 you go right down to the bottom lower right-

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1 hand corner, okay, there's a number there.
 2 That number is the end of the CFL 100 years
 3 is 2076. It started in 1977. At that time,
 4 the net profit – I got to put my glasses on
 5 for up close, excuse me. The number is
 6 around 500 billion dollars net profit.
 7 Now, I took that and I did the 100 year
 8 for CFL and I combined the two of them
 9 together. The next slide shows that. And
 10 if you go down to the bottom there, the
 11 number there after 100 years of CFL and 57
 12 of Muskrat Falls is 1.8 trillion dollars
 13 profit.
 14 Now if you look at the very beginning
 15 of that chart, 2020, this assumes that we go
 16 first power with MFL in 2020. There is a
 17 loss year there. Combined with Churchill
 18 Falls, of course, it's not a loss to Nalcor.
 19 The second year it's positive. Now, the
 20 ingredients in here includes a savings of
 21 Holyrood in the first year of only – a
 22 savings of half the year. From then on,
 23 it's a full year. That's the most
 24 optimistic one.
 25 Now, if we go to the next chart, which

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1 is MFL, and it says it doesn't start until
 2 the year after. At that point, the project
 3 is going to incur an extra – what is it? An
 4 extra 1,000 or – yeah, extra billion
 5 dollars' worth of DCI during construction
 6 interest. So that has to be taken into
 7 account. The following one shows the impact
 8 of that. Just next slide, please.
 9 It says that in 2020, there is no
 10 Muskrat Falls. In 2021, Muskrat Falls loses
 11 about 99 million dollars, but the total for
 12 CFL and Muskrat, minus of course the savings
 13 from Holyrood, is still 758. If you take it
 14 out to the 100 year for CFL, it's once again
 15 around about the 1.8 trillion dollars.
 16 That ends the synopsis and as far as
 17 I'm concerned, there is no need for
 18 mitigation.
 19 Next chart, please. I now switched
 20 away from that. That's the wholesale side
 21 of the argument. Now I'm going to do the
 22 retail side. I got some information from
 23 April 1, 2011 of rates in nine different
 24 cities in Canada. From our own people here,
 25 October the 1st, we have a set of rates for

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1 the same cities as of October 1st. The sum
 2 of those two and the average shows about a
 3 two – take it down a bit further.
 4 Am I missing something here? Oh, I’m
 5 missing something. I didn’t realize that
 6 chart didn’t print properly. Okay. The
 7 yearly percent – oh my, let me see if I got
 8 it in my folder. Why didn’t I pick that up?
 9 Excuse me. I think I picked up the wrong
 10 version of it. I printed off two and I
 11 picked up the wrong one. Well, anyway, the
 12 difference is about 206, and I averaged that
 13 out and it comes out to about .23 cents over
 14 that eight-and-a-half-year period. So, I
 15 figured out that that’s about a two percent
 16 year-over-year increase. And if we applied
 17 that, since there’s no increase this year,
 18 it would mean that it would justify a four
 19 percent increase in rates for next year, in
 20 the retail rates. The next chart shows the
 21 similar data—oh, no. Wait a second. Don’t
 22 you have a chart with the other numbers on
 23 it? I should have looked at them. There’s
 24 no way you can show this without loading it,
 25 right?

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1 MS. KEAN:
 2 Q. Mr. Brown, everybody has a hard copy.
 3 MR. BROWN:
 4 A. You don’t have this chart?
 5 GREENE, Q.C.:
 6 Q. We have -
 7 MS. KEAN:
 8 Q. We all have a hard copy.
 9 MR. O’BRIEN:
 10 Q. I think we have a hard copy of this.
 11 MS. KEAN:
 12 Q. So, we can look at it on –
 13 MR. BROWN:
 14 A. Oh, oh. Does everybody have a hard copy?
 15 MS. KEAN:
 16 Q. Yes.
 17 GREENE, Q.C.:
 18 Q. Yes, we have paper copies.
 19 MR. O’BRIEN:
 20 Q. Yes, I think we do, yes.
 21 MR. BROWN:
 22 A. Oh, well.
 23 MR. O’BRIEN:
 24 Q. Yes, there you go.
 25

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1 MR. BROWN:
 2 A. Thank God for hard copies.
 3 CHAIR:
 4 Q. Does it say, “The last 43 years”? That’s
 5 the –
 6 MR. O’BRIEN:
 7 Q. Yes.
 8 MR. BROWN:
 9 A. What?
 10 CHAIR:
 11 Q. “The last 43 years, the retail rate
 12 history.” That’s the chart you’re looking
 13 for?
 14 MR. BROWN:
 15 A. Yes.
 16 CHAIR:
 17 Q. Yes.
 18 MR. BROWN:
 19 A. That’s the one, yes, yes.
 20 CHAIR:
 21 Q. We have that one, yes. Thank you.
 22 MR. BROWN:
 23 A. I had a version that went back 83 years, but
 24 I decided it was overkill. So, the last 43
 25

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1 years I picked in NL Hydro’s world and then
 2 Quebec Hydro’s world and how they use the
 3 wholesale component. As you can see, Quebec
 4 Hydro--thanks to the found father of
 5 Confederation, we ended up with .2 cents per
 6 kilowatt hour indefinitely. The retail
 7 side, of course, climbs almost consistently
 8 with the retail side at NL Hydro. The net
 9 result is if you live on the other side of
 10 the border in Labrador, you get a little bit
 11 of a bonus if you can get Quebec Hydro
 12 instead of NL Hydro. So, I said, “Based on
 13 the above and no rate increase in 2019, a
 14 rate increase of seven percent next year is
 15 definitely warranted. However, if you
 16 underpin the average wholesale rate over the
 17 last 43 years, it’s, year over year it’s
 18 8.25 percent according to my calculations,
 19 and that actually goes all the way back to
 20 the start of the Hoover Dam. That’s been a
 21 very consistent number and really it should
 22 be 8.25 percent just to keep the thing
 23 alive, but it looks like 7 percent. There
 24 must be savings on the retail side, at least
 25

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1 I show some in here based on the numbers I
 2 saw. That can't go on forever. You can't
 3 constantly stay below what everybody is
 4 using, but anyway, that would be my
 5 recommendation. So, if we go to the summary
 6 sheets, on that summary I've got one called
 7 "Concerns and Conclusions." The only thing
 8 that's wrong with Muskrat Falls, as far as
 9 I'm concerned, are these three, plus there's
 10 another one in here that affects the LIL
 11 that has been brought up recently. The
 12 North Spur is not granite; it's sand. That
 13 could be a problem when you get a lot of
 14 water behind it. I'm not a geologist, so I
 15 have no idea other than what I read in the
 16 paper. Metal mercury I do know about. That
 17 comes when you bury live trees in water.
 18 And the trees have over the years, been
 19 accumulating metal mercury from the soil.
 20 When that leeches out, it definitely will
 21 affect the metal mercury in the water. So,
 22 that one is one that we should have taken
 23 care of by—if I had had my way and I was in
 24 charge of Muskrat Falls, I would have had 50
 25

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1 said that's the last date that we could have
 2 Muskrat. It could turn out that some of the
 3 things that are not trending could turn
 4 around on us, but as of this moment, I don't
 5 see it happening. So, finally on the last
 6 chart, I said that the future of NL is
 7 fantastic because we're going to have a lot
 8 of money from Hydro and we can do a lot of
 9 stuff, including adding transmission lines,
 10 undersea cables. The remaining megawatt
 11 hours--according to both Ed Martin and Stan
 12 Marshall, the Churchill Falls has the
 13 capability water-wise to produce 5,424
 14 megawatts. We're only using 2500 because
 15 there's only 2200 that can be shipped to
 16 Quebec. The other 225 (sic.) is being used
 17 in local—locally in Labrador at the moment,
 18 but there's no other users. So, the
 19 remaining 2924 is in the reservoir, but it
 20 hasn't come out. So, I put that down. Gull
 21 Island it's talking about is 2250 and
 22 there's 270 that would be, because of a low-
 23 water condition, would be unavailable.
 24 However, the Norwegians found a way by
 25

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1 bulldozers or 50 100-tonne euclid trucks and
 2 a whole of mechanical shovels cleaning that
 3 thing down to the bare rock before I put any
 4 water in it, but I wasn't. So, that's not
 5 going to happen, I guess. And of course,
 6 then the GE one which are—CEO Marshall said,
 7 "We don't know when that's going to fix it.
 8 So, we don't know when we're going to start
 9 the actual processing of electricity." And
 10 of course, like the new one with LIL is—when
 11 it comes across the isthmus, what happens
 12 when you get an ice storm and a wind storm
 13 simultaneously, it could be a disaster from
 14 their point of view. I guess the only way
 15 around that would be to bury a parallel DC
 16 cable and have it as standby for the
 17 emergency. So, that would be my concerns
 18 about Muskrat. Nothing about the money side
 19 of it. The conclusion, I think NL Hydro
 20 should as always, recommending their annual
 21 increase which I would say should be around
 22 the eight percent mark, but that's up to NL
 23 Hydro. And rate mitigation is not a concern
 24 at least not until after 2023 which Stan
 25

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1 putting in a restore pump to top up from the
 2 lower level to the upper level and recover
 3 the low-water level by maintaining a
 4 constant level in all reservoirs, and we
 5 could do that. The Hoover Dam is looking at
 6 that right now because they have a severe
 7 low-water level, something like 30 percent.
 8 Ours is only three percent at least
 9 according to the reports I've seen. Then of
 10 course, after that, with all that extra
 11 trillions of dollars that we're going to
 12 have after we do—after we put Gull Island on
 13 and we start using that 2924, we'll be up
 14 around 6-billion dollars or 6-trillion
 15 dollars. We can do a whole raft of things.
 16 Like we can buy back iron ore. Iron ore
 17 right now has the same contract as CFL has.
 18 For every \$2 we make in Labrador, some
 19 company in Ohio makes \$140. So, we could
 20 bring that back in there. Nickel is
 21 probably exactly the same. That's not
 22 unusual for big multinational corporations
 23 to find somebody that can't afford to do it
 24 themselves, and then offer them a minimum
 25

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1 amount of profit and a maximum amount back
 2 home. I have a list of probably 40 other
 3 things that that money could be used for,
 4 but I'm not going to exhaustively put them
 5 there. In other words, we will become the
 6 Norway of the Americas. That's exactly what
 7 Norway does now. End of presentation.
 8 Thank you.
 9 CHAIR:
 10 Q. Thank you very much, Mr. Brown. You did say
 11 -
 12 MR. BROWN:
 13 A. If anybody wants -
 14 CHAIR:
 15 Q. You did say -
 16 MR. BROWN:
 17 A. I still want to say—may I?
 18 CHAIR:
 19 Q. I'm sorry. Yes, absolutely.
 20 MR. BROWN:
 21 A. If anybody would like to learn more about
 22 what my system is, I'd be welcome to have a
 23 get-together with any interested people. It
 24 would be mainly engineers that have the
 25

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1 mindset that would be interested in it, but
 2 anybody that would have a flare or a little
 3 bit of calculus and a little bit of
 4 mathematics, a little bit of exponentiation
 5 would enjoy it, I think. At least in the
 6 past when I presented it internally to the
 7 company I worked for, it was well-received.
 8 CHAIR:
 9 Q. Who did you work for, Mr. Brown?
 10 MR. BROWN:
 11 A. Pardon?
 12 CHAIR:
 13 Q. Who did you work for in your career?
 14 MR. BROWN:
 15 A. I worked for the "I've Been Moved" company.
 16 Do you know what "I've Been Moved" shortens
 17 to?
 18 CHAIR:
 19 Q. No.
 20 MR. BROWN:
 21 A. IBM. Internally, we got moved.
 22 Professionals got moved. I moved to ten
 23 different cities in my career of 30 years.
 24 CHAIR:
 25

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1 Q. Oh, wow.
 2 MR. BROWN:
 3 A. But yeah, I worked for IBM.
 4 CHAIR:
 5 Q. Interesting.
 6 MR. BROWN:
 7 A. And I attained the rank of an international
 8 trouble-shooter for projects. IBM, trying
 9 to install a computer and it fell apart,
 10 they would call one of us from a special
 11 group in Ottawa. We ever had to get NATO
 12 clearance because there were government,
 13 military contracts.
 14 CHAIR:
 15 A. Would you be interested in -
 16 MR. BROWN:
 17 A. So, it was a fun life.
 18 CHAIR:
 19 Q. I can just imagine. I can imagine.
 20 MR. BROWN:
 21 A. Hm?
 22 CHAIR:
 23 Q. I can imagine it was, yes.
 24 MR. BROWN:
 25

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1 A. Yes.
 2 CHAIR:
 3 A. Would you be interested in then taking any
 4 questions if anybody has any?
 5 MR. BROWN:
 6 A. Oh, of course.
 7 CHAIR:
 8 Q. Does anybody have any questions for Mr.
 9 Brown? No?
 10 MR. O'BRIEN:
 11 Q. No questions.
 12 CHAIR:
 13 Q. None at this stage. I think you have the
 14 misfortune of putting upon lunch, so.
 15 MR. BROWN:
 16 A. That's all right. No, no, no, look, it's
 17 impossible to look at what I presented and
 18 pick out a question that would be technical
 19 enough to challenge it, okay, with no
 20 earlier notice. If I had distributed this
 21 two weeks ago, there might be a few people
 22 that would have definitely had questions,
 23 but I can't get into the details. You know,
 24 the size of these spreadsheets are enormous.
 25

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1 CHAIR:
 2 Q. Yes.
 3 MR. BROWN:
 4 A. So, in order to understand them, you have to
 5 almost sit down in a classroom and show how
 6 you built it, right? And that's not an easy
 7 thing to do in this kind of a forum.
 8 CHAIR:
 9 Q. Well, we thank you for you're your interest
 10 today.
 11 MR. BROWN:
 12 A. That's fine.
 13 CHAIR:
 14 Q. Thank you, sir.
 15 MR. BROWN:
 16 A. So, I don't know if I'm the only one that
 17 has a positive view on the whole, as I call
 18 it, the whole Hamilton River Valley
 19 Authority named after the Tennessee Valley
 20 Authority which is a parallel system, but I
 21 don't know much about it. The only one I
 22 studied in the US was the Hoover. Anyway –
 23 CHAIR:
 24 Q. Thank you very much, sir. It's a pleasure
 25

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1 the parties and the presenters today will be
 2 most helpful as we prepare our report. I
 3 would like to note we will continue to
 4 accept written comments from any interested
 5 persons until next Friday, the 25th of
 6 October, and final submissions from the
 7 parties are set to be filed by Friday,
 8 November 1st. And we are required to file
 9 our report to government by January 31st,
 10 2020, and with that, unless there's anything
 11 anyone else needs to raise at this stage,
 12 we'll—I can call this proceeding to a close.
 13 And thanks again, everyone. Thank you, and
 14 enjoy your weekend.
 15 Upon conclusion 12:51 p.m.
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1 meeting you.
 2 MR. BROWN:
 3 A. You're welcome.
 4 CHAIR:
 5 Q. That's brings us to the end of our public
 6 hearing phase. I'd like to express
 7 particular thanks to the presenters for
 8 taking the time today to come and present
 9 your views. We've heard some very
 10 thoughtful and interesting presentations and
 11 acknowledge the concerns raised with respect
 12 to where rates are going and the associated
 13 uncertainty and impact. Thank you as well
 14 to the parties and Board, counsel and staff
 15 for your significant contribution to the
 16 work completed on the referenced questions
 17 over the past number of months and
 18 particular for your efforts in this public
 19 hearing phase. As I noted in my opening
 20 statement, the Board understands the
 21 importance of the work being completed in
 22 this reference to the province and to
 23 electricity consumers on the Island. The
 24 input received over the past two weeks from
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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 18th 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 18th day of October, 2019

Judy Moss

A				
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