

Hearing Transcript

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

October 10, 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 (9am-11am)
Cheryl Blundon, Board Secretary (11:30am-1:30pm)

Parties:

Nalcor Energy /

Newfoundland and Labrador Hydro

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

Newfoundland Power

Kelly Hopkins, Counsel
Liam O'Brien, Counsel

Consumer Advocate

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

Island Industrial Customer Group

Paul Coxworthy, Counsel
Denis Fleming, Counsel

Witnesses:

Nalcor Energy / Newfoundland and Labrador Hydro

Panel 1

Jim Haynes, Executive Vice President, Nalcor
Jennifer Williams, President, Newfoundland and Labrador Hydro
Michael Roberts, Senior Vice President Corporate Services & CHRO, Nalcor
Greg Jones, Director, Nalcor Energy Marketing, Nalcor

Page 1

1 (9:03 a.m.)
 2 CHAIR:
 3 Q. Good morning, everybody. I guess our last
 4 order of business was to go right to you
 5 yesterday afternoon. Right to you, Mr.
 6 O'Brien. Thank you.
 7 MR. O'BRIEN:
 8 Q. Good morning.
 9 MS. WILLIAMS:
 10 Q. Good morning.
 11 MR. O'BRIEN:
 12 Q. Thank you, Madam Chair. Good morning,
 13 folks. I'm not going to be too long. I
 14 don't have too many questions, but I do have
 15 some on each of your presentations, and I'm
 16 going to start, actually, with you, Mr.
 17 Jones, where we finished off.
 18 MR. JONES:
 19 A. Okay.
 20 MR. O'BRIEN:
 21 Q. I wonder if you could give me a little bit
 22 more background just in terms of the Emera
 23 Trading Contract, and you had mentioned
 24 yesterday that there was some cost savings
 25 with bringing the marketing internally. I

Page 2

1 believe you mentioned there was kind of a 25
 2 percent difference in cost.
 3 MR. JONES:
 4 A. Correct.
 5 MR. O'BRIEN:
 6 Q. Could you break that down for me just a
 7 little bit better, how you came to that
 8 figure? Is it just from bodies or was there
 9 a difference in -
 10 MR. JONES:
 11 A. I'm just thinking now how to answer the
 12 question while respecting the
 13 confidentiality of the contract.
 14 MR. O'BRIEN:
 15 Q. And it may not have been you. It might have
 16 been Power Advisory that actually used that
 17 25 percent.
 18 MR. JONES:
 19 A. So again just trying to be careful that I
 20 don't go somewhere that I shouldn't be
 21 going.
 22 MR. O'BRIEN:
 23 Q. Sure, yeah.
 24 MR. JONES:
 25 A. As far as confidentiality respecting Emera

Page 3

1 confidentiality.
 2 MR. O'BRIEN:
 3 Q. Oh, no, I accept that, I accept that.
 4 MR. JONES:
 5 A. So that particular contract had a number of
 6 elements in building up the price. One was
 7 a price per megawatt hour move. So for
 8 every megawatt hour that they moved on our
 9 behalf, we paid them a certain price.
 10 MR. O'BRIEN:
 11 Q. Okay.
 12 MR. JONES:
 13 A. There was a fixed retainer fee as well.
 14 That was a fixed monthly charge, and then on
 15 top of that, we also had incentives built
 16 into the contract that if Emera was able to,
 17 say, beat the market is not the right word,
 18 but to achieve greater value by directing
 19 energy, instead of going to New York and
 20 directing it to New England, for example,
 21 and creating upside on the transaction over
 22 and above what would have otherwise been
 23 achieved in New York, then there was a value
 24 sharing mechanism built into that contract.
 25 MR. O'BRIEN:

Page 4

1 Q. Okay.
 2 MR. JONES:
 3 A. So that was part of the equation. That was
 4 the direct cost that we would pay to the
 5 contractor, and then internal we had to
 6 maintain a certain number of staff
 7 internally just to manage that contract to
 8 oversee it, to make sure that we were
 9 getting appropriate value, and then, of
 10 course, to manage the risk side of it and to
 11 settle our account.
 12 MR. O'BRIEN:
 13 Q. And that internal portion at that particular
 14 time, were you maintaining – you mentioned
 15 some of the FTE's that you would have to
 16 maintain if you did contract out again. Was
 17 that the same number of FTE's you had around
 18 that time?
 19 MR. JONES:
 20 A. No, at the early days with the Emera
 21 contract, it started off, obviously, very
 22 little Nalcor involvement and very much
 23 relying upon Emera to provide those
 24 services, but as time went by we started
 25 building up our own internal confidence and

Page 5

1 what's in the analysis on a g forward basis
 2 is an assessment of our experience there,
 3 recognizing the changes that we would have
 4 had to make to manage that contract on a
 5 long term basis. As we're going through,
 6 once we've had made the decision that the
 7 internal growth model was the model that we
 8 wanted to proceed, then we would not,
 9 obviously, staff up to just meet the Emera
 10 contract, we were staffing up to meet that
 11 internal growth model as well.
 12 MR. O'BRIEN:
 13 Q. Okay. I wonder if I could take you to Slide
 14 7 of your presentation, if we could bring
 15 that up. This is the slide where you talk
 16 about risk management and you did speak
 17 about that a bit yesterday. So you spoke
 18 about the Energy Marketing Risk Manual that
 19 you have in place, and there's some oversight
 20 here, I guess, you've mentioned down in the
 21 last bullet from Nalcor's Treasury and Risk
 22 Management. So it's clear, I guess, you see
 23 that there is some need for oversight over
 24 NEM's activities, is that fair?
 25 MR. JONES:

Page 6

1 A. Absolutely, but what's referenced here is
 2 risk oversight to make sure that we stay
 3 within the bounds of our permitted
 4 activities.
 5 MR. O'BRIEN:
 6 Q. Okay, and, I guess, I'm presuming from
 7 Nalcor's pre-filed evidence that you do have
 8 concerns over extending that to oversight
 9 from the Board, is that fair?
 10 MR. JONES:
 11 A. My concern would be extending oversight
 12 would be to the extent that oversights are
 13 to limit our ability to actually maximize
 14 the value of the portfolio. That's when I
 15 would see a tipping point. Exactly where
 16 that point is, we'll know when we're there,
 17 but to sit here in advance it's kind of
 18 tough to make that assessment.
 19 MR. O'BRIEN:
 20 Q. Okay, and Power Advisory, it mentioned one
 21 of the areas of concern would be the cost of
 22 regulation. Is that an area of concern for
 23 you?
 24 MR. JONES:
 25 A. Well, we have 25 FTE's right now. We have

Page 7

1 one individual that's dedicated to just
 2 regulatory compliance, but it's not
 3 compliance in the context of this kind of a
 4 forum, it's just managing our permits and
 5 our contracts. If we go into additional
 6 oversight, there would be a cost associated
 7 with that.
 8 MR. O'BRIEN:
 9 Q. And do you see that being prohibitive?
 10 MR. JONES:
 11 A. I can't say right now.
 12 MR. O'BRIEN:
 13 Q. Okay.
 14 MR. JONES:
 15 A. It would depend upon the level of regulatory
 16 oversight that would be employed.
 17 MR. O'BRIEN:
 18 Q. Okay. I guess, maybe on that note, Power
 19 Advisory did confirm with their evidence
 20 that in New Brunswick there's some level of
 21 oversight in terms of the regulatory
 22 requiring some external audit to measure
 23 compliance and effectiveness. Is that
 24 something you would see as being something
 25 that Nalcor would be prepared to consider?

Page 8

1 MR. JONES:
 2 A. I can't speak for Nalcor, as a whole, but I
 3 can speak as the marketing entity.
 4 MR. O'BRIEN:
 5 Q. And do you think that would be prohibitive?
 6 MR. JONES:
 7 A. We definitely have an element of
 8 accountability to our shareholder and to our
 9 Board of Directors. I mean, that is one
 10 element of oversight that already exists.
 11 MR. O'BRIEN:
 12 Q. I understand that, and I guess I'm asking
 13 about the next potential element of
 14 oversight which would be potentially Board
 15 oversight. If you had some element of
 16 oversight in terms of an external audit to
 17 measure compliance with your Risk Manual and
 18 compliance with the effectiveness of
 19 managing risk, is that something you would
 20 see as overly prohibitive?
 21 MR. JONES:
 22 A. On the surface it doesn't sound like it's
 23 overly prohibitive, but again the level of
 24 oversight and the level of involvement of
 25 that external third party obviously would

Page 9

1 depend on the -
 2 MR. O'BRIEN:
 3 Q. So it would depend on the degree, I guess?
 4 MR. JONES:
 5 A. The degree of oversight, yes. I believe Mr.
 6 Dalton yesterday had indicated that the
 7 ability to oversee each and every
 8 transaction from a prudence perspective, I
 9 mean, we do it from a risk management
 10 perspective every day and every transaction
 11 is overseen. If we're going to get into
 12 second guessing, call it the Monday morning
 13 quarterback type of analogy, to get into
 14 that kind of oversight, that's essentially
 15 duplicating the entire operation.
 16 MR. O'BRIEN:
 17 Q. Okay. Do you see any value in having the
 18 Board look at or approve, say, your Energy
 19 Marketing Risk Manual in advance versus sort
 20 of second guessing? That sort of sets out
 21 the framework for your trades and that kind
 22 of thing, is it?
 23 MR. JONES:
 24 A. That sets out our permitted range of
 25 operation.

Page 10

1 MR. O'BRIEN:
 2 Q. Yeah, yeah. Would there be a role or
 3 potential role for the Board in that
 4 fashion?
 5 MR. JONES:
 6 A. I'm sure there would be a potential role.
 7 MR. O'BRIEN:
 8 Q. Because it's not sort of second guessing,
 9 looking backwards to see, it's sort of
 10 upfront, is that a possibility, or do you
 11 think that would be prohibitive?
 12 MR. JONES:
 13 A. Again everything is a possibility,
 14 absolutely.
 15 MR. O'BRIEN:
 16 Q. Okay.
 17 MR. JONES:
 18 A. The only caveat I would say is that I'm not
 19 familiar with marketing entities across
 20 Canada that have that level of regulation.
 21 My understanding with New Brunswick Power,
 22 there was an audit done of their marketing
 23 manual, but I don't think it was explicitly
 24 approved by the Board. So to provide the
 25 manual to the Board, I don't see anything

Page 11

1 overt there.
 2 MR. O'BRIEN:
 3 Q. So what's your understanding that was done
 4 when you say an audit of the manual by the
 5 Board versus an approval?
 6 MR. JONES:
 7 A. I can't really speak to the details of it.
 8 I would surmise that the Board had the
 9 opportunity to view the manual.
 10 MR. O'BRIEN:
 11 Q. Okay. Your operating costs, you mentioned
 12 those yesterday. They're largely personnel
 13 costs, I take it, are they?
 14 MR. JONES:
 15 A. Mostly personnel. Of the 5 to 6 million
 16 dollars, about 3.5 is personnel costs.
 17 System costs are another big portion of it
 18 as well.
 19 MR. O'BRIEN:
 20 Q. And those costs, those are costs that are
 21 built into rates for customers, is that
 22 fair?
 23 MR. JONES:
 24 A. Not at this time they are not.
 25 MR. O'BRIEN:

Page 12

1 Q. And I should rephrase the question. I mean,
 2 upon commissioning, they would be built into
 3 rate costs, would they?
 4 MR. JONES:
 5 A. Not under the current model. At this
 6 particular time there is no set in stone
 7 accounting for or method for how those costs
 8 will be recovered, whether it's from Power
 9 Supply or from Hydro, or if it's a shared
 10 service.
 11 MR. O'BRIEN:
 12 Q. And is there – are you looking into that, or
 13 is there proposals in that fashion as to
 14 where Nalcor –
 15 MR. JONES:
 16 A. I believe Newfoundland and Labrador Hydro
 17 has, and Jennifer can correct me if I'm
 18 wrong, but Newfoundland Hydro has indicated
 19 to the Board that we will be bringing
 20 forward a long term marketing and
 21 optimization type of arrangement that would
 22 be certainly discussed here before the
 23 Board.
 24 MR. O'BRIEN:
 25 Q. Okay, that's fair, is it?

Page 13

1 MS. WILLIAMS:
 2 A. That's correct.
 3 MR. O'BRIEN:
 4 Q. Okay, thank you. If we could move to Slide
 5 10, your Energy Marketing 101. That was
 6 helpful for me, I must say. I did have a
 7 question in terms of capacity trading in
 8 transmission, and you've indicated it's
 9 traded in megawatt quantities or dollars per
 10 megawatt per month, or I guess it can vary,
 11 is that fair?
 12 MR. JONES:
 13 A. Yes, definitely.
 14 MR. O'BRIEN:
 15 Q. Is there a dollar value to that or
 16 opportunity there for Nalcor that's already
 17 built into Synapse's calculations, do you
 18 know? I'm looking sort of from a rate
 19 mitigation perspective. Is there a dollar
 20 value that can benefit us here that we
 21 haven't looked at?
 22 (9:15 a.m.)
 23 MR. JONES:
 24 A. I would say yes. What we've done, and
 25 certainly in the information that we have

Page 14

1 provided Synapse, we used clearing markets
 2 and markets to which we have long term firm
 3 transmission rights. So we have access to
 4 those markets.
 5 MR. O'BRIEN:
 6 Q. Yeah.
 7 MR. JONES:
 8 A. We regularly go out and seek blocks of
 9 incremental transmission, particularly into
 10 New England because the New England market
 11 is the premium market in the North East, and
 12 we've been quite successful on occasion
 13 purchasing blocks of transmission that have
 14 been quite profitable for us, so creating
 15 additional upside, but in our forecasting we
 16 do not assume that that will be the case
 17 going forward long term. It will be
 18 realized when it's made available because it
 19 is dependent upon market conditions at the
 20 time.
 21 MR. O'BRIEN:
 22 Q. And I'm paraphrasing here now, it's not
 23 certain enough for you to say we'd put it
 24 into a forecast, but it would be realized if
 25 it came along. Is that fair?

Page 15

1 MR. JONES:
 2 A. Correct, it's expected.
 3 MR. O'BRIEN:
 4 Q. It's expected.
 5 MR. JONES:
 6 A. But not forecasted.
 7 MR. O'BRIEN:
 8 Q. Okay, and in terms of what's expected on a
 9 ball park dollar figure, are you able to
 10 give us any idea? Is that too difficult to
 11 do?
 12 MR. JONES:
 13 A. That's pretty difficult to do, yes, in
 14 particular with the Phase 1 and Phase 2
 15 rights, which is a merchant transmission
 16 line that runs from Quebec into New England
 17 on which we've been quite successful getting
 18 blocks of transmission. When I say blocks
 19 of transmission, that might be 3 megawatts
 20 for six months, it might be 12 megawatts for
 21 a year, it might be a combination of firm
 22 and non-firm, but these are blocks of
 23 transmission that owners of those
 24 transmission rights have put up in some
 25 cases for auction. In some cases, a

Page 16

1 negotiated price, and there are some changes
 2 happening, those Phase 1 and Phase 2 rights
 3 are being renewed within, I think, 18 months
 4 time, and there's some uncertainty with the
 5 owners as to how they're going to proceed.
 6 So to put a pen in what it's worth is really
 7 quite tough.
 8 MR. O'BRIEN:
 9 Q. Yeah, it's difficult to do that, yeah. I
 10 guess, in terms of where that leaves us for
 11 the future to the extent it might be
 12 available, and to the extent that some of
 13 the value there could be used to mitigate
 14 rates, that's there?
 15 MR. JONES:
 16 A. Absolutely.
 17 MR. O'BRIEN:
 18 Q. Okay. Slide 11, you mentioned contract
 19 markets. Is that generally for firm energy?
 20 MR. JONES:
 21 A. Both firm and non-firm.
 22 MR. O'BRIEN:
 23 Q. All right, and does NEM trade in that
 24 fashion right now for both?
 25 MR. JONES:

Page 17

1 A. Yes.

2 MR. O'BRIEN:

3 Q. And is that something that Power Advisory

4 talked about some concerns about Board

5 regulation over really a fast paced

6 environment and you being required to be

7 nimble, that kind of thing, is that

8 something that the same principle would

9 apply here?

10 MR. JONES:

11 A. Absolutely.

12 MR. O'BRIEN:

13 Q. Absolutely, okay. Slide 13, you talk about

14 capacity subject to your reliability and

15 resource adequacy study that's ongoing, I

16 guess, right now. What impact could that

17 have on the dollar amount available from

18 export sales for mitigation purposes?

19 MR. JONES:

20 A. Well, depending on the outcome of that

21 study, for example, if there is more

22 capacity installed here on the island for

23 long term backup of the LIL, for example,

24 which is being discussed, there are

25 scenarios in which you could offer, for

Page 18

1 example, a transmission contingent firm

2 product. So as long as the LIL is in

3 service, then potentially there's the

4 opportunity to sell capacity, which is no

5 different than the Nova Scotia block.

6 MR. O'BRIEN:

7 Q. Okay.

8 GREENE, Q.C.:

9 Q. Excuse me again, Mr. Jones, you need to

10 speak up. Some people are having difficulty

11 hearing you.

12 MR. JONES:

13 A. Sorry.

14 MR. O'BRIEN:

15 Q. And one of the last areas I just wanted to

16 cover with you, Mr. Jones, Slides 17 and 18,

17 you talk about – and these are guiding

18 principles for a collaboration between Hydro

19 and NEM, is that right?

20 MR. JONES:

21 A. Correct.

22 MR. O'BRIEN:

23 Q. As part of your collaboration, is there a

24 principle of least cost sort of built into

25 that as well? Did you consider that as

Page 19

1 well?

2 MR. JONES:

3 A. Absolutely, yes.

4 MR. O'BRIEN:

5 Q. And when you look at Slide 19, you talk

6 about reliability trumping, I guess,

7 trumping all at that point. I want to get a

8 better flavour kind of, of the discussions

9 that occur between Hydro and NEM with

10 respect to production planning and

11 performance upfront, and as well kind of the

12 oversight that you look at after the fact.

13 Can you expand on that a little bit more

14 just to show how reliability would trump?

15 MR. JONES:

16 A. So what we would do, every week our

17 management production scheduling group would

18 prepare a plan for the following week, for

19 the next seven days. We would sit with

20 Newfoundland and Labrador Hydro, and between

21 Hydro and NEM, we would discuss the

22 availability of units, and NEM also sits in

23 on daily calls with the plant operators to

24 talk about the availability of the units

25 because that obviously drives the capability

Page 20

1 of the system. We would discuss how the

2 impact of a proposed production plan for the

3 following week will impact resources, and

4 how it may or may not impact reliability.

5 Sometimes if there's sufficient reserves in

6 the system, the impact on reliability is

7 negligible. We would also look at how the

8 water would be managed to ensure that the

9 water resources are available to meet the

10 generation schedules as are identified.

11 Then on top of that, we would look at

12 capacity requirements as well, maintain

13 certain spinning reserves on the system. We

14 would discuss that with Hydro and we would

15 set an order of start up and shut down for

16 various units, and we'd set out the plan for

17 the following week, and then as long as the

18 plan doesn't vary in any significant way or

19 material way from that plan, the plan is

20 set.

21 MR. O'BRIEN:

22 Q. And in terms of fulfilling that plan, NEM

23 fulfills the plan after upfront instruction

24 from or collaboration with HYDRO, is that

25 fair?

Page 21

1 MR. JONES:
 2 A. Well, Hydro provides the criteria under
 3 which we operate. NEM operates or creates
 4 plans for the market in light of those
 5 criteria, puts forward an overall dispatch
 6 plan which includes both native load and
 7 external market activities, and then Hydro
 8 reviews that with us and then we basically
 9 approve the plan.
 10 MR. O'BRIEN:
 11 Q. Okay, and those weekly meetings, do you look
 12 at what happened the week before or is that
 13 the kind of oversight the week before?
 14 MR. JONES:
 15 A. Absolutely. Every meeting there's a
 16 discussion of what happened last week,
 17 what's the plan for this week, and what's
 18 the three year outlook.
 19 MR. O'BRIEN:
 20 Q. And what if anything are the consequences or
 21 outcomes if for some reason NEM operates
 22 outside of the direction or plan of Hydro,
 23 how does that work?
 24 MR. JONES:
 25 A. NEM does not operate the facilities. Hydro

Page 22

1 operates the facility.
 2 MR. O'BRIEN:
 3 Q. And in terms of purchasing and that sort of
 4 thing, if NEM operates outside of
 5 instruction from Hydro, what are the
 6 consequences of that?
 7 MR. JONES:
 8 A. We can't operate outside of the instruction
 9 from Hydro.
 10 MR. O'BRIEN:
 11 Q. And it won't happen, can't happen?
 12 MR. JONES:
 13 A. It cannot happen. First and foremost,
 14 Hydro's production planning group works with
 15 NEM's scheduling group to set the schedules,
 16 but ultimate reliability constraints are
 17 governed by the Newfoundland and Labrador
 18 system operator.
 19 MR. O'BRIEN:
 20 Q. Okay, so it's not possible for that to
 21 happen, okay. I wonder if I could turn to
 22 you, Mr. Roberts, just on your presentation.
 23 If we could bring up Slide 6, and I thank
 24 you for the information you gave yesterday,
 25 it was helpful with respect to the 2016

Page 23

1 reorg, and it gave me some additional
 2 information that was helpful. So you were
 3 front and foremost for that reorg at that
 4 time by the sounds of it, and you indicated
 5 that rate mitigation was a focus of reorg at
 6 that time. Is that fair?
 7 MR. ROBERTS:
 8 A. That's absolutely correct, yes.
 9 MR. O'BRIEN:
 10 Q. Okay, so I wanted to draw your attention
 11 just as we speak here to the second and
 12 third bullets about how you ensure
 13 efficiencies and cost optimization, but more
 14 along the lines of avoiding duplications,
 15 and you talked about Power Supply yesterday
 16 as well, and that Power Supply was developed
 17 around that time as well, and there was a
 18 thought process behind avoiding duplication
 19 there, but also transitioning to the future.
 20 So you were looking at how we would
 21 transition out of, I guess, once
 22 commissioning occurred, and walk me through
 23 how you set up that structure to avoid
 24 duplication?
 25 MR. ROBERTS:

Page 24

1 A. I'm happy to do that. So the first thing
 2 that led to the restructuring, of course,
 3 was Mr. Marshall's decision to bifurcate the
 4 project, and recognizing that we needed
 5 oversight on the Muskrat Falls construction
 6 component, as well as the transmission
 7 component. Because the transmission
 8 component was further along in terms of
 9 construction build, that was the opportunity
 10 to start to create the organization side
 11 that we refer to now as Power Supply because
 12 it would be the entity that would operate
 13 these new assets.
 14 MR. O'BRIEN:
 15 Q. Right.
 16 MR. ROBERTS:
 17 A. And some of the existing assets, of course,
 18 because again a large portion of what Power
 19 Supply makes up today are Churchill Falls or
 20 CF(L)co. So that was the starting point in
 21 terms of defining that structure. So then
 22 the other component that we had to work
 23 through was myself and representatives from
 24 Nalcor, as well Dawn Dalley, the Vice
 25 President for Corporate Services in Hydro,

Page 25

1 and the Hydro team sat together
 2 cooperatively and worked out how to take the
 3 existing people that we had, and determine
 4 which folks would go into Newfoundland and
 5 Labrador Hydro and support the hydro
 6 operation, and which ones would stay inside
 7 of Nalcor and support all the Nalcor lines
 8 of business, including Power Supply. So to
 9 give you an example, and these are not the
 10 exact numbers, but if we had ten people in
 11 Human Resources, five might have gone into
 12 Hydro and five would have stayed in Nalcor.
 13 We might have through that process obviously
 14 given people some different roles and
 15 responsibilities, and maybe a better example
 16 of that is on the environmental side. So we
 17 had a corporate team and it served all lines
 18 of business that had specialty areas which
 19 they oversaw, and when we decided to move
 20 some people into Hydro to make it more
 21 autonomous and keep some in Nalcor, as we
 22 did that split and put some over here and
 23 some over here without adding anybody, some
 24 of them had to become more generalist and
 25 cover more topic areas as opposed to

Page 26

1 specialists.
 2 MR. O'BRIEN:
 3 Q. Okay.
 4 MR. JONES:
 5 A. And that's sort of how we approached it.
 6 MR. O'BRIEN:
 7 Q. All right, and you've seen – I take it
 8 you've reviewed Liberty's evidence and
 9 Liberty suggested, I guess, after
 10 commissioning that there might be a
 11 potential for moving Power Supply and, I
 12 guess, they've termed it reintegrating Power
 13 Supply into Hydro, but they've also
 14 indicated that they see some duplication
 15 there. Have you looked into the details of
 16 that duplication to see whether or not it
 17 even exists? Is there a level of
 18 duplication there?
 19 MR. ROBERTS:
 20 A. Yes. So, I mean, we worked very closely
 21 with Mr. Antonuk and his team through that
 22 process and I think there's a difference in
 23 what I see between finding some synergy.
 24 MR. O'BRIEN:
 25 Q. Yeah.

Page 27

1 MR. ROBERTS:
 2 A. As opposed to creating duplication.
 3 MR. O'BRIEN:
 4 Q. Okay.
 5 MR. ROBERTS:
 6 A. We fully acknowledge that there's roles in
 7 Power Supply and roles in Hydro that would
 8 have the same job title and similar mandates
 9 for different businesses.
 10 MR. O'BRIEN:
 11 Q. Yeah.
 12 MR. ROBERTS:
 13 A. But again, those are not what I would
 14 consider duplication. I mean, as Mr.
 15 Marshall said, I mean, the only way to avoid
 16 having similar roles in different
 17 organizations is just to have one, and lots
 18 of organizations structure with multiple
 19 lines of business.
 20 So, I think where we were focused was
 21 if we did bring Power Supply in – and I
 22 don't know, to be truthful, if reintegration
 23 is the right characterization because it was
 24 never really in there. Some of the
 25 corporate services might have been part of

Page 28

1 it, but you know, CF(L)Co. wasn't in there
 2 and that's a large part of Power Supply, and
 3 now we are staffing up the new assets. So,
 4 they were never really – or they were never
 5 in Hydro. But where we focused with Liberty
 6 was, okay, well, if we did and if we took
 7 the engineering operations, for example, of
 8 Power Supply and the engineering operations
 9 for Hydro and brought them together, could
 10 we create some synergy? And the answer to
 11 that, I believe, would be yes.
 12 MR. O'BRIEN:
 13 Q. Okay.
 14 MR. ROBERTS:
 15 A. I think where we differ is on the amount of
 16 synergy. The Liberty numbers, I believe –
 17 I'm going by memory, suggest -
 18 MR. O'BRIEN:
 19 Q. 113, I think, FTEs was what they had used.
 20 MR. ROBERTS:
 21 A. Yeah, so -
 22 MR. O'BRIEN:
 23 Q. But where do you land on that in terms of
 24 the amounts?
 25 MR. ROBERTS:

Page 29

1 A. Right. So, just to stick with the
 2 engineering example, if my memory serves me
 3 correctly, I believe they identified the
 4 possibility of eliminating 24 engineering
 5 positions by doing that.
 6 MR. O'BRIEN:
 7 Q. Yeah.
 8 MR. ROBERTS:
 9 A. When our Engineering VPs got together and
 10 their management teams and they looked at
 11 that and gave it a hard thought and, of
 12 course, that's what we're challenged to do
 13 here now and that's the benefit of all this,
 14 to say okay, is there a more optimal way of
 15 doing this. Their numbers that they came up
 16 with were more in the three to five ranges,
 17 as opposed to 24.
 18 (9:30 a.m.)
 19 And so, you know, you stop and think
 20 and say, well, every position counts. So,
 21 why wouldn't you pursue that? And I think
 22 we've laid a lot of the groundwork in terms
 23 of why we wouldn't. Because there are
 24 offsetting costs, even in that scenario, in
 25 terms of – once again – and they're hard to

Page 30

1 measure, I'll be clear about that. But in
 2 terms of having a dedicated engineering team
 3 focused on the line of business that it
 4 serves and the asset base that it serves.
 5 So, in particular, if you think about
 6 it in terms of Newfoundland and Labrador
 7 Hydro -- and I'm going to speak a little bit
 8 on behalf of Ms. Williams and Mr. Haynes, so
 9 they can jump in.
 10 MR. O'BRIEN:
 11 Q. Sure.
 12 MR. ROBERTS:
 13 A. But I know if I were leading either of those
 14 entities, you know, with sustaining capital
 15 in the tens of millions, I would want to
 16 make sure that my team were focused on my
 17 assets and that there was never a fleeting
 18 thought as to where they're focused. So
 19 that would be part of it, in terms of
 20 offsetting the cost of that and what we're
 21 looking at in terms of going forward and how
 22 we grow inside of the Power Supply, as we've
 23 said. We want to make sure that we're
 24 structuring our organization to be flexible
 25 and if we think that we will advance on some

Page 31

1 of these natural resource developments, we
 2 want to have the capacity inside of Power
 3 Development to take that on.
 4 MR. O'BRIEN:
 5 Q. And so, in terms of where you land with
 6 respect to Liberty's analysis, I guess
 7 there's a couple of differences. One is the
 8 numbers that you see, but the other, I
 9 guess, and both you and Mr. Marshall
 10 indicate, is the timing of any sort of a
 11 restructuring is an issue for you guys. Is
 12 that fair?
 13 MR. ROBERTS:
 14 A. Yeah, I think that's fair. I mean, again,
 15 I'm not wanting to be disparaging of the
 16 work that Liberty did. I think they did
 17 good work in the limited time that they had
 18 to do it, and it was difficult because, you
 19 know, trying to provide them data and org
 20 charts and in an operation that's continuing
 21 to evolve and change. You know, they would
 22 request org charts and three weeks later,
 23 they might have been out of date. They were
 24 looking at certain vacancies that by the
 25 time they wrote the report, they were no

Page 32

1 longer vacant, but others might have been.
 2 So, it was a challenge that way.
 3 But certainly, yes, I think that
 4 because of our history and because of where
 5 we've been over the last number of years and
 6 our concern being around reliability, we
 7 just want to be cautious. I think that's a
 8 utility culture to be cautious around
 9 ensuring that we can properly integrate
 10 these assets. And once we're certain of
 11 that, we will start to see that decline.
 12 And so the path that I presented
 13 yesterday is the current projection. You
 14 know, if GE delivers, for example, and six
 15 months in we're feeling very secure about
 16 the supply of power, we'll advance that.
 17 But, if -
 18 MR. O'BRIEN:
 19 Q. Well, let's look at that path, I guess.
 20 MR. ROBERTS:
 21 A. Sure.
 22 MR. O'BRIEN:
 23 Q. I think it's slide 10, is it? I'm just
 24 looking at the trends, and I had some
 25 questions on that. So, in that, is that

Page 33

1 total Nalcor FTEs?
 2 MR. ROBERTS:
 3 A. Yes, that would be.
 4 MR. O'BRIEN:
 5 Q. Okay. So, that's total, and that would be
 6 regulated, unregulated, anything in Nalcor?
 7 MR. ROBERTS:
 8 A. Everything in Nalcor, oil and gas, energy
 9 marketing, everything.
 10 MR. O'BRIEN:
 11 Q. All right. So, when we look at the slide
 12 there, we do see an increase in FTEs up to
 13 your first forecast, I guess, 2019, and I
 14 guess that's kind of transition to
 15 operations related. Is that fair? Is that
 16 kind of getting the -
 17 MR. ROBERTS:
 18 A. Yeah. The bulk of the people that we would
 19 see coming in were always planned to come in
 20 for that year.
 21 MR. O'BRIEN:
 22 Q. Right.
 23 MR. ROBERTS:
 24 A. So, this is not something that's changed.
 25 We'd always forecasted that we'd be hitting

Page 34

1 our peak around this time, based on the
 2 schedule, because as I said before, you're
 3 bringing on employees now to operate these
 4 assets and they have to be brought on well
 5 in advance of them actually starting because
 6 they're important to have in terms of, you
 7 know, the commissioning and acceptance
 8 testings of these assets and learning the
 9 assets before they actually operate them.
 10 And in some cases, of course, as has been
 11 discussed with the LIL, we've already been
 12 operating that. So, we have to have
 13 operators. So, yes, that's a big portion of
 14 what we've seen.
 15 MR. O'BRIEN:
 16 Q. Of what you see in the increase.
 17 MR. ROBERTS:
 18 A. A secondary component of that, albeit it a
 19 much smaller one, is the fact that we've had
 20 to put in a new business system, operating
 21 system, new IT platform to help us basically
 22 upgrade the system that we had, but also
 23 because you're bringing on that magnitude of
 24 new assets. So, we brought in a new
 25 financial system and so, we've had to bring

Page 35

1 some people in to support that as well. So
 2 that contributes to what you're seeing.
 3 MR. O'BRIEN:
 4 Q. The decrease that we see from 2019 as
 5 forecast down to 2022, is that - I know you
 6 mentioned yesterday in terms of your plan
 7 going forward and you'd given a figure, I
 8 think, in the 15 to 20 million dollar ranges
 9 where you see some savings with the
 10 reductions in FTEs, but you did also mention
 11 that that was kind of contingent on where
 12 Holyrood sort of pans out. Are those
 13 reductions all related to Holyrood or are
 14 they related to other areas of reductions
 15 that are already planned or that have been
 16 on plan for some time?
 17 MR. ROBERTS:
 18 A. Yes, so they're much more than just
 19 Holyrood.
 20 MR. O'BRIEN:
 21 Q. Yeah, okay.
 22 MR. ROBERTS:
 23 A. The Power Development team, which represents
 24 -- and I'm going to use rough numbers,
 25 around 25 people today. Those would all

Page 36

1 transition out.
 2 MR. O'BRIEN:
 3 Q. Okay, I figured that.
 4 MR. ROBERTS:
 5 A. The transition operations team, and there's
 6 probably ten-ish in that group, they would
 7 all transition out.
 8 MR. O'BRIEN:
 9 Q. Okay.
 10 MR. ROBERTS:
 11 A. The business system project team I just
 12 described, there's probably about 15 people.
 13 They would transition out.
 14 MR. O'BRIEN:
 15 Q. All right.
 16 MR. ROBERTS:
 17 A. There's corporate services group, finance,
 18 HR, safety, et cetera, that are involved in
 19 this transition. There's roughly 15-20 of
 20 those and that would transition out. So,
 21 you get those numbers, plus the Holyrood
 22 number is approximately 90.
 23 MR. O'BRIEN:
 24 Q. About 90?
 25 MR. ROBERTS:

Page 37

1 A. Out of the numbers, yeah.
 2 MR. O'BRIEN:
 3 Q. Okay. So that's where we see the big
 4 difference in the – I mean, it's over half
 5 of what you're looking at here. Is that
 6 fair?
 7 MR. ROBERTS:
 8 A. Yeah, that's about right. It's about half,
 9 yeah.
 10 MR. O'BRIEN:
 11 Q. Yeah, okay. And are any of those figures or
 12 any of those FTEs similar to the ones that
 13 Liberty has identified that could be reduced
 14 with Power Supply? Are any of those kind of
 15 similar or overlaps would you figure?
 16 MR. ROBERTS:
 17 A. It's been difficult to do an apples to
 18 apples comparison.
 19 MR. O'BRIEN:
 20 Q. Can you parse that out?
 21 MR. ROBERTS:
 22 A. But I will say there's definitely some
 23 overlap there, for certain.
 24 MR. O'BRIEN:
 25 Q. Okay.

Page 38

1 MR. ROBERTS:
 2 A. But for different reasons, I think. You
 3 know, they've identified some synergies in
 4 their minds in terms of the integration, but
 5 they've also identified, I think, some of
 6 these roles that would be transitional that
 7 they could see going, and of course, we
 8 agree.
 9 MR. O'BRIEN:
 10 Q. Yeah, okay. And apart from the Holyrood
 11 figures, are you on target for the other
 12 ones, in terms of you see that as being
 13 realistic? So, Holyrood you got 90 and I
 14 think the figure – was the figure of 160
 15 range that you said yesterday. So, do you
 16 think you're on the target for the remainder
 17 by 2022?
 18 MR. ROBERTS:
 19 A. So, we have a good plan to get the 162 that
 20 are identified in this chart and what we're
 21 tasked with as a team up here, the people
 22 that are at this table, is to try to find
 23 another 30-ish to get us back. Because our
 24 commitment and our goal, as we've expressed
 25 to the shareholder over the last few years,

Page 39

1 is to get back towards that 1463 number.
 2 MR. O'BRIEN:
 3 Q. 1463, yeah, okay.
 4 MR. ROBERTS:
 5 A. So, I think we have a good plan. It has to
 6 stay flexible, but we have a good plan to
 7 get to the number of 1492 and I'm confident
 8 that between us up here that we can find a
 9 plan inside the organization to find the
 10 additional efficiencies.
 11 MR. O'BRIEN:
 12 Q. And you're working on that now, are you?
 13 MR. ROBERTS:
 14 A. Every day.
 15 MR. O'BRIEN:
 16 Q. If I could turn to the Sustainable Cost
 17 Management presentation, Mr. Haynes and Ms.
 18 Williams. I only have a few questions for
 19 you both. The Power Supply side of things,
 20 Mr. Haynes, just for you, you had indicated
 21 there's a lot of collaboration over the
 22 years between Power Supply and Hydro, I
 23 think? Is that fair?
 24 MR. HAYNES:
 25 A. Right.

Page 40

1 MR. O'BRIEN:
 2 Q. That's a constant thing by the sounds of it.
 3 MR. HAYNES:
 4 A. There's quite a bit and I will add, when I
 5 was in Hydro, I was encouraging a lot more
 6 collaboration between Engineering, so we
 7 share experiences, you know, and things like
 8 that there and I continue to do that in
 9 Power Supply role.
 10 MR. O'BRIEN:
 11 Q. Yeah.
 12 MR. HAYNES:
 13 A. There's a lot of dialog between the
 14 Engineering folks and the Operating folks to
 15 make sure that we're all aligned and, you
 16 know, that we're likeminded people, if you
 17 will.
 18 MR. O'BRIEN:
 19 Q. Yeah.
 20 MR. HAYNES:
 21 A. I would emphasize too though that going back
 22 to the organizational structure, even in
 23 conversation with Liberty as well, is that
 24 when we were looking at that there, you
 25 know, Hydro has a large river system,

Page 41

1 running the river plants in Bay d'Espoir,
 2 and there's a lot of coordination back and
 3 forth there.
 4 When you go to Labrador, it's pretty
 5 hard to separate Churchill Falls plant,
 6 which is unregulated clearly, from Muskrat
 7 Falls. So, it's an integrated system and I
 8 think there's a lot of value in maintaining
 9 that as a whole from that point of view of
 10 oversight, along with the capital program
 11 which is growing. But there is a lot of
 12 collaboration back and forth.
 13 MR. O'BRIEN:
 14 Q. There's a lot, yeah.
 15 MR. HAYNES:
 16 A. And we don't want to – as I said in the
 17 presentation there, we don't want to create
 18 a drafting department. We're not going to
 19 go out and create a cyber security group.
 20 We're going to piggyback on things that are
 21 already there and can accommodate that.
 22 Maybe it requires a part of an FTE or an
 23 FTE, but as opposed to going out and billing
 24 that, that's not warranted, but we do think
 25 that from an operations and engineering

Page 42

1 perspective that it is, because there's lot
 2 of work there to be done.
 3 MR. O'BRIEN:
 4 Q. And from a, I guess, a cost perspective and
 5 a focus perspective of Power Supply going
 6 forward, is it fair to say a certain aspect
 7 of Power Supply would be focused upon
 8 development in the future for the Province
 9 and a certain aspect will be focused on sort
 10 of operations, existing operations now?
 11 MR. HAYNES:
 12 A. That's correct.
 13 MR. O'BRIEN:
 14 Q. Is there – and I know you've – and I'm
 15 assuming you've thought through this, but is
 16 there a benefit to separating those two?
 17 MR. HAYNES:
 18 A. I don't think so. I think you're – I think
 19 having the people who operate that river
 20 system with respect to understanding how all
 21 that works, there's a lot of – because
 22 that's primarily our goal. There are other
 23 things too, I'm sure. But there are a lot
 24 of advantages to having all that stuff
 25 contained. I don't see a conflict between

Page 43

1 operating and that stuff.
 2 MR. O'BRIEN:
 3 Q. And I'm not suggesting there is, in terms of
 4 a conflict.
 5 MR. HAYNES:
 6 A. Yeah.
 7 MR. O'BRIEN:
 8 Q. And I guess where I'm going is that there's
 9 kind of – from what I gather, there's
 10 collaboration amongst Hydro and Power Supply
 11 and even within Power Supply I imagine
 12 there's collaboration between people who are
 13 looking at the operations versus people
 14 looking at future development.
 15 MR. HAYNES:
 16 A. Yes.
 17 MR. O'BRIEN:
 18 Q. And I'm not suggesting that – I guess what
 19 I'm suggesting is that that collaboration
 20 can still exist with the separation. My
 21 bigger concern is more if there are costs
 22 that should be associated with them and rate
 23 payers should be covering with existing
 24 assets, should they also be covering costs
 25 of -

Page 44

1 MR. HAYNES:
 2 A. There will not be any costs that the rate
 3 payer – there will be no costs borne by the
 4 LIL, the LTA and Muskrat Falls. That would
 5 be associated with new development. If we –
 6 I mean, everybody does jobs off the end of
 7 their table, so to speak, but once it starts
 8 to get a bit of legs and a bit of momentum,
 9 then basically, you know, we would set up
 10 work orders that would ensure -
 11 MR. O'BRIEN:
 12 Q. Okay.
 13 MR. HAYNES:
 14 A. - that that cost would be excluded. If we
 15 go back tomorrow, for instance, and ask the
 16 transmission planning group, for instance,
 17 I'm just speculating -
 18 MR. O'BRIEN:
 19 Q. Yeah.
 20 MR. HAYNES:
 21 A. - that if you look at – we're looking at
 22 bringing in a particular facility and it
 23 needed to have some work done on what is the
 24 best way to connect that up, you know,
 25 what's the right size -

Page 45

1 MR. O'BRIEN:
 2 Q. Right, okay.
 3 MR. HAYNES:
 4 A. - transmission voltage. There'll be a work
 5 order set up and that will not fall to LIL,
 6 LTA or Hydro. That'll be a Nalcor cost.
 7 MR. O'BRIEN:
 8 Q. And will it be easier to do that if you have
 9 separate entities versus setup work orders?
 10 MR. HAYNES:
 11 A. I don't think so, because we would – you
 12 know, we would not go out and set up a
 13 transmission planning group. We would use
 14 the competent transmission planning group
 15 that Hydro already, under the – well, under
 16 Hydro, that they already have. To go out
 17 and set up would – you know, we would drive
 18 costs up in licenses for software and it is
 19 a unique skillset that you just don't hire
 20 off the street very easily. Like the value
 21 is actually using those resources and
 22 setting up work orders to transfer that cost
 23 out so that they're tracked appropriately,
 24 which is basically overseen by the Public
 25 Utilities Board, from the point of view if

Page 46

1 we're using Hydro stuff on the intercompany
 2 transactions and audited by Grant Thornton,
 3 I believe, and so on. So, there's a lot of
 4 diligence there for that there.
 5 MR. O'BRIEN:
 6 Q. And if you could provide – if there was a
 7 change in legislation and you could see some
 8 of the operations side of things become
 9 regulated for those Muskrat Falls assets,
 10 would there be a benefit then for them
 11 coming into Hydro for regulation for rate
 12 payers?
 13 MR. HAYNES:
 14 A. I'm sorry, repeat the question.
 15 MR. O'BRIEN:
 16 Q. Would there be a benefit for rate payers for
 17 regulation of those assets going forward
 18 from looking at O&M costs and capital? I
 19 know there's legislative barriers there that
 20 we might have to get past, but would there
 21 be a benefit?
 22 MR. HAYNES:
 23 A. If all those particular barriers to making
 24 the currently unregulated assets of Muskrat
 25 Falls and LIL were to be – if all the

Page 47

1 various stakeholders and it's better for the
 2 Finance panel to speak to that.
 3 MR. O'BRIEN:
 4 Q. Yeah.
 5 MR. HAYNES:
 6 A. If all those impediments that are there now
 7 from a legislative point of view or any
 8 covenants out there with respect to Federal
 9 Loan Guarantee or bond rating -
 10 MR. O'BRIEN:
 11 Q. Yeah.
 12 MR. HAYNES:
 13 A. - you know, if that's holistically done and
 14 it becomes regulated, yes, we'll have to go
 15 back and reconsider the structure and things
 16 like that.
 17 MR. O'BRIEN:
 18 Q. Well, it wouldn't be – it wouldn't be overly
 19 taxing for you to reconsider that structure,
 20 I guess, would it be?
 21 MR. HAYNES:
 22 A. If those things change and they're
 23 regulated-
 24 MR. O'BRIEN:
 25 Q. Yeah, you could do that?

Page 48

1 MR. HAYNES:
 2 A. If they become regulated, if that is the
 3 result at the end of the day -
 4 MR. O'BRIEN:
 5 Q. Yeah.
 6 MR. HAYNES:
 7 A. - then obviously we need to go back and
 8 reconsider how we're doing things. But I
 9 would also suggest that I'm not quite sure
 10 that means that Power Supply would disappear
 11 because you still have Churchill Falls
 12 assets, which are significant -
 13 MR. O'BRIEN:
 14 Q. Fair.
 15 MR. HAYNES:
 16 A. - and have a roughly 65 – 60 to 65 million
 17 dollars in capital program for the
 18 foreseeable future. We still operate
 19 Menihek, which basically is looking at in
 20 the order of – which is fully funded by
 21 Hydro Quebec, but nevertheless managed by
 22 Power Supply from a construction point of
 23 view and oversight point of view. You know,
 24 there's 70-80 million dollar capital program
 25 that they still have to manage, from that

Page 49

1 perspective.
 2 MR. O'BRIEN:
 3 Q. And would those be still covered in rates?
 4 MR. HAYNES:
 5 A. Pardon?
 6 (9:45 a.m.)
 7 MR. O'BRIEN:
 8 Q. Would those costs be covered in rates?
 9 MR. HAYNES:
 10 A. No.
 11 MR. O'BRIEN:
 12 Q. Or is that a taxpayer cost?
 13 MR. HAYNES:
 14 A. I'm sorry, that would be – Churchill and
 15 Menihek are not, not in rates at all.
 16 MR. O'BRIEN:
 17 Q. Right. So that would be a taxpayer cost
 18 though I guess?
 19 MR. HAYNES:
 20 A. Well, it would be a – you know, obviously
 21 Nalcor costs from that perspective.
 22 MR. O'BRIEN:
 23 Q. Sure, okay. The last area of questions –
 24 actually I had one more question in terms of
 25 O&M savings. There is a bullet on Slide 4,

Page 50

1 if we could bring up Slide 4? Sure. The
 2 last bullet there, and I think you spoke
 3 about this, Mr. Haynes. "Nalcor remains
 4 committed to finding sustainable O&M cost
 5 savings".
 6 MR. HAYNES:
 7 A. Yeah.
 8 MR. O'BRIEN:
 9 Q. And I guess my question was more along the
 10 lines if we have some evidence in terms of
 11 there's an approach of looking at the most
 12 recent, I think it was \$97 or 97 million
 13 dollar O&M savings of reductions in the
 14 range of around 12 million. Are you still
 15 looking at a higher target than that?
 16 MR. HAYNES:
 17 A. We are looking to gain whatever efficiency
 18 we can from that perspective. You know, I
 19 think there may be a difference in timing.
 20 MR. O'BRIEN:
 21 Q. Yeah.
 22 MR. HAYNES:
 23 A. We do have some uncertainty with respect to
 24 the – you know, the overall cost of
 25 actually, you know, maintaining the assets

Page 51

1 of LIL of the DC side as well, even on the
 2 synchronized condenser side. So, there's
 3 some experience that we need to get under
 4 our belt with respect to that, but we are –
 5 you know, we are focused to getting down to
 6 those target levels.
 7 And we have already – you know, like we
 8 talked about the gating or Mike mentioned
 9 the gating process before. Like we have
 10 eliminated some jobs in that process where,
 11 you know, we went in and we think that we
 12 can do a little bit better by using existing
 13 resources and, you know, and even some of
 14 the ongoing capital, sustaining capital,
 15 things like that there that we would look
 16 at. You know, can we contract some of that
 17 out better? As long as it makes economic
 18 sense, that's the way we would go.
 19 MR. O'BRIEN:
 20 Q. So, the figure in Nalcor's submission talks
 21 about 12 million dollar target kind of
 22 annually.
 23 MR. HAYNES:
 24 A. Yeah.
 25 MR. O'BRIEN:

Page 52

1 Q. Is there an overlap between Mr. Roberts' 20
 2 million dollar figure and that 12 million or
 3 are those separate?
 4 MR. HAYNES:
 5 A. I think the 12 million dollars is -
 6 MR. O'BRIEN:
 7 Q. Mr. Roberts is shaking his head. So, I'm
 8 assuming there's not.
 9 MR. ROBERTS:
 10 A. No, they would be separate and that's the
 11 additional efficiencies we're looking to
 12 achieve, yeah.
 13 MR. O'BRIEN:
 14 Q. Okay. That's what I – yeah.
 15 MR. HAYNES:
 16 A. But now, we will be looking at all – any
 17 requests for operating money, you know,
 18 there's a lot of things in the operating
 19 budget with respect to -- you know, I'll
 20 even talk about software licenses and things
 21 like that that have to be done on a
 22 recurrent basis to keep up with all the
 23 cyber things. Like all those things grow
 24 and they're all being challenged from that
 25 perspective.

Page 53

1 MR. O'BRIEN:
 2 Q. Yeah.
 3 MR. HAYNES:
 4 A. And I will – I'll be quite honest with you,
 5 that's kind of a work in progress. We're
 6 not there yet.
 7 MR. O'BRIEN:
 8 Q. Okay. All right. And that was my next
 9 question.
 10 MR. HAYNES:
 11 A. But we're determined to find the savings.
 12 MR. O'BRIEN:
 13 Q. All right, okay. And the last area, Ms.
 14 Williams, I wanted to ask you – if we can
 15 move to Slide 5, and you spoke on this
 16 slide, I believe. You mentioned the
 17 efficiency and effectiveness plan and you
 18 also mentioned that Hydro is committed to
 19 two million dollars in operating savings. I
 20 just wanted to get a little bit more
 21 background on the origin of that figure. I
 22 had asked Liberty about it and it didn't
 23 seem to be that they felt that came from
 24 them, but can you give me some background on
 25 the origin of that dollar figure?

Page 54

1 MS. WILLIAMS:
 2 A. I'm not familiar obviously with the question
 3 that you would have asked Liberty directly,
 4 but I think Liberty did talk about two
 5 million in theirs and so, we're committing
 6 to that. Ideally we'll get more than two
 7 million.
 8 MR. O'BRIEN:
 9 Q. Okay.
 10 MS. WILLIAMS:
 11 A. And certainly, those projects and
 12 initiatives that I mentioned, they won't
 13 turn on a dime in six months or a year.
 14 MR. O'BRIEN:
 15 Q. No.
 16 MS. WILLIAMS:
 17 A. So, I think we'll certainly have a lot more
 18 clarity when we submit our report to the
 19 report next year.
 20 MR. O'BRIEN:
 21 Q. And that's the plan for next year is to
 22 submit that report.
 23 MS. WILLIAMS:
 24 A. Right.
 25 MR. O'BRIEN:

Page 55

1 Q. Do you have any idea as to where you are now
 2 in terms of what steps you've taken? Are
 3 you getting close to that figure or do you
 4 have any framework?
 5 MS. WILLIAMS:
 6 A. Well, I mean, if you look at our last GRA,
 7 and the final order just came out there in
 8 the fall, we were afforded or sorry, given a
 9 disallow of about four million dollars from
 10 our previous GRA. So, we are certainly
 11 making – and we anticipated that through
 12 some of the – you know, just through the GRA
 13 process anyway, the RFIs. So, from the last
 14 – you know, from our initial submittal to
 15 the order that we received, we're making
 16 significant steps towards taking that money
 17 out.
 18 MR. O'BRIEN:
 19 Q. Okay.
 20 MS. WILLIAMS:
 21 A. But this would be on top of -
 22 MR. O'BRIEN:
 23 Q. On top of that?
 24 MS. WILLIAMS:
 25 A. - on that savings that we already are

Page 56

1 working toward.
 2 MR. O'BRIEN:
 3 Q. Okay.
 4 MS. WILLIAMS:
 5 A. Our ability to fully gain that four million,
 6 we're working toward it. Will we achieve it
 7 fully in this year? It's still a bit of a
 8 stretch, but we're certainly committed to
 9 one million on top of what the last GRA was
 10 ordered.
 11 MR. O'BRIEN:
 12 Q. Okay. And so we're looking at those are
 13 annual savings? Is that fair?
 14 MS. WILLIAMS:
 15 A. Yes, and it certainly wouldn't be
 16 cumulative. Like it wouldn't be two million
 17 dollars one year and then the next we get
 18 two more million. It wouldn't be four, six,
 19 eight obviously.
 20 MR. O'BRIEN:
 21 Q. Yeah, okay.
 22 MS. WILLIAMS:
 23 A. We'll work toward that. Inflation will
 24 obviously affect things.
 25 MR. O'BRIEN:

Page 57

1 Q. Sure.

2 MS. WILLIAMS:

3 A. You know, labour contracts would affect

4 things. But that's where our commitment is

5 right now.

6 MR. O'BRIEN:

7 Q. And is that on top of the 20 million or 15

8 to 20 million Mr. Roberts was speaking of as

9 well or is there an overlap?

10 MS. WILLIAMS:

11 A. I think there will be overlap there because

12 we are certainly a subset of the FTEs that

13 Mr. Roberts mentioned. So, it would be a

14 subset, some portion of that, and the two

15 million is not necessarily just FTE savings.

16 MR. O'BRIEN:

17 Q. No, I figured that, yeah.

18 MS. WILLIAMS:

19 A. Right, yeah. So, it would be some portion

20 of a subset of what Mr. Roberts mentioned.

21 MR. O'BRIEN:

22 Q. Okay. I have no further questions for the

23 Panel. Thank you very much.

24 CHAIR:

25 Q. Thank you, Mr. O'Brien. Consumer Advocate.

Page 58

1 MR. FITZGERALD:

2 Q. Thank you, Madame Chair. I'm going to

3 start, I have a few questions and then Mr.

4 Browne is going to have some questions as

5 well. We'll strive not to overlap, of

6 course. Good morning, Panel.

7 Ms. Williams, I'd start with you. Just

8 a general question on load forecasting. We

9 understand that the load forecast on the

10 island is declining. Is that -

11 MS. WILLIAMS:

12 A. Are you talking the Newfoundland Power load

13 forecast, Hydro's load forecast?

14 MR. FITZGERALD:

15 Q. Yours.

16 MS. WILLIAMS:

17 A. I would have to - I didn't do any

18 preparation on load forecast, to be honest.

19 MR. FITZGERALD:

20 Q. Okay.

21 MS. WILLIAMS:

22 A. For this hearing. So, perhaps if you pursue

23 our line of question a little further, I

24 might be able to help out what you want to

25 pursue.

Page 59

1 MR. FITZGERALD:

2 Q. Okay. Do you expect any significant load

3 growth from say 2021 to 2030?

4 MS. WILLIAMS:

5 A. I don't think we anticipate significant load

6 forecast - sorry, load increase. However,

7 that would be dependent on anything that

8 could come up, any mines, any data centres,

9 anything like that. That can change fairly

10 quickly.

11 MR. FITZGERALD:

12 Q. On the island?

13 MS. WILLIAMS:

14 A. You know, if you look at the media, there's

15 certainly things that come across our plate

16 and some can turn into something real and

17 some couldn't. I mean, certainly there's,

18 you know, an interest in something around

19 Lewisporte right now. So, there's always

20 anything that could change at any point.

21 MR. FITZGERALD:

22 Q. So, just anticipating when the LIL is

23 operational, we're all hopeful it's going to

24 be sooner than later, with that and with -

25 you know, even with Holyrood going offline,

Page 60

1 there won't be any net gain in - or there

2 will be a net gain in capacity, I suppose,

3 on the island?

4 MS. WILLIAMS:

5 A. There'll be a small net gain of capacity,

6 yes.

7 MR. FITZGERALD:

8 Q. So, is it fair to say then that there

9 probably would be no need, despite your

10 comment just then, for additional capacity

11 to 2030 on the island?

12 MS. WILLIAMS:

13 A. That is subject to the Reliability Resource

14 Adequacy Study that we are currently working

15 through with the Board and intervenors. I'm

16 half expecting that that will pick up some

17 steam after we get through this process, and

18 depending on the decision of the Board and,

19 I guess, certainly the input from the

20 intervenors on exactly what the Island will

21 need will dictate what capacity we have at

22 the end of the day, after we finish through

23 that process.

24 MR. FITZGERALD:

25 Q. Fair enough. Just a general question to the

Page 61

1 Panel, I guess, and perhaps, you, Mr.
 2 Haynes. Mr. Marshall has indicated what the
 3 current estimate of Muskrat Falls' annual
 4 operating costs will be to 2030, but I
 5 wasn't quite sure what his answer was on
 6 that. Do you have an insight there?
 7 MR. HAYNES:
 8 A. I do not. You mean the O&M cost?
 9 MR. FITZGERALD:
 10 Q. Yes, on an annual basis.
 11 MR. HAYNES:
 12 A. I think we're in about a hundred-million-
 13 dollar range and I know that we're working
 14 it down, but you know, I don't have a number
 15 off the top of my head.
 16 MR. FITZGERALD:
 17 Q. But that's the ballpark?
 18 MR. HAYNES:
 19 A. I think it's 97 and that includes, you know,
 20 the IBA payments and water rental, things
 21 like that. I think our O&M costs is down
 22 around the eight-million-dollar mark, in
 23 that order.
 24 MR. FITZGERALD:
 25 Q. Okay.

Page 62

1 MR. HAYNES:
 2 A. And you know, obviously, we want to get that
 3 down to what is the right number to be
 4 safely operating the facilities.
 5 MR. FITZGERALD:
 6 Q. Sure. Jumping around here a bit. Mr.
 7 Roberts, you're next. If we can go to slide
 8 10, the—and you spoke about this earlier.
 9 The figure I think that you indicated that
 10 you're striving or the corporation is
 11 striving to get to is the 2016 figure of
 12 1463 FTEs. Prior to 2016, would you have an
 13 idea of what the staffing levels were?
 14 MR. ROBERTS:
 15 A. Not off the top my head. I would hazard to
 16 say that I don't think they were materially
 17 different, but I'd have to confirm that.
 18 MR. FITZGERALD:
 19 Q. Sure, because I see an upward trend. I'm
 20 wondering in 2010 would--or you know, just
 21 as—take a number.
 22 MR. ROBERTS:
 23 A. Yeah, what I can say is that we've been
 24 working very hard for the last five or six
 25 years on keeping our operations costs as

Page 63

1 flat as possible in what I could best
 2 describe as steady-state businesses, if
 3 there are any in fact because we're all
 4 involved in the integration of this, but—so,
 5 Hydro has tried to keep a fairly flat
 6 number. I think there's been some growth
 7 reflected, I mean that the Board has
 8 reviewed and so forth that Ms. Williams can
 9 speak better to. CF(L)Co. I know has
 10 stayed flat. The Corporate Services Groups
 11 have stayed flat or down in terms of FTE
 12 count. So, I know that there's been a
 13 concerted effort to manage those costs
 14 through that period. You know, we've done
 15 other things as well. We've had zero
 16 percent quality increases for management for
 17 four years for example and one year for the
 18 union. You know, budgets go through a lot
 19 of scrutiny in terms of subsidiaries have to
 20 present them to their boards, then they have
 21 to be scrutinized by the Nalcor Board, and
 22 then we do go over and present them to
 23 Treasury and to the government. So,
 24 everybody is focused on making sure that the
 25 existing assets and structures are staying

Page 64

1 at a cost level that is as flat as we can
 2 keep it. So, the growth that we've seen
 3 whether it's pre-2016, if there was some
 4 small growth as well, it would be indicative
 5 again of bringing up the curve, people to
 6 start to learn and build these new assets
 7 and commission these new assets.
 8 MR. FITZGERALD:
 9 Q. Sure.
 10 MR. ROBERTS:
 11 A. Almost primarily.
 12 MR. FITZGERALD:
 13 Q. So, this number of 1463, that's the number
 14 you're striving for thereabouts once you get
 15 to steady state?
 16 MR. ROBERTS:
 17 A. That's correct, yeah.
 18 MR. FITZGERALD:
 19 Q. Okay.
 20 MR. ROBERTS:
 21 A. We have the majority of the plan for now
 22 that we can see and I think that is what we
 23 feel would be a good number to be able to
 24 try to manage the asset base that we have.
 25 MR. FITZGERALD:

Page 65

1 Q. Okay. Just a general question regarding oil
 2 revenues, Mr. Haynes, or maybe this is
 3 perhaps directed better to Mr. Jones. Do
 4 you have a forecast of the annual net
 5 revenues from oil?
 6 MR. JONES:
 7 A. I don't.
 8 MR. HAYNES:
 9 A. I think that would be better left to the
 10 Finance Panel that will be coming up next.
 11 MR. FITZGERALD:
 12 Q. Okay.
 13 MR. HAYNES:
 14 A. They would have a bit more information on
 15 that than –
 16 MR. FITZGERALD:
 17 Q. Fair enough.
 18 MR. HAYNES:
 19 A. The three on this side of the table aren't
 20 involved in the oil business at all.
 21 MR. FITZGERALD:
 22 Q. Okay.
 23 MR. ROBERTS:
 24 A. Thanks, Jim.
 25 MR. HAYNES:

Page 66

1 A. Sorry, Mike.
 2 MR. FITZGERALD:
 3 Q. Spread the fire.
 4 MR. ROBERTS:
 5 A. Yeah.
 6 MR. FITZGERALD:
 7 Q. Okay, we'll defer that one, thanks. Mr.
 8 Marshall referred just briefly to an eastern
 9 provincial regional transmission
 10 organization or something to that effect. I
 11 didn't quite get the correct name on it, but
 12 it seems to be a suggestion of some type of
 13 partnership or something, and we're just
 14 wondering if this organization in a general
 15 sense or a global sense would offer any
 16 relief from a rate mitigation perspective.
 17 Is that initiative there for that—now, it's
 18 obviously for Nalcor's purposes, but do you
 19 foresee any benefits for rate payers there?
 20 MR. HAYNES:
 21 A. So, are you talking about an East Coast
 22 transmission organization or the –
 23 MR. FITZGERALD:
 24 Q. Yes, yes.
 25 MR. HAYNES:

Page 67

1 A. Okay.
 2 MR. FITZGERALD:
 3 Q. Yes.
 4 MR. HAYNES:
 5 A. I'm going to go back a long time ago. A
 6 long time ago there was an initiative
 7 started on that there, yeah. It was
 8 actually started by Hydro-Quebec and they
 9 were talking about an East Coast
 10 transmission organization. And I did attend
 11 one meeting back in the nineties along with
 12 Nova Scotia and New Brunswick and Quebec,
 13 and that was the only meeting. It just
 14 disappeared. You know, I think there's a
 15 lot of negotiations going on there because
 16 every province or every jurisdiction are
 17 going to have their own self-interest to
 18 protect and look after from their rate payer
 19 point of view. It would eliminate, in
 20 theory, pancake rates, but it would also
 21 make the rate a bit higher. So, I think it
 22 will be really premature to see where that
 23 goes from that perspective and I would think
 24 that will be a number of years away before
 25 all the interested parties would actually

Page 68

1 come together and have one. You know, I
 2 think on paper—in the United States, you
 3 know, the transmission organizations don't
 4 respect states lines.
 5 MR. FITZGERALD:
 6 Q. Yes.
 7 MR. HAYNES:
 8 A. You know, it has nothing to do with the
 9 state per se. You know, the New York ISO
 10 may be there, but a lot them are across the
 11 state lines. In Canada, it's pretty
 12 restrictive to provincial jurisdiction. So,
 13 it would require a lot of cooperation by a
 14 lot. I'm not saying it's wrong. I just
 15 think that it would be premature to say what
 16 the value would be, but obviously, if the
 17 value is not there, I'm not quite sure why
 18 anyone would want to go and do it. They
 19 would be looking for synergies of savings
 20 and there may well be, but I think it's
 21 pretty premature to identify that at this
 22 point in time.
 23 MR. FITZGERALD:
 24 Q. Okay. So, you're not as optimistic?
 25 MR. HAYNES:

Page 69

1 A. I'm not as optimistic that we'll get there
 2 in the next two or five years.
 3 MR. FITZGERALD:
 4 Q. Okay.
 5 MR. HAYNES:
 6 A. I don't know if Greg could add something
 7 from that perspective.
 8 MR. JONES:
 9 A. Yeah, probably add a little bit of
 10 additional colour. So, the—what Jim is
 11 talking about is—or some initiatives that
 12 have been on the go in the past. The most
 13 recent initiative has been really
 14 spearheaded by the Department of—or the
 15 Federal Mines and Energy Department, and
 16 it's really focused on Eastern Canada. So,
 17 mostly a maritime view as to what are the
 18 things that can be done in that marketplace
 19 to help Canada's greenhouse gas objectives.
 20 So, there's work happening, collaboration
 21 from the Provinces of Nova Scotia, New
 22 Brunswick, PEI, Newfoundland and Labrador,
 23 and Quebec as well, looking into various
 24 alternatives that can be brought forward for
 25 the region to the extent that any of those

Page 70

1 alternatives enhance the transmission system
 2 in Eastern Canada, in particular, in the
 3 Maritimes. Any--more transmission is always
 4 good for the marketing business because it
 5 gives us greater access to the markets. So,
 6 in theory, there could very well be an
 7 increase in the value that can be achieved
 8 from existing surpluses through that
 9 initiative.
 10 MR. HAYNES:
 11 A. I would suggest though that an East Coast or
 12 Eastern Canadian transmission organization
 13 is not a prerequisite to making value from
 14 the point of view of Gull Island or any
 15 other resource that we can bring to market
 16 because that can still be done. They can be
 17 independent. And obviously, if Gull Island
 18 was done, it would be done to bring value to
 19 the province, even if it's a long-term
 20 contract, it would be value, you know, not
 21 necessarily to Hydro, but presumably to
 22 Nalcor which could be used for rate
 23 mitigation purposes.
 24 MR. FITZGERALD:
 25 Q. Sure. So, I guess the federal focus, if

Page 71

1 it's been driven by them, wouldn't really
 2 have much to do with energy pricing. That
 3 might be incidental, but their focus would
 4 be different?
 5 MR. HAYNES:
 6 A. Presumably off coal and greenhouse gas
 7 reduction.
 8 MR. FITZGERALD:
 9 Q. Yes.
 10 MR. HAYNES:
 11 A. Which obviously, we have a lot of resources
 12 that could be brought –
 13 MR. FITZGERALD:
 14 Q. Right.
 15 MR. HAYNES:
 16 A. You know, that could be used to facilitate
 17 that.
 18 (10:00 a.m.)
 19 MR. FITZGERALD:
 20 Q. Sure. Moving to another topic, and I note
 21 that--and I'm sure that you've been brought
 22 to this before, but Liberty made an
 23 observation in their September 3rd report
 24 that they found, they use the word
 25 "striking," that keeps coming back, that

Page 72

1 nearly half a billion dollars in five-year
 2 capital spending between Newfoundland Power
 3 and Hydro, and in the circumstances of the
 4 looming rate shock, specifically are there
 5 any steps that Hydro is looking to take to
 6 address this?
 7 MS. WILLIAMS:
 8 A. Yes, and actually we're in the middle of our
 9 capital budget application right now. About
 10 two years ago, we started looking at that
 11 problem, in particular as it relates to our
 12 capital investment. And I think it really
 13 has been amplified through the Resource
 14 Adequacy Study, too, because there is a
 15 potential and there certainly would be a
 16 consideration of additional large-capacity
 17 build which would further exacerbate the
 18 rate pressure that we'd be under. So, we
 19 started ourselves saying, "Okay, we need to
 20 forecast out a smaller annual capital
 21 spend." So, from two budget cycles ago, to
 22 the current budget cycle on a five-year
 23 forecast basis, we're reducing our capital.
 24 We went down about 250 million on a five-
 25 year-investment plan. That's not to suggest

Page 73

1 the plan is perfect. That's not to suggest
 2 that there's not going to be a few bumps
 3 that are going kind of come fairly quickly.
 4 The parties would know about the Penstocks
 5 in Bay D'Espoir. We've been wanting to
 6 strike the right balance in cost and
 7 reliability there from an investment
 8 perspective, but we might have to make a
 9 large investment in one of those Penstocks.
 10 So, you know, we are taking the steps to
 11 send a very strong signal internally to all
 12 of our asset-holders, is that we are
 13 interested in lowering the annual capital
 14 spend and then we're going to have to
 15 prioritize better than we ever have before.
 16 So, we are definitely sending a signal
 17 internally into the parties here that we
 18 want to invest less and we want to look very
 19 closely at the cost and reliability balance.
 20 MR. FITZGERALD:
 21 Q. Thanks. We noted yesterday, Power Advisory
 22 in answer to some questions and, in fact,
 23 Mr. Marshall as well when he was on the
 24 stand, the suggestion of performance-based
 25 regulation was discussed and both Power

Page 74

1 Advisory and Mr. Marshall seem to be open to
 2 that type of regulation. Does Hydro have
 3 any openness to that as well?
 4 MS. WILLIAMS:
 5 A. Um-hm. My director of Regulatory Affairs
 6 has had a very well-deserved vacation. He
 7 had hoped his vacation would not line up
 8 with some of these questions, but I
 9 certainly did speak with him and we've
 10 talked a little bit about performance-based
 11 regulation and its potential role here in
 12 this province. And I'm going to
 13 characterize it fairly carefully because,
 14 again, I'm certainly not an expert in this
 15 side, neither is Hydro, but you know, the
 16 information that I've been given is that in
 17 Canada it's generally applicable outside of
 18 Crown Utilities where we have a bit of a
 19 different mandate from, you know, what we're
 20 incented to do. So, it would certainly be
 21 an effort to implement it through the Board
 22 process. I think it is a fairly heavy
 23 process to implement initially. I think the
 24 information I've been given is, if you use
 25 Alberta as an example, you do a fairly heavy

Page 75

1 process at the beginning, and I think
 2 they're in a one in a five-year cycle where
 3 they go back after five years and
 4 essentially do sort of a cost-of-service
 5 review again. I think then what you'd be
 6 removing is maybe a GRA kind of in the
 7 middle and, again, I think to undertake
 8 something that would be, you know, sort of
 9 radially changing the Board's role would be
 10 an initial significant effort. And right
 11 now, there's a lot happening on the system
 12 as is. I'm not saying we should shut it
 13 down by any stretch, but I think for now
 14 there's a lot happening from a regulatory
 15 perspective. So, it probably could be
 16 something that we would pursue in the future
 17 to see, for Hydro, if it's something that
 18 would be appropriate.
 19 MR. FITZGERALD:
 20 Q. Sure, okay. Fair enough. You mentioned
 21 that, yes, Hydro has a different mandate
 22 sometimes than non-regulated utilities, and
 23 if, you know, it's a rate mitigation milieu
 24 that we're in, does Hydro or Nalcor believe
 25 that if the government is to provide funds

Page 76

1 for rate mitigation, which Liberty has more
 2 or less suggested, the first order of
 3 priority should be to eliminate the
 4 requirement that Newfoundland Power's
 5 customers pay the rural rate subsidy?
 6 MS. WILLIAMS:
 7 A. Should that be Hydro's—would that be Hydro's
 8 priority that we would eliminate the
 9 subsidy?
 10 MR. FITZGERALD:
 11 Q. Yes, yes.
 12 MS. WILLIAMS:
 13 A. I'm not sure that that would be the first
 14 priority. If you do that, as I understand
 15 it, you would also then—the Labrador
 16 Interconnect customers also contribute to
 17 that rural subsidy. So, their rates would
 18 go down as well. I think we'd have to look
 19 at, what do we do with that, with those
 20 funds? I'm not sure that would be our first
 21 priority. We would look at it generally,
 22 all rate classes, should understand how
 23 they're going to be impacted by whatever
 24 that subsidization would be.
 25 MR. FITZGERALD:

Page 77

1 Q. And regarding rates, does Hydro see any room
 2 for a utility in implementing seasonal rates
 3 and time-of-use rates as Synergy (sic.) has
 4 suggested?
 5 MS. WILLIAMS:
 6 A. I think time-of-use rates, I think it was
 7 Synapse.
 8 MR. FITZGERALD:
 9 Q. Synapse, I'm sorry.
 10 MS. WILLIAMS:
 11 A. Yes. No, that's okay. Synapse, you know,
 12 gave us sort of a starting point, some good
 13 advice for us to continue the conversation.
 14 I think we have to understand both from
 15 electrification and time-of-use rates,
 16 critical-peak pricing as solutions on the
 17 system. I think there's a lot more work to
 18 do, I think, with this Board and with the
 19 parties to understand what the implications
 20 are on all customers.
 21 MR. FITZGERALD:
 22 Q. I wonder if we can bring up the Liberty
 23 Report, September 3rd. There's a chart there
 24 I'd like you to comment on. It's at page 9
 25 of the report. Thanks. This is the famous

Page 78

1 figure, 1.3, and this demonstrates or
 2 illustrates the overall, you know, the
 3 mitigated rates and unmitigated rates in
 4 stark graphic. It shows the unmitigated
 5 rates in, for example, 2020 at it looks
 6 close to 21 cents a kilowatt hour there and
 7 escalating beyond. And you know, it also
 8 shows the mitigated rates. So, if all of
 9 the measures that were recommended by
 10 Liberty are adopted, then we're still--it
 11 looks to me or to us, that the rate that
 12 we're looking at in 2020 is still north of
 13 16 cents a kilowatt hour. So, are there any
 14 additional actions that Nalcor and/or Hydro
 15 are--can propose to keep the Island
 16 electricity rates from increasing to that
 17 level or is this where we're going to be?
 18 MS. WILLIAMS:
 19 A. I think we have to wait for the Board's
 20 report to government and then government to
 21 decide to what level we're going to
 22 subsidize. They will receive all this same
 23 information and then we will have to work
 24 with the Board on our next GRA to understand
 25 how is this going to impact all customers.

Page 79

1 We're taking the actions as much as possible
 2 that we can right now that's within our
 3 control. Obviously, there's other actions
 4 that are outside of, you know, this Panel's
 5 control that would--could impact things, but
 6 you know, that's outside of our control.
 7 MR. FITZGERALD:
 8 Q. Sure. So, but this graphic is a, in your
 9 estimation, your analysis, probably
 10 accurate?
 11 MS. WILLIAMS:
 12 A. I have no reason to suggest it isn't.
 13 MR. FITZGERALD:
 14 Q. Yes, so that's where we're going to be in
 15 2020 from a kilowatt hour perspective?
 16 MS. WILLIAMS:
 17 A. I have --
 18 MR. FITZGERALD:
 19 Q. That's if everything --
 20 MR. HAYNES:
 21 A. That would be my perception.
 22 MS. WILLIAMS:
 23 A. Yeah.
 24 MR. HAYNES:
 25 A. Unless there's other things brought to bear,

Page 80

1 but that basically, if I recall correctly,
 2 that chart indicates if all the things that
 3 can be done on a rate mitigation regarding
 4 the financial and all the other things are
 5 all done and ploughed back the rates.
 6 MR. FITZGERALD:
 7 Q. Right.
 8 MR. HAYNES:
 9 A. You know, if there are other actions taken
 10 by government where new money comes in, like
 11 I know the oil and gas wasn't part of the
 12 discussion, but if--that would be other
 13 things that may come back or to government,
 14 the provincial government, but you know,
 15 other funding which is a taxpayer--you know,
 16 from a taxpayer point of view, outside of
 17 what Nalcor can self-generate. I'm not
 18 quite sure we can do much better than that.
 19 MR. FITZGERALD:
 20 Q. I understand.
 21 MR. HAYNES:
 22 A. Which basically is comparable to at least
 23 Nova Scotia, but it's still not--it's still a
 24 problem. It's still high obviously.
 25 MR. FITZGERALD:

Page 81

1 Q. Yes. Okay, I'm going to turn you over now
 2 to Mr. Browne.
 3 BROWNE, Q.C.:
 4 Q. Just on that point, Mr. Haynes, why are we
 5 comparable to Nova Scotia? Can you tell us
 6 that?
 7 MR. HAYNES:
 8 A. Why are we comparable?
 9 BROWNE, Q.C.:
 10 Q. Yes.
 11 MR. HAYNES:
 12 A. I understand that –
 13 BROWNE, Q.C.:
 14 Q. Why is our electricity system comparable to
 15 Nova Scotia and our usage?
 16 MR. HAYNES:
 17 A. I have not looked into Nova Scotia's cost of
 18 service and things like that there and I—it
 19 wouldn't be my—a core skill that I have, but
 20 I mean, I'm just—what I referenced was that
 21 the current rates in Nova Scotia, I believe,
 22 are in the 15, 16, 17-cent range. That was
 23 only a statement.
 24 BROWNE, Q.C.:
 25 Q. And you would know that 30 percent of Nova

Page 82

1 Scotia's customers use electric heat and 70
 2 percent of ours do?
 3 MR. HAYNES:
 4 A. I do realize it's on that survey. They do
 5 have access to gas. There's a fair bit of
 6 oil.
 7 BROWNE, Q.C.:
 8 Q. Mr. Haynes, you've made reference to
 9 Churchill Falls and the refurbishment of the
 10 Churchill Falls system in preparation in
 11 preparation for the take-over of the system,
 12 the return of the system in 2041. Isn't
 13 there an agreement in place in reference to
 14 how that refurbishment is being undertaken
 15 within CF(L)Co?
 16 MR. HAYNES:
 17 A. Basically, right now, most of those,
 18 practically all the reinvestment basically
 19 comes from revenue that CF(L)Co currently
 20 gets from its rate payers, from its
 21 customers I should say, if that's what you
 22 mean.
 23 BROWNE, Q.C.:
 24 Q. So, it's all reinvested back into the
 25 enterprise?

Page 83

1 MR. HAYNES:
 2 A. Yeah, there are some things in the
 3 shareholders' agreement, which set up a
 4 reserve fund, but however, a lot of the
 5 income is being ploughed back into doing
 6 necessary refurbishments on the plant. For
 7 instance, last year we were replaced a
 8 runner which was cracked and we've been
 9 nursing that along. When I was there, we
 10 were nursing it along, but eventually you
 11 get to a point where you have to replace it
 12 and there's one –
 13 BROWNE, Q.C.:
 14 Q. So, there's no new money coming from Hydro
 15 here for instance into CF(L)Co?
 16 MR. HAYNES:
 17 A. No, the rates of Newfoundland Hydro are .2
 18 cents a kilowatt hour and the Twin Block is
 19 I think roughly 2.2 and that is basically--
 20 the energy part is unregulated.
 21 BROWNE, Q.C.:
 22 Q. And that all was part of the agreement when
 23 the GWAC came on and so on?
 24 MR. HAYNES:
 25 A. Well, GWAC, I think there was—I don't

Page 84

1 remember all the details, but there was some
 2 caveats there to prevent that all the GWAC
 3 money would be actually turned over to the
 4 shareholders actually because it was
 5 intended to actually sustain the plant.
 6 BROWNE, Q.C.:
 7 Q. And the objective is that the facility would
 8 be entirely refurbished in 2041 through the
 9 use of this process alone?
 10 MR. HAYNES:
 11 A. That was the thought process at the time,
 12 yes.
 13 BROWNE, Q.C.:
 14 Q. And that still is?
 15 MR. HAYNES:
 16 A. It still is. Basically, we are reinvesting
 17 in the plant heavily. With capital program,
 18 it's roughly 60, 65 million dollars a year
 19 which we're currently reviewing and we'll be
 20 challenged again on, you know, how we're
 21 doing it, you know, from that perspective,
 22 but I don't expect it's going to change
 23 much.
 24 BROWNE, Q.C.:
 25 Q. So, there's no money coming out of the

Page 85

1 facility in dividends as such? The
 2 dividends are being reinvested save for the
 3 7-million-dollar –
 4 MR. HAYNES:
 5 A. Yes, just the preferred –
 6 BROWNE, Q.C.:
 7 Q. The preferred dividend?
 8 MR. HAYNES:
 9 A. That’s all that’s coming out right now.
 10 BROWNE, Q.C.:
 11 Q. And the preferred dividend comes from the
 12 time of the sale of the facility from BRINCO
 13 where they’re paying –
 14 MR. HAYNES:
 15 A. Yeah.
 16 BROWNE, Q.C.:
 17 Q. - provincial taxes?
 18 MR. HAYNES:
 19 A. That’s my understanding, yeah.
 20 BROWNE, Q.C.:
 21 Q. Where it became a public facility, so it was
 22 agreed that there would be a preferred
 23 dividend given to the province for that as
 24 seven million?
 25 (10:15 a.m.)

Page 86

1 MR. HAYNES:
 2 A. I can’t speak with accuracy, but that’s my
 3 understanding.
 4 BROWNE, Q.C.:
 5 Q. Yes.
 6 MR. HAYNES:
 7 A. Yeah.
 8 BROWNE, Q.C.:
 9 Q. That’s my understanding as well. In
 10 reference to these—to the sustainable cost
 11 management and what you’ve presented here in
 12 page, the joint cost oversight--Joint
 13 Operating Committees the JOC. And there’s a
 14 Joint Operating Committee, the Emera
 15 Committee for other matters. If we can go
 16 to those for a moment, Madam Clerk, because
 17 they’re in the Sustainable Cost Management
 18 Costs, called Joint Cost Oversight, Joint
 19 Operating Committees, JOC. There we go.
 20 These committees, who is on these
 21 committees?
 22 MR. HAYNES:
 23 A. On the Muskrat Falls Committee, I just don’t
 24 remember the names offhand. There are two
 25 from Newfoundland Hydro and two from Nalcor.

Page 87

1 I cannot cite the names off the top of my
 2 head. They are senior positions from that
 3 perspective.
 4 BROWNE, Q.C.:
 5 Q. Sure. So, yes.
 6 MR. HAYNES:
 7 A. Yeah.
 8 BROWNE, Q.C.:
 9 Q. Well, representatives. You can do it in
 10 that way.
 11 MR. HAYNES:
 12 A. Yeah.
 13 BROWNE, Q.C.:
 14 Q. So, there’s two Newfoundland Hydro, two
 15 Nalcor?
 16 MR. HAYNES:
 17 A. That’s correct.
 18 BROWNE, Q.C.:
 19 Q. On the –
 20 MR. HAYNES:
 21 A. On the Muskrat Falls Committee.
 22 BROWNE, Q.C.:
 23 Q. The Joint Operating Committee?
 24 MR. HAYNES:
 25 A. For the Muskrat Falls there are a total of

Page 88

1 four; two Hydro and two Nalcor.
 2 BROWNE, Q.C.:
 3 Q. And in the other committee, the Emera
 4 Committee, who is that on?
 5 MR. HAYNES:
 6 A. The structures basically was intended to be
 7 four Nalcor and two Emera, basically, but we
 8 have assigned, if you will, one of those
 9 three—four seats of Nalcor to Hydro so
 10 they’d have visibility and transparency.
 11 So, they have involvement in discussion on
 12 these particular—on their responsibilities.
 13 So, there’s—they have more insight than just
 14 being said, “Here’s what we’re doing,” sort
 15 of thing.
 16 BROWNE, Q.C.:
 17 Q. And the purpose of the committee, of the
 18 Emera Committee, is as is stated there, “to
 19 oversee various matters related to the
 20 operation and maintenance of the LIL, the
 21 LTA and Maritime Link,” and the various
 22 standards there.
 23 MR. HAYNES:
 24 A. Yes.
 25 BROWNE, Q.C.:

Page 89

1 Q. So, any spending that has to be done would
 2 be done through that committee?
 3 MR. HAYNES:
 4 A. Well, they would review the Annual
 5 Maintenance Plan, obviously, and the Asset
 6 Management Plan which we would involve—which
 7 would involve, you know, the budgets and
 8 funding. I'm not sure off the top of my
 9 head if that's an approval process or how
 10 that works, but basically, the intention is
 11 to ensure these assets operate reliably and
 12 safely, too, for all stakeholders or off-
 13 takers of power and energy.
 14 BROWNE, Q.C.:
 15 Q. And these are off limits to the regulator?
 16 MR. HAYNES:
 17 A. Yes, by—yes, they both are actually.
 18 BROWNE, Q.C.:
 19 Q. But yet, when expenditures are made, they
 20 will go to the rate payers?
 21 MR. HAYNES:
 22 A. They do.
 23 BROWNE, Q.C.:
 24 Q. How fair a process is that? There's no rate
 25 payer representation there at all.

Page 90

1 MR. HAYNES:
 2 A. There are two members of Hydro on the
 3 Muskrat Falls Committee and there's one
 4 member on the Wires Committee if you will.
 5 So, there's transparency and there's a voice
 6 at the table, but under the current regime
 7 and structure, they are unregulated.
 8 BROWNE, Q.C.:
 9 Q. And that's true and that's not your fault,
 10 but just an observation that we're paying
 11 for something over which the Board has no
 12 oversight and over which we have no say.
 13 MR. HAYNES:
 14 A. I understand.
 15 BROWNE, Q.C.:
 16 Q. To change that, would that require the
 17 agreement of Emera?
 18 MR. HAYNES:
 19 A. I think the finance committee would be more
 20 involved in the mechanics of all that there,
 21 but I expect that it would be, not only
 22 Emera, but the provincial government
 23 primarily and the federal government on the
 24 loan guarantee, but Mr. Meaney could
 25 probably address that much better than I.

Page 91

1 BROWNE, Q.C.:
 2 Q. Sure, sir, thank you. In reference to
 3 Exploit's, you're bringing an application
 4 before the Board at this time to move the
 5 Exploit's assets into Hydro. Why now?
 6 MS. WILLIAMS:
 7 A. It is certainly the shareholders' asset at
 8 this point and we're working with the
 9 shareholders as they would prefer that it
 10 move out of the shareholders' ownership and
 11 into, I believe it should sit within their
 12 regulated set of assets, managed as part of
 13 the whole system. It's certainly managed as
 14 part of the whole system now, but I think it
 15 would provide for better access to long-term
 16 investments through the regulators, so the
 17 shareholder is asking us to do this.
 18 BROWNE, Q.C.:
 19 Q. How did that get into Nalcor to begin with,
 20 Exploit's?
 21 MS. WILLIAMS:
 22 A. Through the expropriation—and that was
 23 before my time, but through the
 24 expropriation I think was 2008.
 25 BROWNE, Q.C.:

Page 92

1 Q. And the expropriation involved Fortis shares
 2 as well as I understand?
 3 MR. HAYNES:
 4 A. Yes, Fortis had interest in the, I'm going
 5 to say the Beaton (phonetic) Unit with
 6 Abitibi and there was also another ENEL with
 7 respect to Star Lake, so there were a couple
 8 of other independent or separate
 9 organizations that had investments in those
 10 assets, yes.
 11 BROWNE, Q.C.:
 12 Q. And who paid Fortis out, was it Nalcor?
 13 MS. WILLIAMS:
 14 A. The government would have, I imagine, as
 15 part of the expropriation.
 16 BROWNE, Q.C.:
 17 Q. Well if you're not sure, that's okay, I can
 18 refer to the finance committee.
 19 MR. HAYNES:
 20 A. I'm not sure.
 21 MS. WILLIAMS:
 22 A. Not sure.
 23 BROWNE, Q.C.:
 24 Q. I'm sure they will certainly know the answer
 25 to that.

Page 93

1 MR. HAYNES:
 2 A. I expect they would.
 3 BROWNE, Q.C.:
 4 Q. By the time we ask it anyway. Because if
 5 it's being transferred, if that asset is
 6 being transferred into Hydro at this time,
 7 surely that would increase the rate base,
 8 would it not?
 9 MS. WILLIAMS:
 10 A. Yes.
 11 BROWNE, Q.C.:
 12 Q. And depending upon the way its brought in
 13 will be of interest to rate payers,
 14 ultimately.
 15 MS. WILLIAMS:
 16 A. Which is why we're submitting the
 17 application to the Board for their
 18 consideration and the Intervenor's
 19 participation. It's not going to be an
 20 Order-in-Council, it's going to be a
 21 regulatory process, so it will be up to
 22 this, the Board and Intervenor's input to
 23 make the decision if it's appropriate.
 24 BROWNE, Q.C.:
 25 Q. And of course, any expansion of rate base,

Page 94

1 via capital expenditures and capital
 2 projects and otherwise, is of interest to
 3 the rate payers of the Province, given the
 4 circumstances in which we find ourselves.
 5 MS. WILLIAMS:
 6 A. Absolutely.
 7 BROWNE, Q.C.:
 8 Q. So if that process was put on hold for the
 9 time being until everyone sees the lay of
 10 the land post Muskrat, there would be really
 11 no prejudice to Nalcor or Hydro.
 12 MS. WILLIAMS:
 13 A. I see no prejudice, the only—I alluded to it
 14 yesterday, the only impact, which again I
 15 don't see a delay of a year or two as being
 16 a material impact, is the revenue stream
 17 that is utilized for those assets. It's a
 18 revenue stream that is simply on the basis
 19 of the PPA and so therefore, it has an
 20 impact on exactly how we use the funds, so
 21 that is the only prejudice, but no, a year
 22 or two delay would not prejudice the
 23 operation.
 24 BROWNE, Q.C.:
 25 Q. Okay, thank you. Now, in reference to

Page 95

1 Nalcor Energy Marketing and from a rate
 2 payer perspective, rate payers are seeking
 3 lowest cost options for anything which we're
 4 paying for, and lowest cost risk and what
 5 has gathered our attention was that the
 6 birth of them came about when the preferred
 7 avenue was to build Gull Island, is that not
 8 correct, Mr. Roberts—or I'm sorry, Mr. Jones
 9 probably?
 10 MR. JONES:
 11 A. No, that's not correct. The birth of Nalcor
 12 Energy, it started, as I described
 13 yesterday, with the repurposing, let's say,
 14 of the surplus energy out of the recapture
 15 contract and then the strategic assessment
 16 basically identified that the next major
 17 project that Nalcor would execute would
 18 drive the rationale behind internal growth
 19 and that next project was Muskrat Falls, and
 20 that was sufficient to drive the analysis.
 21 BROWNE, Q.C.:
 22 Q. What year was that?
 23 MR. JONES:
 24 A. The final, well the decision –
 25 BROWNE, Q.C.:

Page 96

1 Q. When it was conceived, when it was planned.
 2 MR. JONES:
 3 A. When it was originally planned—next slide
 4 please, yes, so that would have been in the
 5 fall of 2009 we would have initiated that
 6 strategic review and in early 2011 we would
 7 have made the decision or that the preferred
 8 alternative was the internal growth, so by
 9 early 2011, I believe we were at that point
 10 changing gears.
 11 BROWNE, Q.C.:
 12 Q. Well pretty close to my original ascertain
 13 that the plan was put in place in reference
 14 to Gull Island in 2009, that's where all
 15 this was headed, was it not?
 16 MR. JONES:
 17 A. In 2009 there was—Gull Island was the
 18 preferred or was the expected path forward.
 19 BROWNE, Q.C.:
 20 Q. Sure.
 21 MR. JONES:
 22 A. Gears changed, focus changed, Muskrat Falls
 23 was initiated so when we were doing the
 24 internal growth model, it was not predicated
 25 upon Gull Island, it was predicated upon the

Page 97

1 next major asset and then once the sanction
 2 decision in 2012 was concluded, we went back
 3 and reassessed that strategic assessment and
 4 re-evaluated it and further confirmed that
 5 internal growth with Muskrat Falls alone was
 6 preferred.
 7 BROWNE, Q.C.:
 8 Q. Now, in your presentation you're raising
 9 issues of public concern in that you're
 10 stating that Nalcor Energy Marketing would
 11 be very good in anticipation down the road
 12 sometime of the development of Gull Island
 13 and we all know the facts that Gull Island,
 14 when discussions were being held with Hydro
 15 Quebec and they got results from the Quebec
 16 regulator in reference to transmission and
 17 the ability to transmit any Gull Island
 18 power through Hydro Quebec lines wasn't
 19 there, having gone through all those
 20 avenues, why would Gull Island still be even
 21 on the table when all that failed after
 22 complete assessment of it just a couple of
 23 years ago?
 24 MR. JONES:
 25 A. So I would suggest that circumstances have

Page 98

1 changed. We've got initiatives in the—the
 2 greenhouse gas initiatives that are being
 3 brought forward by the federal governments
 4 and the governments in New York and New
 5 England, all present new unique challenges
 6 for system operators and electricity
 7 providers to source clean non-emitting
 8 energy. Gull Island is a game changer. It
 9 is a needle mover in the region and for that
 10 reason, people are interested in it.
 11 BROWNE, Q.C.:
 12 Q. What people are interested in it? We had
 13 evidence from experts here telling us due to
 14 the natural gas situation in the United
 15 States, for now in the foreseeable future no
 16 one privately is building anything electric,
 17 any electric facilities, as far as they
 18 knew, and the future lay with that. What
 19 has changed?
 20 MR. JONES:
 21 A. So I don't think it's accurate to say that
 22 nobody is building assets in the United
 23 States.
 24 BROWNE, Q.C.:
 25 Q. Electricity assets.

Page 99

1 MR. JONES:
 2 A. Electricity assets.
 3 BROWNE, Q.C.:
 4 Q. Do you know of any construction going on
 5 there in reference to –
 6 MR. JONES:
 7 A. Absolutely, there's tens of thousands of
 8 megawatts of gas.
 9 BROWNE, Q.C.:
 10 Q. We're in gas, yeah, we're in that form of
 11 energy, electric I'm talking –
 12 MR. JONES:
 13 A. And the states of, well certainly the state
 14 of Massachusetts has gone out seeking
 15 Canadian hydro. New York State is seeking
 16 Canadian hydro, has explicitly identified
 17 Canadian hydro as a desired resource. We
 18 have the Atlantic Canada provinces seeking
 19 to replace coal.
 20 BROWNE, Q.C.:
 21 Q. All these we heard from Mr. Marshall
 22 yesterday and he told us unless there are
 23 contracts in place from outsiders, there's
 24 really no appetite, there's no ability, in
 25 fact, for Nalcor to be involved with Gull

Page 100

1 Island.
 2 MR. HAYNES:
 3 A. I don't think that means that we—I don't
 4 think that implies that we should not be
 5 looking at that opportunity. Gull Island is
 6 a, you know, Gull Island was looked at many
 7 times over the years for sure and it was
 8 being looked at when I joined Hydro in 1977,
 9 it was always a goal to develop Gull Island
 10 because I thought there was opportunity.
 11 There's been negotiations with Hydro Quebec
 12 over the years and yes, they've never been
 13 successful, that's certainly true and I
 14 would also say that if you were to build
 15 Gull Island, transmission has to be
 16 reinforced, you know, and primarily through
 17 Quebec or partly in Labrador, but certainly
 18 mostly through Quebec, but that doesn't mean
 19 we shouldn't be looking at that opportunity.
 20 Things have changed, it is a renewable
 21 source or energy and gas is a, in my view,
 22 gas is a bandaid to greenhouse gas. It is
 23 not a solution, it's better than, you know,
 24 traditional oil fired or coal fired, but
 25 it's not a panacea that's going to be there

Page 101

1 forever if people are serious about climate
 2 change, which is—so we can't just sit back
 3 and ignore the fact that there may be an
 4 opportunity, so we do need to look at that
 5 and, you know, studies with Hydro Quebec to
 6 look at transmission and stuff like that
 7 because it will be through Quebec, more than
 8 likely, it doesn't have to be only that, but
 9 it's intuitive that's the cheapest way to do
 10 it, so we need to look. We shouldn't just
 11 let the water continue running down the
 12 river if we can bring value to the Province.
 13 BROWNE, Q.C.:
 14 Q. But you already looked and you looked
 15 completely in reference to that project, it
 16 was studied, you were going to do the
 17 project, that was the project of preference
 18 in July of 2010, 2011, I forget the year
 19 now, and then within two weeks or three
 20 weeks you've pivoted to Muskrat Falls, which
 21 most analysts said was a huge mistake, but
 22 if that—I mean, we're not dealing with too
 23 long ago. There was no transmission, there
 24 was no capacity, if there are no markets,
 25 why would you spend, I mean it's there, we

Page 102

1 all know it's there. You mentioned 1977 you
 2 were looking at it, that's 50 years ago.
 3 MR. HAYNES:
 4 A. That's right.
 5 BROWNE, Q.C.:
 6 Q. So it's a long time.
 7 MR. HAYNES:
 8 A. Yes.
 9 BROWNE, Q.C.:
 10 Q. So I'm talking about reality here and
 11 realism.
 12 MR. HAYNES:
 13 A. I don't think that we should be discounting
 14 the value that Gull Island can bring to the
 15 economy of Newfoundland and Canada and bring
 16 to displacing natural gas or coal or
 17 anything else. There is a need, there's
 18 2000 megawatts in Eastern Canada of coal
 19 that will disappear and there's a place for
 20 wind, there's a place for solar and so on,
 21 but basically what Hydro brings is if
 22 firming that up from the point of view of
 23 managing the, when the sun is not shining
 24 and wind is now blowing, it's a storage
 25 battery that technology hasn't been able to

Page 103

1 replace to any large degree at this point in
 2 time.
 3 (10:30 a.m.)
 4 BROWNE, Q.C.:
 5 Q. Well if Hydro Quebec and people who are
 6 interested in developing Gull Island and
 7 there are markets for it and there's no
 8 resulting cost to rate payers and it all
 9 comes on stream, if all these things happen
 10 out, I mean, well and good, but we're not
 11 talking about anytime soon. Mr. Marshall
 12 mentioned it could be ten years down the
 13 road or more, so my point is this, things
 14 change, technology has changed within ten
 15 years, why would Gull Island be considered
 16 in terms of Nalcor Energy Marketing today?
 17 Probably everyone at Nalcor Energy Marketing
 18 today might be long gone by the time Gull
 19 Island comes on.
 20 MR. JONES:
 21 A. Well, if I may, the point that we're making
 22 here and I think it was the very last point
 23 on the summary slide, was that Nalcor Energy
 24 Marketing by virtue of its activity in the
 25 marketplace brings value in assessing

Page 104

1 options, such as Gull, such as runner
 2 upgrades at Churchill Falls, such as
 3 additional wind projects here in the
 4 Province, small Hydro developments. To be
 5 able to assess that, you need to have an
 6 understanding of the markets in which this
 7 ultimately goes, because as we have said
 8 many times, with the completion of Muskrat
 9 Falls, the needs of this Province are
 10 largely met for the foreseeable future, so
 11 any future developments will be on the back
 12 of an export market and that's where Nalcor
 13 Energy Marketing brings its expertise to
 14 bear in supporting that analysis and that
 15 decision-making.
 16 BROWNE, Q.C.:
 17 Q. You also mentioned that Nalcor Energy
 18 Marketing would be invaluable when the
 19 Churchill Falls contract is up in 2041, 20
 20 years from now and we all know Churchill
 21 Falls and Churchill Falls power can only
 22 flow through Hydro Quebec, that's the only
 23 possibility, the only transmission network
 24 for it. There is none other; otherwise it
 25 would be a stranded asset, would it not?

Page 105

1 MR. HAYNES:
 2 A. Yes, but the transmission system is there
 3 and CF(L)Co are not bound to sell that to
 4 Hydro Quebec or to Newfoundland Hydro, for
 5 that matter. It will be available and it
 6 would be work in years required to hopefully
 7 have those things settled out by 2031, as
 8 Mr. Marshall said if we understand, if it's
 9 not available to Hydro Quebec or if it's
 10 sold in a different formula, that's all open
 11 for discussion, obviously, that's to be
 12 negotiated.
 13 BROWNE, Q.C.:
 14 Q. And Hydro Quebec, of course, has, what, a 35
 15 percent interest in CF(L)Co in any case.
 16 It's the large minority shareholder.
 17 MR. HAYNES:
 18 A. And that stays, yes.
 19 BROWNE, Q.C.:
 20 Q. I just wonder if the justification or the
 21 rationalization for Nalcor Energy Marketing
 22 should be in those projects, as opposed to
 23 the here and now. Can it be rationalized in
 24 and of itself for the value its doing here
 25 and now, and can it, Mr. Jones?

Page 106

1 MR. JONES:
 2 A. Absolutely.
 3 BROWNE, Q.C.:
 4 Q. Okay, let's just go to page 13 of your
 5 presentation, it's entitled "Electricity
 6 Assets for Extra-Provincial Trade". And
 7 within that, of course we see the great
 8 conundrum which we face is that we live on
 9 an island and in order to transmit and
 10 market power through the Maritime Link we
 11 have to go through a number of
 12 jurisdictions, don't we?
 13 MR. HAYNES:
 14 A. So through the Maritime Link, if we are
 15 selling to Nova Scotia, we transmit over the
 16 Maritime Link.
 17 BROWNE, Q.C.:
 18 Q. And if you're selling to Nova Scotia and
 19 there are obligations in reference to Nova
 20 Scotia, we have the excess agreement that
 21 Nova Scotia is able to take looksee to see
 22 what the market price is in New England if
 23 the New England market price suits their
 24 fancy, they'll offer you the New England
 25 market price for Muskrat Falls excess, I

Page 107

1 guess that's what they would do, is that a
 2 fair comment?
 3 MR. HAYNES:
 4 A. Correct, there's a very detailed process by
 5 which we go through offering and making the
 6 decision to purchase or not and then how
 7 it's scheduled in real time after the
 8 contract has been set once each year, those
 9 are all very detailed steps that have to be
 10 taken.
 11 BROWNE, Q.C.:
 12 Q. Now under the agreement and the Energy
 13 Access Agreement and so on, if Nova Scotia,
 14 I guess it's Emera or it's Nova Scotia
 15 Power, if they're transmitting our power
 16 sale through Nova Scotia, do we pay Nova
 17 Scotia a transmission charge for doing that?
 18 After the Maritime Link, over the Maritime
 19 Link there's no charge.
 20 MR. JONES:
 21 A. After the Maritime Link.
 22 BROWNE, Q.C.:
 23 Q. But once we're on Nova Scotia land, we're
 24 going across Nova Scotia to market the
 25 power.

Page 108

1 MR. JONES:
 2 A. If we're delivering to markets beyond Nova
 3 Scotia, so if we're selling, for example, to
 4 New Brunswick Power, then we would pay the
 5 tariff through Nova Scotia.
 6 BROWNE, Q.C.:
 7 Q. You'd pay the tariff, so they're charging us
 8 a tariff, Nova Scotia?
 9 MR. JONES:
 10 A. Absolutely.
 11 BROWNE, Q.C.:
 12 Q. So that was not negotiated where we would be
 13 able to get that as part of the Maritime
 14 Link agreements and –
 15 MR. JONES:
 16 A. Well it actually was, so what we have
 17 through Nova Scotia are firm rights, no
 18 different than we have through Quebec. The
 19 difference that we have through Nova Scotia
 20 is we pay as we use it. In Quebec, because
 21 to have the privilege of having 265
 22 megawatts of firm transmission through
 23 Quebec, we have to pay, it's roughly 22
 24 million dollars a year, so we pay the full
 25 fee. Emera is paying the full fee for the

Page 109

1 services through Nova Scotia and it's being
 2 transferred to us as we use it. So if we
 3 don't use it in Nova Scotia in a particular
 4 year, if we don't sell to New Brunswick,
 5 then we don't pay anything to Nova Scotia.
 6 If we sell a megawatt hour, then we pay
 7 whatever the dollar per megawatt hour tariff
 8 is through Nova Scotia.
 9 BROWNE, Q.C.:
 10 Q. So if you're selling it and the market is
 11 into New England, you're paying a
 12 transmission charge to Nova Scotia, you're
 13 paying one to New Brunswick.
 14 MR. JONES:
 15 A. Correct.
 16 BROWNE, Q.C.:
 17 Q. And where else would you be paying it?
 18 MR. JONES:
 19 A. That's it.
 20 BROWNE, Q.C.:
 21 Q. Do you pay it on the sight of delivery? If
 22 it goes into one of the New England states,
 23 would you have to pay that there because the
 24 American rules kick in?
 25 MR. JONES:

Page 110

1 A. No, we sell to the New England system
 2 operator.
 3 BROWNE, Q.C.:
 4 Q. Okay, he takes it from there.
 5 MR. JONES:
 6 A. And they take it from there.
 7 BROWNE, Q.C.:
 8 Q. In reference to firm transmission here, you
 9 got Quebec 265 megawatts, that's the
 10 corridor through Quebec, the firm corridor
 11 that has been purchased for use?
 12 MR. JONES:
 13 A. Right, that's correct, it originates in
 14 Labrador and it terminates at a site called
 15 Mesina in New York.
 16 BROWNE, Q.C.:
 17 Q. And what do we pay for that?
 18 MR. JONES:
 19 A. Roughly 22 million dollars a year.
 20 BROWNE, Q.C.:
 21 Q. And through that 265 megawatt corridor, is
 22 that useable at any time or are there –
 23 MR. JONES:
 24 A. Yes.
 25 BROWNE, Q.C.:

Page 111

1 Q. In terms of Nova Scotia and the 330 megawatt
 2 which you referred to, the firm
 3 transmission, are we paying anything for
 4 that, for the use of that corridor?
 5 MR. JONES:
 6 A. Not until we use it.
 7 BROWNE, Q.C.:
 8 Q. Until we use it we have to pay?
 9 MR. JONES:
 10 A. We pay the posted tariff through Nova
 11 Scotia.
 12 BROWNE, Q.C.:
 13 Q. And so are we paying to reserve it, the same
 14 way we're paying for the 266 megawatts
 15 through Quebec?
 16 MR. JONES:
 17 A. No.
 18 BROWNE, Q.C.:
 19 Q. So we don't pay to reserve the corridor?
 20 MR. JONES:
 21 A. Correct.
 22 BROWNE, Q.C.:
 23 Q. But there's no corridor reserved either,
 24 it's just –
 25 MR. JONES:

Page 112

1 A. It is reserved by Emera and under contract
 2 with Emera, so one of the formal agreements
 3 with Emera, the Nova Scotia Transmission
 4 Utilization Agreement, that is the agreement
 5 by which Emera confers to us the rights to
 6 use that transmission path through Nova
 7 Scotia and the terms of that use.
 8 BROWNE, Q.C.:
 9 Q. And can it be any time in a 24 hour period
 10 or are there specific times or is it only
 11 when available?
 12 MR. JONES:
 13 A. It's any time within a 24 hour period. They
 14 have an obligation to provide it to us and
 15 if that obligation is not met, then we have
 16 some fairly significant backstop penalties.
 17 BROWNE, Q.C.:
 18 Q. And we're just paying a transmission charge
 19 at that stage.
 20 MR. JONES:
 21 A. That's correct.
 22 BROWNE, Q.C.:
 23 Q. Now with the payment through, go back to
 24 Quebec a minute for the corridor, you're
 25 paying 22 million, do you also pay

Page 113

1 transmission charges to Hydro Quebec in
 2 addition to that?
 3 MR. JONES:
 4 A. No, that is the only charge.
 5 BROWNE, Q.C.:
 6 Q. So it's 22 billion and you can send 265
 7 megawatts and that's the complete
 8 transmission charge?
 9 MR. JONES:
 10 A. Correct, and if we use it, we pay 22 million
 11 dollars; if we use it all hours, we pay 22
 12 million dollars; if we don't use it at all,
 13 we still pay 22 million dollars.
 14 BROWNE, Q.C.:
 15 Q. So it's an annual reserve and you have been
 16 using it.
 17 MR. JONES:
 18 A. Oh, absolutely.
 19 BROWNE, Q.C.:
 20 Q. Yes, because that's the only route you
 21 really have at this stage.
 22 MR. JONES:
 23 A. Correct.
 24 BROWNE, Q.C.:
 25 Q. Okay, and in New Brunswick you have

Page 114

1 something similar, you have something, 260
 2 megawatts firm transmission, how does that
 3 work, seven months you have there.
 4 MR. JONES:
 5 A. Seven months, so that's the seven summer
 6 months we have the ability to use that 260
 7 megawatts at any time, during those seven
 8 summer months of the year.
 9 BROWNE, Q.C.:
 10 Q. Are you paying for the reserve or just for
 11 the usage?
 12 MR. JONES:
 13 A. No, just for the usage.
 14 BROWNE, Q.C.:
 15 Q. So you're paying a transmission charge.
 16 MR. JONES:
 17 A. Correct.
 18 BROWNE, Q.C.:
 19 Q. And in New England, 300 megawatts, what's
 20 that?
 21 MR. JONES:
 22 A. So that's a congestion rights on the New
 23 Brunswick, New England interface, so –
 24 BROWNE, Q.C.:
 25 Q. It's where the sort of bottleneck is.

Page 115

1 MR. JONES:
 2 A. Absolutely, so if we face that bottleneck
 3 and we're at risk of getting curtailed, we
 4 can call upon those transmission rights,
 5 those congestion rights to get us into that
 6 market.
 7 BROWNE, Q.C.:
 8 Q. And who are you paying for that and is it an
 9 annual fee or just as you use it?
 10 MR. JONES:
 11 A. As we use it.
 12 BROWNE, Q.C.:
 13 Q. And you've done an analysis, I guess, at
 14 some point you must have done analysis, are
 15 the transmission charges always the same or
 16 are they—do they change from day to day?
 17 MR. JONES:
 18 A. Generally speaking they are set by the
 19 regulator in each jurisdiction and the rates
 20 can be different between on peak and off-
 21 peak periods, but once you're in the on-peak
 22 period, so the period from 7:00 in the
 23 morning until 11:00 at night, that's
 24 considered a peak period and the
 25 transmission rate is set for that peak

Page 116

1 period. It may be something different for
 2 the overnight period in different
 3 jurisdictions.
 4 BROWNE, Q.C.:
 5 Q. And which jurisdiction would have the
 6 greater value. You're paying Quebec 265,
 7 365 days of the year, 24 hours a day, you're
 8 paying them a total of 20 million. In doing
 9 your own analysis going through all these
 10 different systems and paying various
 11 transmission charges, would that be more
 12 expensive or less expensive than what you're
 13 paying Quebec?
 14 MR. JONES:
 15 A. It will depend upon the time in which we do
 16 it, so that's the job of the traders and the
 17 real-time traders and the day ahead traders
 18 to make that assessment of the cost, the
 19 incremental cost to move energy from
 20 Newfoundland and Labrador to a market,
 21 whether we use the Quebec path or whether we
 22 use the Maritime path, and we'd make
 23 assessment do the prices justify us moving
 24 in one market verses the other, so if, for
 25 example prices in New York, for example,

Page 117

1 might be \$40.00 a megawatt hour, well we
 2 don't pay anything additional going through
 3 Quebec, so we're going to get \$40.00 a
 4 megawatt hour.
 5 BROWNE, Q.C.:
 6 Q. Sure.
 7 MR. JONES:
 8 A. If they're \$40.00 in New Brunswick but we
 9 have to pay a \$7.00 transmission fee through
 10 Nova Scotia, then we're only getting \$33.00,
 11 so we'll make the decision to transact
 12 through Quebec into New York in that
 13 particular case. There will be many times
 14 that we will be using both paths at the same
 15 time.
 16 BROWNE, Q.C.:
 17 Q. And once you're outside Quebec, you're into
 18 the American market without any further
 19 transmission fees.
 20 MR. JONES:
 21 A. Correct. No further fees. There are, just
 22 to be absolutely clear, there are some
 23 incidental fees, maybe a dollar, maybe fifty
 24 cents a megawatt hour just to transact, they
 25 call them import fees, but they're really

Page 118

1 incidental.
 2 BROWNE, Q.C.:
 3 Q. So does the Quebec contract have its
 4 advantages that way if it's 20 million?
 5 MR. JONES:
 6 A. Well the advantage is that we have it and
 7 it's year round and with the Quebec
 8 transmission we also have the right of
 9 redirect, so the Nova Scotia interface, for
 10 example, there is one interface out of Nova
 11 Scotia into New Brunswick. In Quebec, there
 12 are numerous trading nodes between Quebec
 13 and Ontario, New York, New England and New
 14 Brunswick. So with the Quebec transmission,
 15 we can pick it all up or a piece of it at
 16 any particular time and redirect it. We
 17 often sell into New York, New England, New
 18 Brunswick and Ontario at the same time.
 19 BROWNE, Q.C.:
 20 Q. So Quebec has its advantages.
 21 MR. JONES:
 22 A. Quebec definitely has its advantages.
 23 BROWNE, Q.C.:
 24 Q. And, of course, Quebec is there without
 25 Muskrat Falls, that was their—that

Page 119

1 transmission has been purchased for a while
 2 now, hasn't it?
 3 MR. JONES:
 4 A. That was required to deliver the recapture
 5 energy to market.
 6 BROWNE, Q.C.:
 7 Q. Yeah, exactly. In reference to the
 8 recapturing, and you've given some evidence
 9 on that, before Nalcor Energy Marketing came
 10 on the scene, there were two routes to sell
 11 the recall power and one was through Hydro
 12 Quebec itself, give it to Hydro Quebec to
 13 market or for them to purchase at market
 14 values, I guess, is that correct?
 15 MR. JONES:
 16 A. They'd purchase it under a fixed price
 17 contract.
 18 BROWNE, Q.C.:
 19 Q. In a fixed price contract, and when that
 20 contract expired, Emera came on the scene?
 21 MR. JONES:
 22 A. So that contract had been renewed or, yeah,
 23 a different version of the contract a number
 24 of times over the years from 1998 –
 25 MR. HAYNES:

Page 120

1 A. 1998 up until it was taken back. I think
 2 there might have been three actual renewals
 3 of that contract with Hydro Quebec.
 4 MR. JONES:
 5 A. And in 2008 when the then current contract
 6 was coming up for renewal or was expiring in
 7 April of 2009, we initiated an evaluation of
 8 what are the alternatives to achieve
 9 greatest value from that energy, and it was
 10 determined that the contract, marketing it
 11 ourselves and getting direct access to
 12 market ourselves was the preferred route
 13 because it gave us the greatest value.
 14 BROWNE, Q.C.:
 15 Q. And there was a financial independent study
 16 shown of that, that it was far better to
 17 incur costs from Nalcor Energy Marketing
 18 than to contract it out to Emera or Hydro
 19 Quebec.
 20 MR. JONES:
 21 A. So at that time –
 22 BROWNE, Q.C.:
 23 Q. I'm looking for best values here.
 24 (10:45 a.m.)
 25 MR. JONES:

Page 121

1 A. Absolutely, so at that time we looked at
 2 marketing it ourselves or selling it under
 3 another renewed contract with Hydro Quebec
 4 or a potential third party, but it's selling
 5 it at the boarder. We did not—we could not
 6 conclude an acceptable arrangement with
 7 Hydro Quebec, so then we looked at different
 8 alternatives to get that energy to market
 9 and we went out with a public or we went out
 10 with a solicitation for and invited bidders
 11 to come in, market providers or market
 12 energy trading companies to come in and
 13 provide that service to us to get it to the
 14 market. We ultimately ended up selecting
 15 Emera as the preferred alternative that gave
 16 us the greatest value. And then we went
 17 forward with the strategic assessment of,
 18 okay, so what do we do now in the long term.
 19 BROWNE, Q.C.:
 20 Q. You also in this diagram here referred to
 21 Bayside capacity called 250 megawatts,
 22 what's that?
 23 MR. JONES:
 24 A. So Bayside is combined cycle combustion
 25 turbine that's located in Saint John, New

Page 122

1 Brunswick as part of the arrangements with
 2 Emera. Emera had ownership rights into that
 3 plant. It is now currently owned by New
 4 Brunswick Power and we have rights through
 5 New Brunswick Power. But it is also one of
 6 those rights that we pay for it as we use
 7 it. If we don't ever use it, we'll never
 8 ever pay for anything, but we have the right
 9 to call upon that capacity to backstop our
 10 deliveries into New England.
 11 BROWNE, Q.C.:
 12 Q. Ever used it yet?
 13 MR. JONES:
 14 A. We have not. It doesn't become effective
 15 until the project is complete.
 16 BROWNE, Q.C.:
 17 Q. Until you use the Maritime Link.
 18 MR. JONES:
 19 A. No, until Muskrat Falls is complete.
 20 BROWNE, Q.C.:
 21 Q. Okay.
 22 MR. JONES:
 23 A. It's tied to sanction of Muskrat Falls—or
 24 sorry, commissioning of Muskrat Falls.
 25 BROWNE, Q.C.:

Page 123

1 Q. So we'd pay something for the use of that,
 2 as well as for New Brunswick transmission,
 3 would we pay both then at that time?
 4 MR. JONES:
 5 A. At that time, if we were entering into a
 6 transaction and it made economic sense for
 7 us to call upon the Bayside Plant to have it
 8 as a reserve and to deliver into New
 9 England, then we would pay both the Bayside
 10 capacity call and the New Brunswick
 11 transmission, of course, that would be on
 12 the back of a transaction that we entered
 13 into with customers into New England.
 14 BROWNE, Q.C.:
 15 Q. So the Bayside capacity call, you're saying
 16 Bayside is an Emera asset?
 17 MR. JONES:
 18 A. It is, it was an Emera asset, it has now
 19 been transferred to New Brunswick Power.
 20 But we have the same rights that Emera had
 21 conferred upon us through the negotiations
 22 basing New Brunswick Power is setting in to
 23 fill those obligations on Emera's behalf.
 24 BROWNE, Q.C.:
 25 Q. You have in here renewable attributes,

Page 124

1 greenhouse gas credits, how does that work?
 2 How does that work in the mix with Nalcor
 3 Energy Marketing?
 4 MR. JONES:
 5 A. So right now there are markets for what I
 6 call RECs, renewable energy certificates, in
 7 New England. The market is, it can be
 8 called—well there's really two markets, one
 9 is called a voluntary market, so that would
 10 be a company like Walmart might come out for
 11 example and say we want to have "X" percent
 12 of our energy supplied from green resources.
 13 The way that they achieve that recognition
 14 is they pay for green energy credits. So
 15 for example, here on the Island, I believe
 16 Granite Canal is a resource that's owned by
 17 obviously Newfoundland and Labrador Hydro
 18 that has eco-logo certification, so we can
 19 sell those credits. Until the Maritime Link
 20 and the connections to North America, the
 21 only market that we had was a voluntary
 22 market, so there are a couple of companies
 23 testing the waters here. We did sell a very
 24 small amount to the Juno's, when the Juno's
 25 were here in St. John's a number of years

Page 125

1 ago. The Juno’s wanted to be green.
 2 BROWNE, Q.C.:
 3 Q. Okay, so just do a general quantification of
 4 that, what does it mean in dollars and cents
 5 for Nalcor Energy Marketing and I guess for
 6 us, ultimately.
 7 MR. JONES:
 8 A. So into the long term –
 9 BROWNE, Q.C.:
 10 Q. I just said the Juno’s, by example.
 11 MR. JONES:
 12 A. So the Juno’s, as I said, that was a very
 13 incidental amount, I think it was like
 14 \$1,500.00, \$1,600.00, I’m looking over at
 15 Jeff, I can’t remember the exact number. It
 16 was incidental, like I said, they were kind
 17 of kicking the tires.
 18 BROWNE, Q.C.:
 19 Q. And that’s probably a nice word, yeah,
 20 \$1,600.00 or thereabouts, okay.
 21 MR. JONES:
 22 A. But if you look into the New England and New
 23 York marketplaces, renewable energy credits
 24 have ranged from \$50.00 a megawatt hour to
 25 five cents a kilowatt hour equivalent. They

Page 126

1 have been down as low as \$15.00 a megawatt
 2 hour or one and a half cents. The market
 3 changes quite dramatically as different
 4 policy initiatives are put in place by the
 5 various governments. So we would be looking
 6 to trade into those markets to the extent
 7 that we had renewable energy credits here,
 8 so recognizing Hydro as clean and non-
 9 emitting, basically gives us the ability to
 10 sell into green markets and right now, at
 11 the current state we are not eligible to
 12 trade RECs into New England because we are
 13 called a second tier jurisdiction, so we’re
 14 two jurisdictions away from New England.
 15 We’ve been quite active in Massachusetts
 16 with the administrators and the government
 17 there and recently the Massachusetts
 18 Department of Energy, the equivalent of
 19 Department of Energy, I can’t remember the
 20 exact acronym now, has come out with some
 21 suggested changes to its green energy or
 22 clean portfolio standards and one of those
 23 suggestions or one of those policy changes
 24 they’re looking at making is making energy
 25 from Newfoundland and Labrador eligible as

Page 127

1 to qualify for green energy credits in New
 2 England for delivery into Massachusetts. So
 3 that’s a proposed rule making that’s
 4 currently out. We’re still working with the
 5 administration in Massachusetts.
 6 BROWNE, Q.C.:
 7 Q. But we’ve heard evidence that the only
 8 market right now for electricity is the spot
 9 market, so if you’re selling to the spot
 10 market, how do you get the greenhouse gas
 11 energy credits from that point forward? How
 12 does that work?
 13 MR. JONES:
 14 A. Those are also sold on the spot market as
 15 well. So whether it’s a contract market or
 16 a spot market, it really doesn’t matter. If
 17 the counterparty is buying green energy
 18 credits or green energy, attributes that are
 19 associated with energy, those are traded no
 20 different that the energy is traded.
 21 BROWNE, Q.C.:
 22 Q. So it’s not the case of Walmart calling up
 23 Nalcor Energy Marketing and saying we got a
 24 store up in New England somewhere and can
 25 you send your electricity here? Can you

Page 128

1 take it and –
 2 MR. JONES:
 3 A. So what I described then would be called –
 4 BROWNE, Q.C.:
 5 Q. - dissemble it so I have an understanding
 6 and others here might want an understanding
 7 of it as well.
 8 MR. JONES:
 9 A. So when I spoke about Walmart and the
 10 Juno’s, those were called the voluntary
 11 market, they call us up through a green
 12 energy marketer and ask if we had anything
 13 that we would be willing to sell and we sold
 14 to the Juno’s. But the compliance or that
 15 voluntary market is a very soft market
 16 because it only just runs on companies, you
 17 know, wanting to claim themselves as green.
 18 What I refer to in New England is called a
 19 compliance market and those compliance
 20 markets are driven by the state. The state
 21 sets renewable energy standards that says
 22 that “X” percent of a particular utility’s
 23 energy must come from clean energy
 24 resources. The way that they meet that
 25 standard is they buy renewable energy

Page 129

1 credits or they buy green energy that's
 2 certified as green energy. That energy is
 3 traded on trading platforms no different
 4 than when we trade electricity.
 5 BROWNE, Q.C.:
 6 Q. So if your electricity is used in a
 7 combined, you'll get a percentage of the
 8 green energy credits, a number of companies
 9 might get it or –
 10 MR. JONES:
 11 A. Correct, yes, absolutely, so the state would
 12 look to buy or the utilities would be out
 13 buying green energy credits no different
 14 than they're buying energy.
 15 BROWNE, Q.C.:
 16 Q. So if they're buying it from various
 17 providers, energy providers, you would get
 18 your share of your –
 19 MR. JONES:
 20 A. We would be competing with those other
 21 energy providers.
 22 BROWNE, Q.C.:
 23 Q. No doubt you've made reference to markets
 24 in, and indeed Power Advisory in New England
 25 and Boston and areas, no doubt you've

Page 130

1 contacted these markets to see if there's
 2 any contracts available.
 3 MR. JONES:
 4 A. We have.
 5 BROWNE, Q.C.:
 6 Q. And what's the answer.
 7 MR. JONES:
 8 A. So we've participated a few years ago in the
 9 Massachusetts RFP, so the markets in New
 10 England are largely spot, but they do, some
 11 of the utilities do go out for long-term
 12 contracts to basically hedge their bets to
 13 meet certain state objectives. Few
 14 participated in a project called the
 15 Atlantic Link, so this is a project that
 16 when we partnered with Emera and New
 17 Brunswick Power and a number of wind
 18 providers in Maine and New Brunswick and
 19 Nova Scotia to offer energy on a
 20 transmission line that would basically,
 21 originate in New Brunswick and terminate in
 22 Boston Harbour. So we competed with a
 23 number of other providers. We were down
 24 very active in the state because ultimately
 25 it's driven by state policy objectives, so

Page 131

1 the state insisted that the utilities go out
 2 and procure this clean energy. Ultimately
 3 we were not successful. Hydro Quebec was
 4 successful with its partner, Eversource, on
 5 the, I think it was called the New Hampshire
 6 Line. That particular transmission link was
 7 since rejected by New Hampshire and now an
 8 alternate route through Maine is being
 9 pursued.
 10 BROWNE, Q.C.:
 11 Q. So Hydro Quebec is still working on that
 12 because it hasn't been perfected yet.
 13 MR. JONES:
 14 A. The contract has been signed, so the utility
 15 has signed the contract with Hydro Quebec
 16 and the transmission developers are in the
 17 process of finalizing, and getting the final
 18 permits to go through Maine.
 19 BROWNE, Q.C.:
 20 Q. And your partner, Emera, your partner in
 21 some things but not in all things, your
 22 partner attempted or offered to buy into
 23 that market as well by an underwater cable
 24 they were planning from Nova Scotia into –
 25 MR. JONES:

Page 132

1 A. It was actually from New Brunswick into
 2 Boston Harbour and we were part of that
 3 coalition.
 4 BROWNE, Q.C.:
 5 Q. You were part of that coalition, and all
 6 that didn't materialize.
 7 MR. JONES:
 8 A. As I said, we were not the successful
 9 bidder. There were a number of bidders into
 10 the Massachusetts RFP and Hydro Quebec and
 11 their partner, Eversource, were –
 12 BROWNE, Q.C.:
 13 Q. Now when that didn't all work out and you
 14 were part of the coalition, everything costs
 15 money, where would that money have come from
 16 to be involved in that? Who paid for that,
 17 Nalcor Energy Marketing or –
 18 MR. JONES:
 19 A. Nalcor.
 20 BROWNE, Q.C.:
 21 Q. Nalcor.
 22 MR. JONES:
 23 A. So Nalcor Energy Marketing would have, we
 24 would have absorbed our own costs and
 25 Business Development folks from Nalcor and

Page 133

1 some folks supporting us from Hydro would
 2 have also charged into Nalcor.
 3 BROWNE, Q.C.:
 4 Q. And how was all that costing reported to the
 5 shareholder and ultimately to rate payers?
 6 Do rate payers know what's going on there
 7 where you haven't been successful as where
 8 you have been successful?
 9 MR. JONES:
 10 A. So there would have been no impact on rate
 11 payers at all because it was ultimately a
 12 Nalcor expense and the Nalcor expense was
 13 justified to the Nalcor board.
 14 BROWNE, Q.C.:
 15 Q. In terms of Nalcor Energy Marketing where
 16 they're marketing recall power and power
 17 from Hydro, do they charge any kind of
 18 agency fee for marketing that power?
 19 MR. JONES:
 20 A. We have not yet.
 21 BROWNE, Q.C.:
 22 Q. "We have not yet", now the word "yet"
 23 attracts some interest, what are you plans
 24 there?
 25 MR. JONES:

Page 134

1 A. As I had indicated earlier, it is Hydro's
 2 intention to bring forward a long-term
 3 marketing agreement that will govern how
 4 market activities are undertaken and how
 5 value is shared between marketing and Hydro
 6 and Nalcor and any other entities that may
 7 be part of the puzzle, and that will
 8 ultimately be brought here before the Board
 9 for, at the very least, discussion. I had
 10 to look at Jennifer just to make sure I
 11 didn't say anything wrong then.
 12 MS. WILLIAMS:
 13 A. Yes.
 14 BROWNE, Q.C.:
 15 Q. So rate payers would be paying additional
 16 costs for Nalcor Energy Marketing to market
 17 rate pay of power, the power that we're
 18 paying from, coming down from Muskrat Falls,
 19 Muskrat Falls has been paid for by the rate
 20 payers of the Province and any excess power,
 21 I guess, has been paid for. The plan was to
 22 pay for in rate payer rates, so it's
 23 essentially rate payer power one way or the
 24 other, so our power then is going to be
 25 marketed and our power, the rate payer

Page 135

1 power, is going to go through Nalcor Energy
 2 via Hydro and we're going to pay a cost for
 3 that, for the marketing, that's the plan?
 4 MR. JONES:
 5 A. Presumably Nalcor Energy Marketing will not
 6 be providing free service to Newfoundland
 7 and Labrador Hydro ad infinitum. There
 8 obviously has to be an appropriate value
 9 sharing mechanism and if, you know, if there
 10 is some decision that all of the value from
 11 export activity ends up benefiting the
 12 customer, then ultimately the customer will
 13 have to pay to market that energy and
 14 whether you do it through Nalcor Energy
 15 Marketing, which based on the analysis that
 16 we've done is by far the most cost-effective
 17 route to do it, or if you pay it through the
 18 third party provider, you still have to pay
 19 for services.
 20 BROWNE, Q.C.:
 21 Q. Has that been costed in when you're costing
 22 the value of Nalcor Energy Marketing verses
 23 the values of hiring a contractor, an
 24 outside contractor, to market the power?
 25 MR. JONES:

Page 136

1 A. Yes.
 2 BROWNE, Q.C.:
 3 Q. Have those values been considered when we're
 4 looking for the lowest possible cost?
 5 MR. JONES:
 6 A. Yes.
 7 BROWNE, Q.C.:
 8 Q. From a rate payer perspective.
 9 MR. JONES:
 10 A. Correct.
 11 BROWNE, Q.C.:
 12 Q. It's 11:00 now, Chair, I'm going to move to
 13 another area in reference to the same topic
 14 where you're bringing power onto this Island
 15 through the Maritime Link and the
 16 possibilities there, what's possible and
 17 what's needed, given the fix we find
 18 ourselves in, in reference to the LIL. Is
 19 it a good time for a break?
 20 CHAIR:
 21 Q. Sure, thank you, we'll reconvene at 11:30.
 22 BROWNE, Q.C.:
 23 Q. Thank you very much.
 24 (RECESS – 11:00 A.M.)
 25 (RECONVENE – 11:30 A.M.)

Page 137

1 CHAIR:
 2 Q. Thank you. Back to you, Mr. Browne.
 3 BROWNE, Q.C.:
 4 Q. Thank you, Chair. In terms of greenhouse
 5 gas credits, Mr. Jones, I gather there's
 6 value in that for the future?
 7 MR. JONES:
 8 A. Yes
 9 BROWNE, Q.C.:
 10 Q. And in terms of the value, you gave an
 11 amount per kilowatt, did you say, is worth
 12 5.5 cents or –
 13 MR. JONES:
 14 A. Dollars per megawatt hour.
 15 BROWNE, Q.C.:
 16 Q. Dollar per megawatt hour.
 17 MR. JONES:
 18 A. Equivalent would be somewhere between 15—
 19 I've seen it as low as \$15.00 a megawatt
 20 hour and I've seen it as high as over 50..
 21 BROWNE, Q.C.:
 22 Q. So, in the future this is a way of Nalcor
 23 Energy making money through that gas credit.
 24 MR. JONES:
 25 A. Correct.

Page 138

1 BROWNE, Q.C.:
 2 Q. Now, it just strikes me that from a rate
 3 payer perspective, the rate payers are
 4 obligated to pay for Muskrat Falls through
 5 rates. The power is our power that we paid
 6 for in our rates. Why would the greenhouse
 7 gas credit go to Nalcor Energy Marketing
 8 instead of to the rate payer to mitigate
 9 against our rates directly. It is our
 10 power.
 11 MR. JONES:
 12 A. I'm not suggesting that it necessarily goes
 13 to Nalcor Energy Marketing. Nalcor Energy
 14 Marketing is a vehicle by which the value is
 15 achieved. Who get the benefit of that
 16 value, ultimately is a shareholder decision.
 17 So, if the shareholder decides that all
 18 value of external market activities go to
 19 the account of the customer here in the
 20 Province, then any monies that NEM would
 21 earn in the marketplace would ultimately be
 22 returned back to Hydro.
 23 BROWNE, Q.C.:
 24 Q. In terms of greenhouse gas submissions, do
 25 you have a figure in mind as to what Nalcor

Page 139

1 Energy Marketing could make in reference to
 2 the greenhouse gas credit alone? Has that
 3 been discussed among you, what the
 4 possibilities are there?
 5 MR. JONES:
 6 A. No. There's a number of analyses that are
 7 out there when we look at, you know, what's
 8 the price of carbon going to be. Again,
 9 that's not something that I'm deeply
 10 involved in, but it changes with different
 11 wills of different governments.
 12 BROWNE, Q.C.:
 13 Q. In terms of exactly where the money goes,
 14 Nalcor Energy Marketing is out there,
 15 presumably making money. Some quarters
 16 you've done better than others.
 17 MR. JONES:
 18 A. Um-hm.
 19 BROWNE, Q.C.:
 20 Q. And why would that be, some quarters you're
 21 doing more work or less work or is it market
 22 conditions, what is it?
 23 MR. JONES:
 24 A. It's a little bit of both. So with the
 25 product that we're marketing today, so that

Page 140

1 recapture energy product, the amount of
 2 recapture that's available at any given
 3 season is dependent upon the load in
 4 Labrador. So, we market whatever is left
 5 over. What Newfoundland and Labrador Hydro
 6 does not use in Labrador, Nalcor Energy
 7 Marketing brings to market. So, during the
 8 summer months when load is quite low in
 9 Labrador, we would be filling the 265
 10 megawatt booking through Quebec for example.
 11 So, there will be a lot of energy going to
 12 market. Depending on the market that you're
 13 going into, New England typically peaks in
 14 the wintertime now and so does New York.
 15 So, while there's greater volumes going in
 16 the summertime, they're probably lower
 17 prices on average during that season. But
 18 in the wintertime when prices are really
 19 quite high in New England, the load in
 20 Labrador is also quite high and we've been
 21 down as low as 80 megawatts in a particular
 22 hour delivering energy to market. So, it
 23 depends on what's available to market. And
 24 in the post Muskrat era when we're outside
 25 of the confines of the recapture agreement

Page 141

1 and we have the full ability or the full
 2 capability of the Province’s hydro electric
 3 reservoirs, I would full expect to see a
 4 whole lot different, much different pattern
 5 of trade activity.
 6 BROWNE, Q.C.:
 7 Q. Your profit for 2018, do you recall what
 8 that would have been generally?
 9 MR. JONES:
 10 Oh, I can’t remember off hand.
 11 BROWNE, Q.C.:
 12 Q. Twenty two million?
 13 MR. JONES:
 14 A. Yes, I was going to say, in the twenty
 15 million dollar range.
 16 BROWNE, Q.C.:
 17 Q. And 2017 it was less than that, fourteen
 18 million?
 19 MR. JONES:
 20 A. Yeah, and that was largely due with energies
 21 that was being delivered last year,
 22 certainly was the energies that were being
 23 delivered over the LIL.
 24 BROWNE, Q.C.:
 25 Q. Now how is your profit and your—where does

Page 142

1 it go? Does it go to Nalcor or does it go
 2 to Hydro? Where does your contribution to
 3 the Nalcor system, where is your dividend,
 4 where does it all go?
 5 MR. JONES:
 6 A. Currently Nalcor Energy Marketing’s
 7 dividends, a net profits from Nalcor Energy
 8 Marketing’s trading activities goes to
 9 Nalcor, with the exception of transactions
 10 that we enter into on Hydro’s behalf. So
 11 fuel displacement transactions that we enter
 12 into on Hydro’s behalf go to the account of
 13 Hydro.
 14 BROWNE, Q.C.:
 15 Q. So let me get this straight. You will be
 16 selling our electricity excess that the rate
 17 payers are paying for from Muskrat Falls,
 18 you will be selling it into the markets.
 19 You make a profit and that market, that
 20 profit does not go back to mitigate against
 21 our rates, it goes to Nalcor, the
 22 shareholder?
 23 MR. JONES:
 24 A. That is ultimately the decision of the
 25 shareholder to make, whether it goes to

Page 143

1 Hydro or to Nalcor.
 2 MR. HAYNES:
 3 A. Could I interject? For the power that is
 4 Hydro’s power, it goes back to Hydro. Under
 5 the construct of the PPAs, the stuff that is
 6 Nalcor’s is there, but the stuff that
 7 belongs to Hydro, the Schedule 2 and
 8 recapture eventually, is basically Hydro’s.
 9 So there is a mix of that. A part of it is
 10 Hydro’s, period, and a part of it is
 11 Nalcor’s from that perspective and if you
 12 direct it back to rate mitigation, of
 13 course, it’s -
 14 BROWNE, Q.C.:
 15 Q. So the Labrador recapture, for instance,
 16 that would go to Nalcor, but the Muskrat
 17 Falls –
 18 MR. HAYNES:
 19 A. In the old days, Labrador recapture was
 20 always exported and that was basically,
 21 never went back to Hydro. Hydro only
 22 retained recapture required for its use in
 23 Labrador Interconnect System. What would
 24 happen in the future is that the recapture
 25 that Hydro has will come to the Island and

Page 144

1 will allow more Muskrat Falls power, with a
 2 Hydro tag on it, if you will, from that
 3 perspective, so the recall power will be
 4 used on the Island first and then Muskrat
 5 Falls second. It just makes the excess
 6 Muskrat Falls’ power a little bit bigger
 7 than it was, but Nalcor’s amount that they
 8 own is in Nalcor, but Hydro gets the benefit
 9 of its Schedule 2, I think, energy, which is
 10 effectively bigger because recapture is
 11 coming in first. I don’t know if that’s
 12 helpful, but –
 13 BROWNE, Q.C.:
 14 Q. But you could see where a case could be made
 15 that any of the recall or I’m sorry, any of
 16 the excess power that’s sold through the
 17 Labrador Island Link, any of these excesses
 18 which are paid for by the rate payers should
 19 go directly toward our rates, should they
 20 not?
 21 MR. HAYNES:
 22 A. And I guess the finance folks will speak to
 23 it, with rate subsidization or using all
 24 those dividends back, it kind of looks after
 25 itself from that perspective. But the

Page 145

1 constructs of the contract –
 2 BROWNE, Q.C.:
 3 Q. So we shouldn't be embarrassed, the rate
 4 payer shouldn't be too embarrassed looking
 5 for that money to go towards their rates
 6 because it's our power to begin with.
 7 MR. HAYNES:
 8 A. I think the constructs put before the, you
 9 know, the Board, with respect to rate
 10 mitigation kind of contemplates that they
 11 will be used for that anyway, but it is a
 12 shareholder decision how it is done.
 13 MR. JONES:
 14 A. If I could just add on to what Jim was
 15 saying there, so based on our forecast in
 16 2021, 2022, let's say following full in-
 17 service of the Muskrat Falls facility, based
 18 on the contracts that are currently in
 19 place, not any decisions of the shareholder
 20 at some point in the future, but on the
 21 contracts that are currently in place of all
 22 of the surplus energy that will be directed
 23 to the external markets, I'm going to say,
 24 big round numbers, roughly half is to the
 25 account of Newfoundland and Labrador Hydro

Page 146

1 and roughly half is to the account of
 2 Nalcor. The part that's to the account of
 3 Newfoundland and Labrador Hydro is
 4 Newfoundland and Labrador Hydro, and any
 5 value associated with that, will be retained
 6 by Newfoundland and Labrador Hydro. What I
 7 was referring to is the portion that is
 8 currently under contract, Nalcor's, that's a
 9 shareholder's decision as to whether that
 10 gets redirected back to rates.
 11 MR. JONES:
 12 A. Yeah, I agree.
 13 BROWNE, Q.C.:
 14 Q. Can we take it through the purchases of
 15 power that you're making through the
 16 Maritime Link for the use on the Island, how
 17 does that work, generally?
 18 MR. JONES:
 19 A. So we currently have a contract in place
 20 between Nalcor Energy Marketing and
 21 Newfoundland and Labrador Hydro that enables
 22 those purchases, so it enables Nalcor Energy
 23 Marketing to go out into the market and
 24 purchase energy on behalf of Newfoundland
 25 and Labrador Hydro. Typically that's done

Page 147

1 either to support reserves, basically the
 2 need to have additional reserves of backup
 3 capacity or additional capacity here on the
 4 Island, and for water management purposes.
 5 So when we talk about water management
 6 purposes, these would be, I talked earlier
 7 about the water management meetings that
 8 Nalcor and NEM or NEM and Hydro conduct
 9 weekly. Currently we're into a particular
 10 dry spell, so our reservoirs are actually
 11 quite low right now compared to where they
 12 have been historically. So a decision has
 13 been made and the decision ultimately was
 14 made by Hydro that Hydro wanted additional
 15 energy to bring into the Province to
 16 basically shore up its water resources. So
 17 in those weekly water management meetings,
 18 there's a target given to Nalcor Energy
 19 Marketing to go out and procure "X" amount
 20 of energy on Hydro's behalf, so currently
 21 the instruction to Nalcor Energy Marketing
 22 is go out and buy whatever you can, as long
 23 as it's cost effective, i.e. it's cheaper
 24 than Holyrood, go out and buy whatever you
 25 can up to the capability of the Maritime

Page 148

1 Link to bring it in. So over this, just
 2 anecdotally this past week, so I just looked
 3 up the water management package from earlier
 4 this week, in the previous week we imported,
 5 on average, 60 megawatts, all hours,
 6 throughout the week. So that was all to the
 7 account of Newfoundland and Labrador Hydro.
 8 Hydro would pay for that energy and, of
 9 course, it's saving fuel at Holyrood.
 10 BROWNE, Q.C.:
 11 Q. How many transactions have you made to date
 12 through the Maritime Link in an effort to
 13 displace fuel at Holyrood? Are you doing
 14 this daily, weekly, monthly?
 15 MR. JONES:
 16 A. Daily. Ever since the decision was made to,
 17 that we needed to shore up the water
 18 resources here in the Province, the
 19 instruction to the marketers, to the real-
 20 time traders and to the day-ahead traders
 21 has been get whatever you can at the best
 22 price that you can achieve.
 23 BROWNE, Q.C.:
 24 Q. Can you just take us through it, the steps
 25 through it, the way this is done because I

Page 149

1 see, you go to the previous slide, Madam
 2 Clerk, "Electricity Market Participation",
 3 yes, there we go. This gives you some idea
 4 of where you're going looking for power, is
 5 that it?
 6 MR. JONES:
 7 A. Correct.
 8 BROWNE, Q.C.:
 9 Q. Okay. And how does it work specifically?
 10 MR. JONES:
 11 A. Okay, so I can give you some examples of the
 12 transactions that we have done on Hydro's
 13 behalf, so we negotiated a bi-lateral deal
 14 with Nova Scotia Power. I think that was in
 15 March of this year, for a firm supply of
 16 energy for the month of March. I think it
 17 was, I'm going to say 100 megawatts, I can't
 18 remember if it's 100 megawatts all hours
 19 with an additional 50 over the peak hours,
 20 or the other way around, but there was a
 21 substantial amount of energy that was
 22 brought in during the month of March and
 23 that was enabling the earlier shutdown of a
 24 unit at Holyrood. In 2019, so far over the
 25 Labrador Island Link earlier this year,

Page 150

1 before the link was taken out of service,
 2 there was 215 gigawatt hours of energy
 3 brought down over the Labrador Island Link
 4 that was managed on behalf of Hydro by NEM.
 5 We purchased 92 gigawatt hours of energy
 6 that was brought over the Maritime Link.
 7 Now of that 92 gigawatt hours of energy,
 8 some of it would have come from Nova Scotia,
 9 some of it from transactions with New
 10 Brunswick, so each and every day our traders
 11 are talking to their counterparts at Nova
 12 Scotia, their counterparts at New Brunswick
 13 Power, at Hydro Quebec, they're looking at
 14 the clearing markets in Ontario and the
 15 clearing markets in New England. New York
 16 is not really an alternative to bring it in
 17 over the Maritime Link, and we're making an
 18 assessment as to what counterparty was
 19 giving us the greatest value, basically who
 20 is giving us the energy at the cheapest
 21 price because that's what this is all about,
 22 is buying the energy at the cheapest price.
 23 So this, so far this year, the bulk of the
 24 energy has come from Nova Scotia and New
 25 Brunswick. We have brought in energy out of

Page 151

1 the New England marketplace. We've brought
 2 in energy out of Ontario, shipped it across,
 3 we redirected our transmission rights
 4 through Quebec to bring the energy from
 5 Ontario, deliver it to New Brunswick,
 6 through New Brunswick, Nova Scotia and onto
 7 the Island and there are occasions that we
 8 have actually brought recapture out of
 9 Labrador, through Quebec, through the
 10 Maritime Provinces and onto the Island. So
 11 those are the transactions, those are the
 12 decisions that are made each and every hour
 13 of each and every day to achieve the
 14 greatest value.
 15 BROWNE, Q.C.:
 16 Q. So if you buy on the market—we're told
 17 market prices are 2.4, 2.5 cents US a
 18 kilowatt. Can you buy at that price?
 19 MR. JONES:
 20 A. So we've bought as low as zero.
 21 BROWNE, Q.C.:
 22 Q. So you bought as low as zero when Ontario
 23 were unloading a lot of power, they had
 24 excess in their nuclear facilities.
 25 MR. JONES:

Page 152

1 A. Ontario and we also see that in New England,
 2 so when we talk about prices and market
 3 prices, there is not one set market price.
 4 Market prices change literally every five
 5 minutes.
 6 (11:45 a.m.)
 7 BROWNE, Q.C.:
 8 Q. By the time it gets here, though, it's not a
 9 zero. You have to pay transmission charges
 10 through each jurisdiction.
 11 MR. JONES:
 12 A. Absolutely, yes.
 13 BROWNE, Q.C.:
 14 Q. And is there a premium that these
 15 jurisdictions are charging to bring
 16 electricity onto the Island? Emera and Nova
 17 Scotia would know that we need it to
 18 displace fuel at a certain price, do they
 19 charge a premium for transmitting that, to
 20 make sure that we're paying through the
 21 nose?
 22 MR. JONES:
 23 A. So we've negotiated a deal with Nova Scotia
 24 Power. We call it our Framework Pricing
 25 Agreement and I'm not sure if that is

Page 153

1 public, I think it's redacted before the
 2 Board because these are highly sensitive or
 3 commercially sensitive contracts.
 4 BROWNE, Q.C.:
 5 Q. Yes, and I can appreciate that, so you're
 6 paying less than what the cost of fuel would
 7 be at Holyrood, but sometimes it's not that
 8 much less and certainly not the 2.3 cents or
 9 zero cents that's offered –
 10 MR. JONES:
 11 A. It's always substantially less than
 12 Holyrood.
 13 BROWNE, Q.C.:
 14 Q. But it's substantially less.
 15 MR. JONES:
 16 A. Yes.
 17 BROWNE, Q.C.:
 18 Q. Okay. Well we're in a dilemma, so we can't
 19 get electricity down through the Maritime
 20 Link, we have a software problem and we need
 21 to buy fuel at Holyrood for this winter.
 22 How much power do you think that you could
 23 purchase to compete with the thermal energy
 24 which have to be built there, can you
 25 displace most of that or what's the plan

Page 154

1 here?
 2 MR. JONES:
 3 A. I don't think we can displace most of that
 4 and Jennifer, I'll make a statement and ask
 5 you to weigh in on it, but Holyrood is a 300
 6 plus megawatt plant. The current capacity
 7 of the Maritime Link is quite substantially
 8 less than that, so there are –
 9 BROWNE, Q.C.:
 10 Q. What is the capacity of the Maritime Link,
 11 it is less than 300?
 12 MR. JONES:
 13 A. Full capacity of the Maritime Link is 500
 14 megawatts, either direction, but that's
 15 after all of the projects are complete and
 16 all of the system upgrades are complete here
 17 on the Island and in Labrador. Currently I
 18 think we're at about 100 megawatts in a
 19 given hour for an import capacity, I can't
 20 recall offhand, depending on the number of
 21 units that are on it, Holyrood and stability
 22 of the system, the Newfoundland and Labrador
 23 system operator identifies and sets the
 24 capacity on the Maritime Link, and basically
 25 what we do is we react to that. So if the

Page 155

1 capacity is 100 megawatts, we will go out
 2 and seek contracts up to 100 megawatts.
 3 BROWNE, Q.C.:
 4 Q. Is there less availability during the winter
 5 months?
 6 MR. JONES:
 7 A. Generally speaking, yes, because Nova Scotia
 8 and New Brunswick and Newfoundland and
 9 Labrador, we're all winter peaking
 10 jurisdictions.
 11 BROWNE, Q.C.:
 12 Q. And, of course, Holyrood doesn't operate for
 13 the most part during the summer months.
 14 MR. JONES:
 15 A. Not historically, no.
 16 BROWNE, Q.C.:
 17 Q. Not historically. So this particular
 18 winter, is there any other restraints to
 19 bringing power onto the Avalon via the
 20 Maritime Link, are there transmission
 21 inhibitions there as well on the Island?
 22 MR. JONES:
 23 A. Not to bringing it in from the Maritimes.
 24 BROWNE, Q.C.:
 25 Q. So conceivably you could bring in 300 if 300

Page 156

1 were available and bring it all the way onto
 2 the Avalon?
 3 MR. JONES:
 4 A. It would be dependent upon what the
 5 Newfoundland and Labrador system operator
 6 identifies as a constraint on the Maritime
 7 Link for import capacity.
 8 BROWNE, Q.C.:
 9 Q. In reference to the traders themselves, we
 10 see here in the trading agreements that
 11 there have to be authorizations and permits
 12 to participate into various markets. Nalcor
 13 Energy Marketing has authorizations, permits
 14 to participate. These permits and
 15 authorizations, they rest with whom? Who
 16 gets the permits and authorizations?
 17 MR. JONES:
 18 A. Nalcor Energy Marketing.
 19 BROWNE, Q.C.:
 20 Q. And Nalcor Energy Marketing, the various
 21 other significant permits, it has an NEB
 22 export permit that will rest with?
 23 MR. JONES:
 24 A. Nalcor Energy Marketing.
 25 BROWNE, Q.C.:

Page 157

1 Q. And what do these permits all cost? Do they
 2 cost –
 3 MR. JONES:
 4 A. Incidental, a few hundreds.
 5 BROWNE, Q.C.:
 6 Q. Hundreds, okay. So the traders themselves,
 7 the people you have working, do they require
 8 any kind of bonding or permit or license to
 9 deal with the markets?
 10 MR. JONES:
 11 A. They do not. They have to be authorized by
 12 the trading entity, so we notify each of the
 13 markets who is authorized to transact on our
 14 behalf.
 15 BROWNE, Q.C.:
 16 Q. In reference to your participation in it,
 17 does there have to be some kind of letter of
 18 credit or does there have to be some
 19 guarantee that Nalcor Energy Marketing puts
 20 up in reference to these matters?
 21 MR. JONES:
 22 A. Absolutely, there's big volumes of energy or
 23 big volumes of dollars going both
 24 directions, so we have to post credit with
 25 counterparties from which we are buying so

Page 158

1 we would be in arrears on some of—or not
 2 arrears, but we would be owing money for
 3 energy that we have purchased, so obviously
 4 those counterparties wished to be protected
 5 against our defaults and the other way
 6 around, so whenever we are buying energy
 7 from counterparties—excuse me, when we're
 8 buying energy from New Brunswick, we have to
 9 post credit with New Brunswick. When we're
 10 selling energy to New Brunswick, they post
 11 credit with us, for example.
 12 BROWNE, Q.C.:
 13 Q. So the posting of credit is a commercial
 14 transaction done by way of letter of credit
 15 or how is it done?
 16 MR. JONES:
 17 A. The commercial, it's through the enabling
 18 agreements, so we posted credit with New
 19 York, New England, our various
 20 counterparties, New Brunswick, OPG, Nova
 21 Scotia Power, et cetera, et cetera, and we
 22 have letters of credit from each of those
 23 entities and it's all related to the amount
 24 of the volume of transactions that we do and
 25 the credit worthiness of the various

Page 159

1 counterparties.
 2 BROWNE, Q.C.:
 3 Q. Who is a guarantor of the letter of credit?
 4 MR. JONES:
 5 A. So there's two elements, in some cases
 6 Nalcor parent has provided a parental
 7 guarantee to Nalcor Energy Marketing and
 8 that sits with the counterparties and we
 9 also have a credit facility, basically we
 10 have a credit facility with the bank and we
 11 post credit on the strength of that credit
 12 facility.
 13 BROWNE, Q.C.:
 14 Q. How much money are we talking generally, 10,
 15 15, 100 million? What would be out there at
 16 a given time?
 17 MR. JONES:
 18 A. A couple of million dollars.
 19 BROWNE, Q.C.:
 20 Q. A couple of million.
 21 MR. JONES:
 22 A. Yeah, a couple of million in credit, in
 23 letters of credit.
 24 BROWNE, Q.C.:
 25 Q. Now, can losses be incurred? You're into

Page 160

1 trading and we all watch our stock market,
 2 it's not always good news out of there.
 3 Have you incurred losses and if so, how have
 4 these losses been incurred?
 5 MR. JONES:
 6 A. Occasionally we have incurred losses.
 7 Typically, because we are delivering
 8 physical product, so we are delivering
 9 physical energy that we own, we're not
 10 speculating, so we're not taking spreads
 11 between markets or anything like that. To
 12 the extent that our transactions get
 13 interrupted, then we still have to, we are
 14 still bound by the contracts that we have
 15 entered into, so for example, yes, I think
 16 it was last year there was a fairly
 17 substantial transmission outage in Quebec,
 18 so we had transactions that we had committed
 19 a day-ahead basis to New York state, so the
 20 New York system operator. When you enter
 21 into a contract, a firm contract, it's
 22 called financially firm, so when that flow
 23 of energy gets disrupted, the market will
 24 fill the void, so if we said that we are
 25 going to supply 100 megawatts to New York

Page 161

1 state and the transmission system in Quebec
 2 went out for any reason, then we still, as
 3 far as the market is concerned, we are still
 4 delivering that energy and they are still
 5 going to pay us what they agreed to pay us
 6 for that energy, but of course, we're not
 7 delivering it, so the market makes up the
 8 whole and then we pay the market whatever
 9 the market provided on our behalf. So what
 10 happens is is that if the contract that we
 11 entered into, sometimes when you get a
 12 disruption, our day-ahead contracts are
 13 settled by the real-time markets. If the
 14 real-time market is actually cheaper than
 15 the day-ahead market, when we don't deliver
 16 we actually make money. But, of course,
 17 when you get disrupted, generally speaking
 18 there is an interruption in supply which
 19 means that the market is now under supplied
 20 and prices go up. So typically in those
 21 cases when it's due to an interruption of
 22 supply, the real-time market will increase
 23 in price because the local market is calling
 24 upon the resources in its local area that
 25 area generally more expensive than the

Page 162

1 imports that have been previously
 2 contracted, and then we pay the market
 3 whatever they supplied on our behalf. So
 4 the losses that we have incurred are, you
 5 know, a few thousands of dollars, but
 6 typically they're due to system events.
 7 BROWNE, Q.C.:
 8 Q. Just talking about thousands in losses, not
 9 millions.
 10 MR. JONES:
 11 A. Oh, it's definitely not millions. We have
 12 done a number of analyses as to what our
 13 maximum exposure is and it is nowhere close
 14 to the millions.
 15 BROWNE, Q.C.:
 16 Q. And I saw somewhere you're into hedging as
 17 well?
 18 MR. JONES:
 19 A. Hedging is done, but it's done at the
 20 direction of the board of directors. So
 21 Nalcor Energy Marketing does not hedge on a
 22 real-time day-to-day basis. Hedging is
 23 typically done at the corporate level and it
 24 is done by the direction of the Nalcor
 25 Energy Marketing or Nalcor board of

Page 163

1 directors and in the Nalcor's Treasury and
 2 Risk Management or Treasury Department
 3 actually goes out and executes those trades.
 4 BROWNE, Q.C.:
 5 Q. The Treasury Department. So the financial
 6 people who come on to testify, they'll be
 7 able to speak to that?
 8 MR. JONES:
 9 A. I'm sure they would, yeah.
 10 BROWNE, Q.C.:
 11 Q. What is hedged? Is it the profits that
 12 you're getting from -
 13 MR. JONES:
 14 A. Typically there's two main - actually, three
 15 main elements of hedging that we enter into.
 16 One is congestion management, so we talked
 17 about that before, and we buy contracts to
 18 back up our physical positions, so that
 19 would be a market transaction to make sure
 20 that we have a path to market, but the more
 21 traditional hedges which you're speaking
 22 about, I believe, are commodity hedges. So
 23 we would enter into transactions to secure
 24 income streams from a certain portion of our
 25 deliveries into various markets, and foreign

Page 164

1 exchange hedges as well, and the same thing
 2 depending on the amount of energy that we
 3 forecast that we're going to be delivering
 4 into the United States, and the amount of US
 5 dollars that we have coming back, the
 6 corporation at the corporate level may
 7 decide that we want to limit our exposure on
 8 foreign exchange, and then the Treasury
 9 Department would enter into foreign exchange
 10 contracts.
 11 BROWNE, Q.C.:
 12 Q. Have there been losses incurred through the
 13 hedging process?
 14 MR. JONES:
 15 A. I believe, yes.
 16 BROWNE, Q.C.:
 17 Q. Do you know the amount, is it thousands?
 18 MR. JONES:
 19 A. I can't recall offhand. We haven't hedged
 20 any significant volumes in the last couple
 21 of years.
 22 BROWNE, Q.C.:
 23 Q. I'm sure someone will be able to give us
 24 that information when they come forward to
 25 testify, because it can't be forgotten that

Page 165

1 Nalcor lost nearly 67 million dollars in
 2 hedging when the second loan guarantee was
 3 being negotiated due to a timing issue, and
 4 even though Nalcor said it was normal and
 5 prudent, I'm sure a lot of rate payers out
 6 there would take exception to that language.
 7 So in terms of hedging and what goes on
 8 there, the questions that we can put in
 9 reference to that would be to the financial
 10 people?
 11 MR. JONES:
 12 A. The financial folks, but I will say that,
 13 you know, a hedge is not a instrument to
 14 make or lose money. It is an instrument to
 15 protect an income stream just like buying
 16 insurance.
 17 BROWNE, Q.C.:
 18 Q. Any electricity that's brought through
 19 during the winter and to displace fuel, how
 20 is that being accounted for and reported to
 21 the regulator that fuel has been displaced,
 22 and, therefore, that budgetary item would
 23 have to be corrected accordingly? Is there
 24 a mechanism for that?
 25 MS. WILLIAMS:

Page 166

1 A. Obviously, in our test year, we would
 2 include what we expect to bring down for
 3 economic displacement of Holyrood fuel. So
 4 through that process, it gives a visibility
 5 to the Board of what we expect, and then on
 6 a monthly basis we are reporting the actual
 7 deliveries, and also goes in our quarterly
 8 report to the Board on the actual
 9 deliveries.
 10 BROWNE, Q.C.:
 11 Q. In reference to a question Mr. Fitzgerald
 12 asked you, he asked you about the load on
 13 the island. On the island there doesn't
 14 appear to be much by way of growth, and
 15 dependent on what appears on the scene. Is
 16 the same true of Labrador?
 17 MS. WILLIAMS:
 18 A. I think Labrador probably has a little more
 19 activity with regards to things that are
 20 building up up in Labrador. So I think it
 21 is definitely a different market at this
 22 point.
 23 BROWNE, Q.C.:
 24 Q. So in Labrador, the source of electricity
 25 there would be the TwinCo block 225, and the

Page 167

1 recall, the 300. If there's low growth in
 2 Labrador, that would affect possibly the
 3 recall?
 4 MS. WILLIAMS:
 5 A. We would have to do a study on how we would
 6 supply whatever the magnitude of load that
 7 does become firm and absolute.
 8 BROWNE, Q.C.:
 9 Q. There's talk of mines opening and new mines
 10 coming on, and an analysis that's been done
 11 of all that.
 12 MS. WILLIAMS:
 13 A. When things become more firm, we have to do
 14 the analysis of exactly how we're going to
 15 source, but from a transmission capacity and
 16 from a generation capacity perspective, we
 17 would have to understand what is a least
 18 cost solution to supply those kinds of
 19 customers.
 20 BROWNE, Q.C.:
 21 Q. So if recall is to be used in Labrador, it
 22 can't be used for the island or for sale, so
 23 the growth in Labrador may affect that part
 24 of the economics of our whole regime?
 25 MS. WILLIAMS:

Page 168

1 A. Correct.
 2 BROWNE, Q.C.:
 3 Q. Mr. Haynes, when you mentioned refurbishing
 4 at CF(L)co, the refurbishing that's
 5 undertaken up there by CF(L)co, who pays the
 6 employees for the refurbishing? Does that
 7 come out of CF(L)co or come out of Hydro
 8 directly?
 9 MR. HAYNES:
 10 A. There's no impact on Newfoundland and
 11 Labrador Hydro as we invest in Churchill.
 12 Hydro for the recapture contract is .2 cents
 13 per kilowatt hour. That doesn't change no
 14 matter what we spend in Churchill. The only
 15 other income besides from Hydro-Quebec for
 16 the power contract and the guarantee
 17 availability contract is a TwinCo block, and
 18 basically that is approximately 2.2 cents
 19 right now and that can change – any of the
 20 components can change annually, I think, by
 21 half CPI, something like that. It's a
 22 modest change, and that's it.
 23 BROWNE, Q.C.:
 24 Q. So any Hydro employees working up there are
 25 paid through CF(L)co? Is that the answer?

Page 169

1 MR. HAYNES:
 2 A. There are no Hydro employees working there
 3 as such on any of this upgrading work.
 4 There are costs to CF(L)co based on the
 5 admin fees that come in from Nalcor and
 6 Hydro for various services, but any
 7 operations or capital upgrades that's all
 8 self-contained within CF(L)co through its
 9 engineering or contractors. There's no pass
 10 through that goes back to Hydro rate payers.
 11 BROWNE, Q.C.:
 12 Q. So what's being done at CF(L)co rests with
 13 CF(L)co?
 14 MR. HAYNES:
 15 A. Yeah, it's pretty well self-contained, yeah.
 16 (12:00 p.m.)
 17 BROWNE, Q.C.:
 18 Q. In terms of agreements with Hydro-Quebec,
 19 years ago there were some agreements in
 20 reference to Fermont and Blanc Sablon and
 21 reciprocation when power went down in terms
 22 of Labrador City. Are those agreements
 23 still in place?
 24 MR. HAYNES:
 25 A. There is an agreement which is very rarely

Page 170

1 used in a very limited capacity. There is a
 2 46 or maybe 37 KV line – 46 KV line that
 3 leaves Wabush terminal station and it feeds
 4 Walsh's River area and then goes on to near
 5 Fermont, but it has a 10 or 12 megawatt
 6 capacity. It's more of an emergency supply
 7 for Fermont as opposed to any meaningful
 8 capability.
 9 BROWNE, Q.C.:
 10 Q. It hasn't been used that often?
 11 MR. HAYNES:
 12 A. I think it was used last year maybe once,
 13 and I think that's the first time in a
 14 number of years it was used. It's pretty
 15 miniscule from the overall capability or
 16 whatever.
 17 BROWNE, Q.C.:
 18 Q. And there are no other agreements with
 19 Hydro-Quebec, no side agreements?
 20 MR. HAYNES:
 21 A. No. When you mentioned Blanc Sablon,
 22 there's a contract between Hydro and Hydro-
 23 Quebec to utilize hydraulic resources from
 24 the Robertson River Plant, which is in the
 25 Quebec North Shore, and I can speak for

Page 171

1 Hydro a bit, but that basically is a
 2 contract that basically provides hydro power
 3 from Hydro-Quebec isolated system into this
 4 (unintelligible - 32:45) of the Blanc Sablon
 5 – sorry, the L'Anse au Loup diesel plant.
 6 So it's an opportunity to save money. The
 7 only other contract that Nalcor has is with
 8 Hydro-Quebec for the Menihek plant, which I
 9 mentioned yesterday, to serve Schefferville
 10 area and that's another isolated system.
 11 BROWNE, Q.C.:
 12 Q. In terms of Holyrood and mitigation and oil,
 13 what's the situation with Holyrood this
 14 winter coming, are all the units ready to go
 15 or where are we with all of that?
 16 MS. WILLIAMS:
 17 A. Yes, all units will be available at their
 18 capacity for this winter.
 19 BROWNE, Q.C.:
 20 Q. They've all been refurbished? There was
 21 some refurbishing of units there. It's all
 22 been completed?
 23 MS. WILLIAMS:
 24 A. Yes, actually, I think there's a report
 25 being submitted to the Board today on winter

Page 172

1 readiness, so that should be further
 2 discussed in that report.
 3 BROWNE, Q.C.:
 4 Q. So there are no issues at Holyrood for rate
 5 payers this winter to your knowledge?
 6 MS. WILLIAMS:
 7 A. No. Now certainly we are doing additional
 8 modelling, working with some of the
 9 recommendations that Liberty has suggested
 10 that we do, that talk about risks, if any
 11 risks do materialize, but that's really sort
 12 of a modelled assessment. It's not an
 13 expectation.
 14 BROWNE, Q.C.:
 15 Q. There's a question I forgot to ask Mr.
 16 Jones. When you're purchasing power to
 17 bring on to the island for the benefit of
 18 the island, is there any markup that Nalcor
 19 Energy puts on that before it goes to
 20 Holyrood – before it goes to Hydro?
 21 MR. JONES:
 22 A. No, there is no additional markup outside of
 23 the actual incremental fees that are paid to
 24 the market.
 25 BROWNE, Q.C.:

Page 173

1 Q. Now you used the word “yet” in reference to
 2 one aspect of transactions. Will there ever
 3 be a markup for that service?
 4 MR. JONES:
 5 A. I don’t know if I’d call it -
 6 BROWNE, Q.C.:
 7 Q. Is it in the plans?
 8 MR. JONES:
 9 A. I don’t know if I’d call it a markup.
 10 Nalcor Energy Marketing will need to recover
 11 its cost of this operation, and ultimately
 12 it’s providing a service to both Nalcor and
 13 to Hydro, and ultimately those customers
 14 will be expected to pay those costs.
 15 BROWNE, Q.C.:
 16 Q. So rate payers will be expected to pay the
 17 cost of bringing in the electricity as it
 18 applies to -
 19 MR. JONES:
 20 A. Not on what’s being brought in.
 21 BROWNE, Q.C.:
 22 Q. Right now?
 23 MR. JONES:
 24 A. Not right now. The long term agreement
 25 which we’ve referenced on a number of

Page 174

1 occasions which would have been brought
 2 before the Board here, will contain all of
 3 those items.
 4 BROWNE, Q.C.:
 5 Q. So the Board will be dealing with all these
 6 matters?
 7 MR. JONES:
 8 A. Absolutely, but in the interim until that
 9 happens, Nalcor Energy Marketing is not
 10 charging any fee for the services it’s
 11 providing to Newfoundland and Labrador
 12 Hydro.
 13 BROWNE, Q.C.:
 14 Q. In terms of storage and so on, Nalcor Energy
 15 Marketing is using reservoirs?
 16 MR. JONES:
 17 A. Correct.
 18 BROWNE, Q.C.:
 19 Q. And the reservoirs owned by Hydro?
 20 MR. JONES:
 21 A. Correct.
 22 BROWNE, Q.C.:
 23 Q. And so is Hydro charging anything to Nalcor
 24 Energy Marketing for the use of its
 25 reservoirs which rate payers have paid for

Page 175

1 and maintained in reference to the
 2 operations of Nalcor Energy Marketing?
 3 MR. JONES:
 4 A. The only time that Nalcor Energy Marketing
 5 would be in the current regime using Hydro’s
 6 reservoirs for its own use, so for Nalcor
 7 Energy Marketing’s use, would be under what
 8 we call ponding. So it would be economic
 9 transactions that we buy energy out of the
 10 marketplace when the prices are low and sell
 11 when the prices are high.
 12 BROWNE, Q.C.:
 13 Q. So you’re using ponding, you’re using the
 14 services of Hydro’s reservoirs?
 15 MR. JONES:
 16 A. Right, to create value, and what’s before
 17 the Board here, we have an interim ponding
 18 agreement with Newfoundland and Labrador
 19 Hydro in which all net proceeds that do not
 20 include any markups or any costs pass
 21 through from Nalcor Energy Marketing, so all
 22 net proceeds of ponding activities are
 23 resting in a deferral account and the
 24 disposition of that deferral account will be
 25 subject of a future hearing here at the

Page 176

1 Board, or a future application to the Board.
 2 BROWNE, Q.C.:
 3 Q. Thank you very much. I thank the panel and
 4 members of the panel for your answers and
 5 your forthrightness. Thank you.
 6 MR. JONES:
 7 A. You’re welcome.
 8 CHAIR:
 9 Q. Thank you, Mr. Browne. Mr. Coxworthy.
 10 MR. COXWORTHY:
 11 Q. Thank you, Madam Chair and Commissioners.
 12 Good afternoon. Paul Coxworthy for the
 13 Island Industrial Customer Group. I’d like
 14 to start with some evidence of Mr. Marshall,
 15 and if we could – well, I don’t know if we
 16 need to turn to it, but in the course of his
 17 presentation at page 13 of Mr. Marshall’s
 18 evidence on October 8th, he spoke to the cost
 19 of regulation that was, as he put it, a
 20 direct cost assigned to us, Regulatory
 21 Affairs, in 2015 was 14 million dollars, and
 22 his comment that followed on that, this is
 23 at line 16 to 20 on page 13, “Hydro had not
 24 been doing a good job”. So he seemed to be
 25 attributing at least some of that cost to

Page 177

1 his assessment that Hydro had not been doing
 2 a good job. These questions, or the
 3 questions that I'm going to follow up on,
 4 given that context, I think are directed
 5 primarily to Ms. Williams, both in her
 6 present and past capacities with Hydro, and
 7 Mr. Haynes as well to the extent that he
 8 would have some insight, I believe, into
 9 Hydro operations in some of these years.
 10 Has there been, from your perspective – I
 11 think Mr. Marshall was hoping that the Board
 12 had hoped that he had seen an improvement,
 13 but from Hydro's perspective, has there been
 14 an improvement, has Hydro strived to bring
 15 an improvement to its dealings with the
 16 Board in the regulatory –
 17 MS. WILLIAMS:
 18 A. I can certainly take that first. It
 19 absolutely has been an interest of it, and
 20 certainly in my past capacities it has been
 21 my intention to provide for that better
 22 relationship with the Board and to be more
 23 responsive, and listen to the Board, and not
 24 just the Board, but certainly the
 25 interveners, the things that are part of

Page 178

1 their inputs to all the various filings.
 2 It's been a very concerted effort and, you
 3 know, a philosophy that I have held. If I
 4 can use sort of a couple of examples, I
 5 mean, I think the most recent example that
 6 would show an improvement in the efforts
 7 over the past few years to work better with
 8 all the parties and the interveners is the
 9 cost of service that was just negotiated as
 10 opposed to a hearing. I think when we were
 11 doing our plans for that process, we
 12 expected it could be as much as a couple of
 13 week hearing, just like we're seeing here,
 14 and, you know, with the parties involved and
 15 then with the Board's approval, we're
 16 avoiding a hearing all together and it's
 17 been a negotiated process. That's a very
 18 current example of a number of years of
 19 focus of working on that regulated process.
 20 If we go back a number of years, the
 21 Prudence Review that we had to go through
 22 was very lengthy. Just all of the outcomes
 23 of the outage inquiry was quite a bit of
 24 work. So I believe we're in a much better
 25 place today, room to grow, still lots of

Page 179

1 room to grow, still a lot of accountability
 2 and transparency that we have to provide,
 3 but I do believe that we have made good
 4 strides.
 5 MR. HAYNES:
 6 A. If you don't mind, if I could, certainly
 7 when the move was made to, I think the term
 8 used, ring fence Hydro", when I came back
 9 that was in progress and we went from there.
 10 The amount of attention, and not diluting
 11 other things that were on the go, was a big
 12 positive actually helping that process, and
 13 I agree with Jennifer, I think they made
 14 great strides from that perspective because
 15 I remember testifying at the last GRA, I
 16 don't remember the question, but I wasn't
 17 worried about the engineering folks spending
 18 50 percent of their time on a Nalcor issue
 19 and 50 percent on Hydro, they were 150
 20 percent dedicated to Hydro, period, and full
 21 focus of all Hydro people was on the
 22 regulatory part and what their mandate was.
 23 There was no dilution with other activities
 24 of Nalcor. It was taking care of itself,
 25 and there was a lot more opportunity to do a

Page 180

1 better job.
 2 MR. COXWORTHY:
 3 Q. Thank you. So is it the assessment – I
 4 guess, I would ask Ms. Williams, are the
 5 regulatory costs that Hydro is incurred now
 6 vis-à-vis the processes of this Board, and
 7 I'm excluding the Commission of Inquiry and
 8 the forensic audits that were referred to by
 9 Mr. Marshall, they're not part of this
 10 Board's regulatory function, and I recognize
 11 the cost to Hydro and Nalcor in dealing with
 12 this costs, stresses, whatever you want to
 13 put it, but it's not part of the regular
 14 regulatory framework. So has the cost of
 15 serving that regular, the normal regulatory
 16 framework, in recent years, has it cost too
 17 much in Hydro's perspective?
 18 MS. WILLIAMS:
 19 A. No, I feel the costs are appropriate. I
 20 sometimes characterize it as it's an
 21 additional financial management. It
 22 certainly provides for us additional focus
 23 internally, and I don't think the costs that
 24 we're currently bearing is inappropriate.
 25 On an expected basis, I think we're in the

Page 181

1 range of 4 to 5 million. These larger things
 2 are certainly the anomalies, appropriately
 3 executed, but I think that's in the range
 4 that we would expect on a routine year with
 5 a GRA or something like that. Every year
 6 you're going to have something. Especially
 7 in the next few years we're going to have, I
 8 think, some pretty significant files to
 9 bring before the Board, so we are still
 10 going to have some of these bigger ones, but
 11 on a routine basis, it's not prohibitive.
 12 MR. COXWORTHY:
 13 Q. Sure, it's reasonable to expect in any given
 14 year, but certainly for the near future
 15 you'll have your annual capital budget.
 16 That's always a given, and probably one
 17 other thing, some of which may be somewhat
 18 predictable in terms of timing and scope,
 19 some of it perhaps not?
 20 MS. WILLIAMS:
 21 A. Correct.
 22 MR. COXWORTHY:
 23 Q. But certainly that's been the case over the
 24 past years, and I would agree that that's a
 25 reasonable expectation going forward. In

Page 182

1 terms of the rate mitigation reference and
 2 the work that Hydro and Nalcor has been
 3 asked to do to respond to the Board's
 4 inquiries, is that money well spent from
 5 both a Nalcor and a Hydro perspective, or to
 6 put it another way, is it money that you
 7 would have had to have spent anyway to
 8 address the rate mitigation issue, even if
 9 the Board had not been given this reference?
 10 MR. HAYNES:
 11 A. My personal view is, yes, it is money well
 12 spent. I mean, I think it's long recognized
 13 that rate mitigation is an issue, and there
 14 was a committee established, a Rate
 15 Mitigation Committee, primarily the
 16 Department of Natural Resources, so a fair
 17 bit of energy and things looked at, and I
 18 know that some of the finance folks can
 19 maybe comment a bit more, but there was a
 20 deep dive taking all kinds of things,
 21 electrification, you know, how much revenues
 22 or dividends or whatever get plowed back to
 23 help that. So it's been ongoing, and
 24 unavoidable. I mean, it is a must, and the
 25 other part, I think, in our report, you

Page 183

1 know, I think there was a mix of things that
 2 could be done through PUB, also some social
 3 policy issues because, you know – I told the
 4 people who report to me, I'm not worried
 5 about them, but it's the people who are on
 6 minimum wage who need help, you know, and
 7 other people don't need help, and obviously
 8 the industrial customers, you know, industry
 9 has to be sustained. It's a complicated
 10 question and it all requires a look and a
 11 deep dive on the way best to affect an
 12 outcome that works for the province
 13 primarily.
 14 MR. COXWORTHY:
 15 Q. And in your view, having that look before
 16 this Board, is that value added or that
 17 doesn't help?
 18 MR. HAYNES:
 19 A. I think it helps. I think it helps. I
 20 mean, it all has to be done because rate
 21 mitigation is there, but there is a huge
 22 issue for the provincial government to deal
 23 with from the point of view of what is the
 24 policy and what is the mandate from that
 25 perspective.

Page 184

1 MR. COXWORTHY:
 2 Q. Ms. Williams, anything you want to add to
 3 that?
 4 MS. WILLIAMS:
 5 A. I agree, and I think part of your question
 6 was, would you have been doing it, anyway,
 7 and I do believe that is the case. However,
 8 when you have a different group come in and
 9 ask you questions certainly the way that
 10 Liberty did, and especially for me where I
 11 was new in the role, and I don't have the
 12 same history as Mr. Haynes would, I got to
 13 know a lot of good things about Hydro, but I
 14 also, again through the types and minds of
 15 questioning that Liberty would have provided
 16 and as we were developing our own evidence,
 17 it provided for me that spotlight that
 18 additional extra deep focus on where we can
 19 indeed improve. So would we have gotten to
 20 the exact same conclusions and commitments
 21 that we're making today, perhaps; it
 22 certainly has been beneficial.
 23 (12:15 p.m.)
 24 MR. COXWORTHY:
 25 Q. Thank you, Ms. Williams. I wanted to move

Page 185

1 on to Nalcor’s mandate. There’s been much
 2 said by some of the experts who have already
 3 given testimony or their presentations,
 4 their evidence, however you want to
 5 characterize it, to the Board. Mr. Marshall
 6 spoke about Nalcor’s mandate and the
 7 importance of the Nalcor organizational
 8 structure serving the mandate that its been
 9 given by government. I think he put
 10 particular emphasis on that, and I’m going
 11 to paraphrase the Nalcor mandate, but please
 12 correct me if you think I’m being unfair in
 13 my paraphrasing it, “It’s to maximize
 14 benefits to the province from the
 15 unregulated Hydro electric resources in the
 16 province”.

17 MR. HAYNES:
 18 A. It is, yes, for energy developments that can
 19 be done that the rate payer doesn’t need –
 20 that Newfoundland Hydro doesn’t need. When
 21 Hydro goes down to its load forecasting of
 22 capacity and energy, they will identify
 23 requirements and needs. If there are
 24 developments there that Hydro has that can
 25 do that, then they will, obviously, stand

Page 186

1 the scrutiny of the Public Utilities Board,
 2 as they should. If there are projects that
 3 are absolutely outside that, that are for
 4 export potential and monetization value to
 5 the province, they will be unregulated.
 6 That doesn’t mean they don’t interact with
 7 Hydro from a transmission point of view. We
 8 need some of their resources from a
 9 transmission planning perspective to say
 10 what can and can’t be done, what’s the right
 11 voltage level, and things like that from an
 12 optimization point of view, and I would also
 13 suggest that there would always be a look as
 14 to what does this mean for Hydro down the
 15 road. You know, whether there will be a
 16 recall provisions or whatever and some of
 17 those things later on, I don’t think that
 18 can be left off the table either, but,
 19 obviously, there’s a lot of discussion and
 20 negotiation before you get an off-taker to
 21 justify building another project.

22 MR. COXWORTHY:
 23 Q. Ms. Williams, before I follow up, anything
 24 you wanted to add to that?
 25 MS. WILLIAMS:

Page 187

1 A. No, I agree with Jim.
 2 MR. COXWORTHY:
 3 Q. Okay. So to explore further the mandate of
 4 Nalcor and what it means in terms of your
 5 decision-making, you made a distinction
 6 there, Mr. Haynes, I think a fairly black
 7 and white distinction between unregulated,
 8 not necessary to serve Hydro customers. I
 9 mean, they might get a benefit, obviously,
 10 to the extent rate payers are also tax
 11 payers in the province, etc, etc., but not
 12 directly necessary to serve their electrical
 13 needs, and then regulated, and that is the
 14 costs that are necessary to provide
 15 electrical service to people in the
 16 province.

17 MR. HAYNES:
 18 A. Uh-hm.
 19 MR. COXWORTHY:
 20 Q. That’s the dividing line. Of course, there
 21 is a middle category – I’ll call it a middle
 22 category that exists now in this province,
 23 which is the Muskrat Falls assets, which at
 24 least are in part necessary to serve the
 25 customers, but there’s also a decision been

Page 188

1 made at policy level to be unregulated. So
 2 there’s that middle – would you agree that
 3 that’s a middle ground between the –

4 MR. HAYNES:
 5 A. It is a middle ground, and under the current
 6 construct is unregulated, yes. It’s in the
 7 middle. It was primarily done to offset
 8 Holyrood, so there was over capacity, and I
 9 think the Maritime Link was an avenue to
 10 monetize that a bit better than through
 11 Quebec. I think it was all well purposed at
 12 the time. Unfortunately, things have
 13 changed a bit on the cost and so on.

14 MR. COXWORTHY:
 15 Q. I don’t want to revisit the wisdom of the
 16 decision. That’s not my intent.

17 MR. HAYNES:
 18 A. No, no, it is done.
 19 MR. COXWORTHY:
 20 Q. Just to identify that there is that middle
 21 category of asset.

22 MR. HAYNES:
 23 A. There is a middle category.
 24 MR. COXWORTHY:
 25 Q. But Nalcor’s pure mandate, if I can call it

Page 189

1 that, you know, let's leave aside Muskrat
 2 Falls for a moment, you know, maximizing
 3 exports from power that isn't necessary to
 4 provincial customers, new hydro developments
 5 if there's an opportunity for those that
 6 aren't going to put risk on the people of
 7 the province, the rate payers, and I'd say
 8 even further perhaps maximizing generation
 9 from existing hydro assets. Is that – you
 10 mentioned, for instance, with respect to
 11 Churchill Falls, I thought – perhaps it was
 12 you, perhaps I'm thinking back to Mr.
 13 Marshall, but I thought there's been some
 14 evidence here that there might be an
 15 opportunity to increase capacity in the
 16 future with respect to the Churchill Falls
 17 generation assets?
 18 MR. HAYNES:
 19 A. There are options in Churchill Falls to
 20 increase capacity and energy, based on the
 21 existing assets, with capital investment,
 22 particularly from the point of view of new
 23 runners. There's are different degrees.
 24 And you could design a runner – sorry to tap
 25 the microphone. You can design a runner for

Page 190

1 maximum capacity. You can design a runner
 2 to be more efficient or to generate more
 3 energy. So, we have, last year, replaced
 4 one runner.
 5 We did not finish the efficiency
 6 testing. We kind of benchmarked, if you
 7 will, the megawatts and energy additions
 8 that were added by that unit. We've done
 9 some preliminary testing, but the vendor had
 10 some issues with their modelling equipment
 11 and it'll be redone next year to nail down
 12 what the efficiency curve is and what – how
 13 many megawatts we actually got. But you
 14 know, it is – it's not insignificant. I
 15 think Mr. Marshall used 100. It's more like
 16 a couple hundred megawatts potential
 17 obviously with a capital investment.
 18 And basically, right now in the Hydro
 19 Quebec, as I understand it, they have
 20 energy. They have a fair bit of energy.
 21 They stood a lot last year, but there's also
 22 some capacity constraints that could add to
 23 that or onto Quebec or for Newfoundland and
 24 Labrador load for that matter.
 25 But it can be done. There are

Page 191

1 opportunities to upgrade the plant. As, and
 2 I'll go back to in the mid-80s, the Bay
 3 d'Espoir plant was upgraded. There were new
 4 runners put in there for various reasons and
 5 there was, I think primarily an energy
 6 efficiency improvement there, as opposed to
 7 megawatts. But you know, when the
 8 specialists design a runner, they can
 9 optimize it different ways, depending where
 10 the market is or what the value is or what
 11 you're looking for.
 12 MR. COXWORTHY:
 13 Q. And if the opportunities to increase the
 14 amount of capacity energy that's available
 15 from Churchill Falls, if the decision is
 16 made to proceed with those capital
 17 investments, none of that is going to come
 18 back onto Hydro customers in terms of their
 19 having to pay for any cost of that in rates?
 20 Is that correct?
 21 MR. HAYNES:
 22 A. Under the current structure, no. With a
 23 CF(L)Co. hat on, if they've added, you know,
 24 200 megawatts and, I just don't recall the
 25 energy amount off the top of my head, but

Page 192

1 let's say it's 200 gigawatt hours, for
 2 instance. So that might have a different
 3 pricing structure and if it was sold to
 4 Hydro, that would be negotiated obviously
 5 from that perspective. But to invest in the
 6 plant right now and do all that there, based
 7 on Newfoundland Hydro's current take of Twin
 8 Block and Recapture, there would be no
 9 impact on your rates because of that.
 10 MR. COXWORTHY:
 11 Q. So, you know, I'd like to contrast that,
 12 hypothetically mind you, with the Muskrat
 13 Falls Project. And if at some future time
 14 it's determined by Nalcor, by Power Supply
 15 if that's the structure that's there now,
 16 that there are capital investments that
 17 should be made to maximize generation from
 18 that asset or enhance generation from that
 19 asset, are those costs that could or will be
 20 visited on Hydro's customers?
 21 MR. HAYNES:
 22 A. There's an obligation for Hydro to take
 23 power based on, you know, the current
 24 construct sustaining capital would require.
 25 But basically, the basis is all that's kind

Page 193

1 of locked down. If we were to – I don't
 2 think we -
 3 MR. COXWORTHY:
 4 Q. Or hardwired, to use Mr. Marshall's -
 5 MR. HAYNES:
 6 A. We could use that term, but if there were
 7 provisions or a need to put in a fifth
 8 runner, for instance, at Muskrat, which I
 9 don't think there is because of the way it's
 10 done, but if there was, that would be
 11 completely outside of Hydro. That would be
 12 a separate issue. The Hydro rate payer
 13 should not bear any cost for that.
 14 MR. COXWORTHY:
 15 Q. So, is it your view that there can be a
 16 clear line made, in terms of future capital
 17 investments at Muskrat Falls, between what's
 18 strictly necessary to serve the existing
 19 agreements -
 20 MR. HAYNES:
 21 A. I think the intent -
 22 MR. COXWORTHY:
 23 Q. - as opposed to what might be, you know,
 24 something to pursue an export opportunity
 25 generate some extra capacity or ability to

Page 194

1 dispatch from that – from Muskrat Falls,
 2 additional export energy?
 3 MR. HAYNES:
 4 A. The Hydro rate payer, the Island rate payer
 5 should only be paying for the current assets
 6 that are designed and sustaining capital to
 7 keep that going. If there's enhancements, I
 8 think that's a separate discussion.
 9 MR. COXWORTHY:
 10 Q. Okay. And you're confident sustaining
 11 capital or sustaining activity is another
 12 term that's used?
 13 MR. HAYNES:
 14 A. Yes. I mean, you know, those assets that
 15 can be -
 16 MR. COXWORTHY:
 17 Q. There's a ring around – you've talked about
 18 a ring around Hydro. Is there a ring around
 19 that?
 20 MR. HAYNES:
 21 A. I think the basis of design kind of sets
 22 that out. This is what Hydro signed onto in
 23 the PPA and basically it identifies the
 24 capability. Like if I wanted to use an
 25 example, if for some reason they thought

Page 195

1 they could increase the LIL rating from, you
 2 know, the 900 megawatts to 1200 megawatts
 3 for export things that would not be to the
 4 repair. That incremental cost should
 5 clearly be a Nalcor cost and not be
 6 transferred to the rate payer. So, I don't
 7 think the issue to maintain the assets that
 8 we have built on, you know, basically for
 9 the 55-year period, from that perspective.
 10 MR. COXWORTHY:
 11 Q. Perhaps to use a separate example, a
 12 different example and not a hypothetical one
 13 this time. The software problems with
 14 respect to the transmission system that
 15 we've been hearing about. Mr. Marshall
 16 spoke about he's going to be going to Europe
 17 next week to gather information, hopefully
 18 get some good news about whether we're
 19 getting closer to a resolution there.
 20 Now, I don't want to get into whatever
 21 contractual arrangements Nalcor has with GE
 22 and who's responsible for cost overruns and
 23 the rest of that, but I do, at a high level,
 24 want to ask. Is the delay and difficulties
 25 in solving that software problem, is it

Page 196

1 driving any costs to Nalcor that it may not
 2 recover through its contractual arrangement
 3 with GE or from some other source?
 4 MR. HAYNES:
 5 A. It depends on where it goes at the end of
 6 the day with respect to what they deliver
 7 and there are two things that are – GE
 8 delivered systems before on this particular
 9 Series 5 software, but I mean, they do
 10 things a little bit uniquely, I'll say.
 11 What Hydro needs and what the Island needs
 12 are reliability and availability and so, if
 13 we have a high availability, in other words
 14 we can deliver all the energy but it's
 15 tripping every other day, you know, or an
 16 hour in a day or once a week, that's not
 17 reliable and that's not suitable to the
 18 Island. So, we need to have both. That's
 19 the challenge.
 20 If there's an investment – I would
 21 suggest that if there's an investment
 22 required, you know, in a year or two or
 23 three to actually improve that reliability
 24 that will be to – that will be a part of our
 25 sustaining capital from that perspective.

Page 197

1 MR. COXWORTHY:
 2 Q. Do you -
 3 MR. HAYNES:
 4 A. I will add -
 5 MR. COXWORTHY:
 6 Q. I'm sorry, go ahead.
 7 MR. HAYNES:
 8 A. - there are penalties with GE for the
 9 reliability implications. They are under
 10 the contract, basically under the contracts.
 11 They are allowed a bi-pole trip that's
 12 deemed to be their fault I think once in
 13 every ten years. They are allowed a single
 14 pole fault I think five in a year. But the
 15 system doesn't actually see that. It
 16 recovers from a - you know, that is one of
 17 the design principles there that's in the
 18 contract and that is still there. But,
 19 obviously they have to deliver that and they
 20 will be held accountable.
 21 If it actually gets to the point where
 22 it's not workable and we require a capital
 23 fix, I think that is, you know, I'll call it
 24 sustaining capital. We need to get it to
 25 work.

Page 198

1 MR. COXWORTHY:
 2 Q. It would be a cost that would be driven
 3 towards Hydro's customers -
 4 MR. HAYNES:
 5 A. Yes.
 6 MR. COXWORTHY:
 7 Q. - if a capital fix is necessary?
 8 MR. HAYNES:
 9 A. That would be my view, yes.
 10 MR. COXWORTHY:
 11 Q. And I don't know if you can provide us with
 12 any insight about if the only technological
 13 or software problem that needed to be
 14 resolved was getting Muskrat Falls power to
 15 the Avalon Peninsula and we didn't have to
 16 worry about any of the other transmission
 17 leaks, would we be having this software
 18 problem?
 19 MR. HAYNES:
 20 A. Could you just repeat the question?
 21 MR. COXWORTHY:
 22 Q. Sure. No, it's - if - with respect to the
 23 software problem that's confronting Nalcor,
 24 you know, if the only issue, if the only
 25 technological problem that needed to be

Page 199

1 solved is how do we get X amount of
 2 megawatts from Muskrat Falls to the Avalon
 3 Peninsula, to Soldier's Pond -
 4 MR. HAYNES:
 5 A. Yes.
 6 MR. COXWORTHY:
 7 Q. - if that's the only issue that needed to be
 8 - the Maritime Link wasn't part that needed
 9 to be factored in. If the LTA and its
 10 linkage through that to Quebec didn't need
 11 to be factored in. If all we were worrying
 12 about is that lead line from Muskrat Falls,
 13 would the software problems be as complex?
 14 MR. HAYNES:
 15 A. I think the software - I don't think the
 16 software problem is the root here. I think
 17 that will be there no matter what.
 18 MR. COXWORTHY:
 19 Q. No matter what?
 20 MR. HAYNES:
 21 A. The software problem will be - there might
 22 be little nuances of blocking or transfer
 23 trips, I can't remember the term exactly, or
 24 things like that, but the overload
 25 capability and making that software work is

Page 200

1 fundamental to making the DC line work. And
 2 whether the Maritime Link is there or the
 3 350Kv lines to Churchill are there, it
 4 doesn't matter.
 5 MR. COXWORTHY:
 6 Q. You don't think that's -
 7 MR. HAYNES:
 8 A. It's fundamental.
 9 MR. COXWORTHY:
 10 Q. From your understanding, that's not a factor
 11 in terms of the software?
 12 MR. HAYNES:
 13 A. It is the fundamental issue.
 14 MR. COXWORTHY:
 15 Q. Thank you. I'm going to move on, I think,
 16 for some questions for Mr. Jones. And if we
 17 could turn to Slide - starting with Slide 20
 18 of the Nalcor Energy Marketing presentation.
 19 And Mr. Jones, as I read this slide, it
 20 delineates three distinct functions. There
 21 are others, obviously, under Nalcor's
 22 umbrella, but three distinct functions in
 23 terms of what's - or divisions, if you want
 24 to put it that way, or components of Nalcor,
 25 which are relevant to what the Board has to

Page 201

1 consider in this reference. And one of them
 2 is Hydro. One of them is CF(L)Co. Muskrat.
 3 Is another way of talking about them Power
 4 Supply?
 5 MR. JONES:
 6 A. Sure.
 7 MR. COXWORTHY:
 8 Q. And then you've got the organization for
 9 which you're responsible as sort of the
 10 third. And is that how it works in
 11 practice? Is it really a three –
 12 (12:30 p.m.)
 13 MR. JONES:
 14 A. Absolutely. So, in practice, because
 15 CF(L)Co. and Muskrat are really not part of
 16 the equation just yet, you know, as it
 17 relates to supplying Island needs, it is
 18 strictly between Hydro and NEM, but fully
 19 expect that Muskrat and CF will be involved
 20 in it.
 21 MR. COXWORTHY:
 22 Q. And without going through all your evidence
 23 or all the slides, you know, my
 24 understanding is you were describing in
 25 terms of the work that Nalcor Energy

Page 202

1 Marketing does is that there's a lot of
 2 interfacing directly with Hydro. So, not -
 3 MR. JONES:
 4 A. Yes.
 5 MR. COXWORTHY:
 6 Q. You don't need to go through Power Supply or
 7 through some other Nalcor entity. You
 8 interact directly, your people interact
 9 directly with Hydro?
 10 MR. JONES:
 11 A. Correct.
 12 MR. COXWORTHY:
 13 Q. And Hydro, as a regulated entity, has Nalcor
 14 Energy Marketing been less nimble or
 15 impaired in its task by the fact that it
 16 needs to deal with a regulated entity,
 17 Hydro? Has that been your experience or the
 18 experience of Nalcor Energy Marketing up to
 19 this point?
 20 MR. JONES:
 21 A. So, I would say yes.
 22 MR. COXWORTHY:
 23 Q. You would say yes, it has impaired your
 24 nimbleness?
 25 MR. JONES:

Page 203

1 A. It has impaired our nimbleness.
 2 MR. COXWORTHY:
 3 Q. Can you give us an example?
 4 MR. JONES:
 5 A. Yes.
 6 MR. COXWORTHY:
 7 Q. Thank you.
 8 MR. JONES:
 9 A. So, when we first contemplated the prospect
 10 of ponding activities that we identified
 11 value opportunities that were available that
 12 we could arbitrage, basically by low, sell
 13 high, but there was a requirement that Hydro
 14 did not have the authority to sell to NEM to
 15 enable those transactions. So, that
 16 required a process that was held before the
 17 Board here and ultimately the project was
 18 approved and then the contract was approved
 19 and we started executing on it. But,
 20 opportunities were lost.
 21 MR. COXWORTHY:
 22 Q. And what was your understanding of why it
 23 needed to be brought to the Board? What was
 24 the concern?
 25 MR. JONES:

Page 204

1 A. So, I can't speak for the lawyers, the many
 2 lawyers here in this room.
 3 MR. COXWORTHY:
 4 Q. If you don't know the answer to that, you
 5 know, I don't want you to speculate.
 6 MR. JONES:
 7 A. I don't think Hydro had the authority to
 8 sell to NEM under that construct.
 9 MR. COXWORTHY:
 10 Q. Do you know or have any insight as to
 11 whether there would have been any concern at
 12 Hydro's end, at the regulated end, as to
 13 whether what was being proposed might impact
 14 on the reliability of supply to Hydro's
 15 customers?
 16 MR. JONES:
 17 A. It would certainly have been a conversation
 18 between Hydro and NEM, but it would not have
 19 been an impediment because it is a given.
 20 It is a license to operate.
 21 MR. COXWORTHY:
 22 Q. So, whatever ponding arrangements were put
 23 in place, it would be a given that they
 24 could have no impact on reliability of
 25 supply?

Page 205

1 MR. JONES:
 2 A. Correct.
 3 MR. COXWORTHY:
 4 Q. And is that as proposed by yourselves and
 5 Hydro?
 6 MR. JONES:
 7 A. Yes.
 8 MR. COXWORTHY:
 9 Q. And going to the Board to confirm that; that
 10 was an impediment?
 11 MR. JONES:
 12 A. No, that wasn't the – that wasn't the reason
 13 to go to the Board. The reason to go to the
 14 Board was to get approval to sell to NEM.
 15 It was a technical limitation that we felt
 16 had to be closed.
 17 MR. COXWORTHY:
 18 Q. And did that take a long time to obtain that
 19 technical approval?
 20 MR. JONES:
 21 A. Six months, I think, something like that.
 22 MR. COXWORTHY:
 23 Q. Is that something that's going to be
 24 repeated in the future?
 25 MR. JONES:

Page 206

1 A. No.
 2 MR. COXWORTHY:
 3 Q. So, are there any other impediments of that
 4 sort that you see on the horizon in dealing
 5 with Hydro as a regulated entity that's
 6 going to impair the nimbleness of your
 7 organization?
 8 MR. JONES:
 9 A. Under the construct that we have achieved or
 10 we have established so far, which is Hydro
 11 establishes basically the rules of
 12 engagement for use of Hydro's assets and,
 13 you know, maintaining security of supply as
 14 paramount in all decision making. With that
 15 as a given, I don't see the fact that Hydro
 16 would be regulated as an impairment to NEM's
 17 ability to achieve value.
 18 MR. COXWORTHY:
 19 Q. Okay. If we could turn to page 21 of
 20 Nalcor's evidence filing on September 20th, I
 21 think. I think I would say September 19th,
 22 but September 20th, 2019. So, page 21 of the
 23 Nalcor evidence. Yes, if we could scroll
 24 down to the bottom or near the bottom of
 25 page 21.

Page 207

1 And what I'm referring to or will be
 2 referring to is an extensive, I guess, quote
 3 by Hydro from Power Advisory's report and I
 4 didn't go to Power Advisory's report because
 5 I do – I, at least, attach some significance
 6 to the fact that Hydro or Nalcor thought
 7 that this passage was sufficiently important
 8 to highlight to the Board by putting it in
 9 their own evidence in the light that it's
 10 been provided there.
 11 So, I'm not going to read through the
 12 whole passage, but the passage I'll say is
 13 about, you know, is there a conflict, if I
 14 can, about the decisions Power Supply is
 15 going to have to make on a go-forward basis
 16 and reliability of supply to Hydro's
 17 customers. I don't want to suggest that's
 18 all it says, but you know, without reading
 19 through at a high level, I think that that's
 20 what it's talking about.
 21 So, if we could move on then to the
 22 next page, and I'm going to read the last
 23 couple of sentences. And one of them talks
 24 about – I'm sorry, just before that. Talks
 25 about the value of off-system transactions.

Page 208

1 So, I think the types of transactions, Mr.
 2 Jones, that your organization or your
 3 division of Hydro is – Nalcor, I'm sorry, is
 4 going to be doing.
 5 "Neither activity is likely to threaten
 6 reliability. Increase output will enhance
 7 reliability and shifting the timing of
 8 output should not have an effect. Power
 9 Advisory understands that maintaining the
 10 reliability of service to Newfoundland
 11 customers will be Hydro's highest priority.
 12 It could require" and I think it means Hydro
 13 there, "could require that sales to export
 14 markets be interrupted."
 15 So, I have a few questions about that
 16 passage for you, Mr. Jones. "Reliability of
 17 service to Newfoundland customers will be
 18 Hydro's highest priority". Is that the
 19 mandate of Newfoundland (sic) Energy
 20 Marketing, that the reliability of service
 21 to Newfoundland customers is also its
 22 highest priority?
 23 MR. JONES:
 24 A. Absolutely, and we've embedded that in our
 25 contracts.

Page 209

1 MR. COXWORTHY:
 2 Q. And “it could require that sales to export
 3 markets be interrupted”. Again, I don’t
 4 want to get into anything commercially
 5 sensitive, but you just mentioned that this
 6 principle is embedded in your contracts,
 7 your contracts with customers, off-system
 8 customers. Do those contracts also include
 9 provision to deal with the possibility that
 10 Hydro may require that sales to export
 11 markets be interrupted?
 12 MR. JONES:
 13 A. Yes.
 14 MR. COXWORTHY:
 15 Q. And what’s the degree of sensitivity there?
 16 I mean, can Hydro say, with respect to an
 17 existing contract, power is flowing to that
 18 customer, we’ve got to interrupt that in 15
 19 minutes? Is there that degree of sense –
 20 because we’ve got a problem here on the
 21 Island that needs that level and that
 22 rapidity of response? Is that level of
 23 sensitivity built into the contracts that
 24 NEM has with its customers?
 25 MR. JONES:

Page 210

1 A. Yes. Yes, with the exception, I would say,
 2 of the Nova Scotia block. So, the
 3 reliability obligations on the – or the
 4 obligation to serve the Nova Scotia block,
 5 those reliability obligations and the
 6 priority of service out of Muskrat Falls and
 7 the priority of service due to transmission
 8 interruptions that would impact the flow of
 9 energy potentially out of Muskrat Falls or
 10 even to Nova Scotia Power, those are
 11 embedded into the contract and obviously
 12 Nalcor has to abide by that contract as
 13 well.
 14 MR. COXWORTHY:
 15 Q. And you’ve mentioned in your evidence in
 16 response to questions from Mr. Browne, I
 17 believe, the Bayside backstop, if I can call
 18 it that.
 19 MR. JONES:
 20 A. Um-hm.
 21 MR. COXWORTHY:
 22 Q. The New Brunswick generation facility. What
 23 type of generation facility is that? Is it
 24 gas turbine? Is it -
 25 MR. JONES:

Page 211

1 A. Combined cycle combustion turbine fired on
 2 natural gas.
 3 MR. COXWORTHY:
 4 Q. And it is otherwise used by New Brunswick
 5 Power to serve its customers or is it
 6 entirely surplus to NB Power’s needs or do
 7 you know?
 8 MR. JONES:
 9 A. It is not entirely surplus. New Brunswick
 10 Power bought it from Nova Scotia Power or
 11 excuse me, from Emera. During the five
 12 winters – so, we have access to the capacity
 13 call for the summer months. New Brunswick
 14 uses it to supply native load during the
 15 winter months and for reliability purposes.
 16 MR. COXWORTHY:
 17 Q. So, to use my hypothetical Hydro calls you
 18 up and says “we’ve got to interrupt any
 19 export of power in 15 minutes”, is the
 20 Bayside backstop, does it have the
 21 sensitivity for you to be able to call them
 22 and say “we need – we want to backstop this
 23 interruption. Make up for this interruption
 24 by taking power from your facility”?
 25 MR. JONES:

Page 212

1 A. Yes, and there are obviously constraints on
 2 the ability to start up the unit, et cetera,
 3 et cetera, but yes, the combination of that
 4 contract, that facility and the contract
 5 language that we have in all of our enabling
 6 agreements would cover off that eventuality.
 7 MR. COXWORTHY:
 8 Q. Is there always though the possibility that
 9 Bayside may not be in a position to respond
 10 to that call or not respond to it in a
 11 timely fashion?
 12 MR. JONES:
 13 A. Absolutely.
 14 MR. COXWORTHY:
 15 Q. So that there is an actual interruption to
 16 NEM’s end customer?
 17 MR. JONES:
 18 A. That is correct.
 19 MR. COXWORTHY:
 20 Q. And again, without getting into too much
 21 detail about the first (unintelligible)
 22 obviously someone suffered a loss in that
 23 situation where the power has been
 24 interrupted.
 25 MR. JONES:

Page 213

1 A. So, NEM would bear that risk. So, that
 2 would be similar to the example that I
 3 described on the transmission interruption
 4 through Quebec in which we either win or
 5 lose on the real-time market filling our
 6 contracts for us.
 7 MR. COXWORTHY:
 8 Q. So, to the extent there's any loss from that
 9 interruption that NEM might have to bear, if
 10 that loss was caused by Hydro calling for an
 11 interruption, that's still a loss that NEM
 12 and Nalcor has to bear? IT doesn't get sent
 13 back to Hydro?
 14 MR. JONES:
 15 A. Correct.
 16 MR. COXWORTHY:
 17 Q. In one way or another?
 18 MR. JONES:
 19 A. That's correct.
 20 MR. COXWORTHY:
 21 Q. That's your understanding?
 22 MR. JONES:
 23 A. Yes.
 24 MR. COXWORTHY:
 25 Q. Is it possible there could be a disagreement

Page 214

1 between NEM and Hydro as to the timing of
 2 such an interruption? Is that a discussion
 3 that you could conceive NEM having with
 4 Hydro?
 5 MR. JONES:
 6 A. I suppose there's always room for a
 7 discussion, but generally speaking, those
 8 decisions to interrupt supply would be done
 9 by the Newfoundland and Labrador system
 10 operator and we are governed by the
 11 operations of the system operators in every
 12 jurisdiction that we operate. So, there are
 13 times that we have been curtailed from
 14 delivering into New York by the New York
 15 system operator because the New York system
 16 operator says "we do not – we cannot absorb
 17 your energy." There's no forgiveness out of
 18 that. We still have to meet our contracts
 19 to that same system operator who just
 20 interrupted our supply. But that is –
 21 that's the nature of how the energy trading
 22 business works.
 23 MR. COXWORTHY:
 24 Q. Thank you, Mr. Jones. If we could turn to –
 25 this is again in Nalcor's evidence – to page

Page 215

1 40 of Appendix A, and that's the summary, I
 2 believe, of Nalcor Hydro has a public –
 3 well, as a utility. And the current
 4 structure is: Power Development, which is in
 5 addition to being responsible for Muskrat
 6 Falls, also responsible for potential
 7 developments at Gull Island or such as Gull
 8 Island; Power Supply; and then Newfoundland
 9 Hydro. What is the thinking, Mr. Haynes, as
 10 to why Power Development, as I understand
 11 it, should be folded into Power Supply?
 12 MR. HAYNES:
 13 A. Well, Power Development was created – I
 14 mean, started off obviously, as was already
 15 mentioned, with respect to Gull Island. But
 16 when you start to execute a project like
 17 Muskrat Falls and LIL, it was all contained
 18 within that particular group. Until Gull
 19 gets – or some other larger development gets
 20 legs under it, you know, it will be a part
 21 of kind of the engineering folks who would
 22 look at those things. There would be
 23 somebody obviously leading any negotiation
 24 or exercise with respect to what we're doing
 25 and technical and economic. But once it

Page 216

1 starts to get traction and that they're
 2 going to build it, you know, you tend to
 3 have somebody specifically assigned to that.
 4 In this case, for Muskrat Falls, there
 5 was a department set up. Gilbert Bennett is
 6 the VP looking after that there and most of
 7 those – well, other people are contractors.
 8 So, I think it's a matter of timing,
 9 you know. You roll it back in to Power
 10 Supply. If Gull became a development, you
 11 would probably have that kind of farmed out
 12 again as being a separate group to deliver
 13 that, obviously using people that will be
 14 transferred over temporarily or contractors.
 15 That will be the construct. I don't know
 16 why we would not do that again. Once it
 17 gets legs and starts to get traction and
 18 actually gets sanction sort of thing.
 19 MR. COXWORTHY:
 20 Q. Is there anyone within Power Development now
 21 dedicated solely to examining potential
 22 developments, i.e. anything other than
 23 Muskrat Falls?
 24 MR. HAYNES:
 25 A. I think Gilbert spent some time thinking

Page 217

1 about that there, because him and I worked
 2 together on that there, but from a project
 3 point of view, there will be little to none.
 4 Their focus is to deliver the generating
 5 plant right now.
 6 MR. COXWORTHY:
 7 Q. Sure.
 8 MR. HAYNES:
 9 A. And all the wires and stuff is already moved
 10 over to Power Supply.
 11 MR. COXWORTHY:
 12 Q. Is it fair for me to say that there may not
 13 be anyone specifically dedicated to that for
 14 months or years until an opportunity like
 15 Gull Island has more – has crystallized or
 16 crystallized to a greater extent than it has
 17 now?
 18 MR. HAYNES:
 19 A. There is no single individual or say one
 20 position on a box in an organization chart
 21 looking at that right now. But there are a
 22 bunch of people spending some time looking
 23 at those things.
 24 MR. COXWORTHY:
 25 Q. Is there a line item in – or will there be a

Page 218

1 line item in Power Supply’s budget that
 2 relates solely to potential developments and
 3 not to the Muskrat Falls?
 4 MR. HAYNES:
 5 A. Currently there’s not a line item there, but
 6 as we start to get traction, if we need to
 7 start allocating resources or have dollars
 8 to, you know, pay system planning for doing
 9 some transmission work, there would have to
 10 be. At the moment, I don’t think there’s
 11 any specific line that says, you know,
 12 future development at this point in time.
 13 But everybody has a little corner of their
 14 desk working on different parts of it.
 15 MR. COXWORTHY:
 16 Q. But you’re indicating if and when Power
 17 Development is folded into Power Supply that
 18 there’ll be a need for a separate line item
 19 in terms of Power Supply’s budget to
 20 identify what resources are being dedicated
 21 to potential developments versus –
 22 (12:45 p.m.)
 23 MR. HAYNES:
 24 A. Right now, if I were looking for some
 25 engineering input, I would have to – you

Page 219

1 know, the engineering department would look
 2 at that from that perspective and provide
 3 some updated cost estimates based on the
 4 numbers that we already have. We’ve done
 5 that, from that perspective, but that’s not
 6 a lot of time at this point in time.
 7 There’s not enough traction as yet.
 8 MR. COXWORTHY:
 9 Q. I guess what I’m trying to get at, Mr.
 10 Haynes, and you’ve talked about this
 11 already, you know, in terms of what would
 12 happen in Power Supply that, you know, if a
 13 particular task within Power Supply was not
 14 related to the delivery of power to Hydro’s
 15 customers, was not part of that envelope of
 16 work, you know, that there would be certain
 17 systems that would be triggered within Power
 18 Supply so that that task would be segregated
 19 or somehow flagged as being something that
 20 doesn’t flow through to Hydro’s customers.
 21 Am I right in thinking that either that is
 22 in place or you would envision something
 23 like that being in place going forward?
 24 MR. HAYNES:
 25 A. Not quite sure I understand the question

Page 220

1 exactly.
 2 MR. COXWORTHY:
 3 Q. Okay. Well, let’s turn perhaps to page
 4 seven of Hydro’s evidence. Yes. And Power
 5 Supply. So this lists the various functions
 6 that are in Power Supply and then on top of
 7 that, it’s proposed to fold in Power
 8 Development as well, which will include
 9 potential developments, future developments,
 10 although that’s not identified there.
 11 So, to use I think an easy example.
 12 Operation of the Menihek Generation Station
 13 in Labrador. I think it’s obvious that any
 14 costs that are incurred in relation to that
 15 don’t flow through, shouldn’t flow through,
 16 are not supposed to flow through to Hydro
 17 customers.
 18 MR. HAYNES:
 19 A. They don’t.
 20 MR. COXWORTHY:
 21 Q. So, if you have someone within your
 22 organization who’s spending some or all of
 23 their time in relation to that, there’s got
 24 to be some way of flagging what extent of
 25 costs, salary that’s paid to that person, et

Page 221

1 cetera, that goes towards Menihek as opposed
 2 to perhaps something that should be paid to
 3 the – flowed through to the Hydro customers.
 4 MR. HAYNES:
 5 A. Yeah, it's a work order system set up.
 6 There's a charge number that if anybody in
 7 Engineering spend any time working on
 8 Menihek or doing a capital budget proposal,
 9 they'll put in their timesheet on a weekly
 10 basis and number whatever the work order
 11 number is will charge it off to that there.
 12 That's how it's done and that will be
 13 applied to any of these projects.
 14 MR. COXWORTHY:
 15 Q. And at a higher level, will there be a
 16 budget set within Power Supply to say well,
 17 this is how much we're going to allocate
 18 towards Menihek. This is how much we're
 19 going to allocate towards Newfoundland
 20 Energy Marketing, if it stays within Power
 21 Supply. Oh, and this is how much we're
 22 going to – or we think we're going to need
 23 to expand in relation to the operation of
 24 the Muskrat Falls?
 25 MR. HAYNES:

Page 222

1 A. Some of those things are there now. Some
 2 will grow as time goes on. There is a
 3 business development group. The gentleman
 4 who actually is the record for that right
 5 now is off sick, but he'll be back in a
 6 couple of months hopefully, two or three at
 7 the latest, I hope, and it's a very, very
 8 small group, but they basically respond to
 9 that. They work closely with Greg on some
 10 of his external opportunities. They work
 11 with myself and Stan and Gilbert on some
 12 other options from that perspective. At the
 13 moment, the gentleman is off on sick leave.
 14 MR. COXWORTHY:
 15 Q. So, will Power Supply have a formal annual
 16 budget that it has to present -
 17 MR. HAYNES:
 18 A. Power Supply is -
 19 MR. COXWORTHY:
 20 Q. - to Nalcor's Board or to someone else
 21 within Nalcor?
 22 MR. HAYNES:
 23 A. Yes. Power Supply – Power Supply is not a
 24 company. Power Supply -
 25 MR. COXWORTHY:

Page 223

1 Q. No, it's a division.
 2 MR. HAYNES:
 3 A. - is a hodgepodge of things and there's a
 4 Churchill budget. There's a – you know, I
 5 don't think Menihek actually has a budget.
 6 I haven't seen it because it's rolled up in
 7 the Churchill. The Lower Churchill
 8 components have a budget. And I think
 9 there's three, if not four, separate budgets
 10 that roll together to the Power Supply's
 11 overall budget from an operating budget and
 12 a capital budget perspective.
 13 MR. COXWORTHY:
 14 Q. Will there be a separate budget for the
 15 operation of the Muskrat Falls Project
 16 assets?
 17 MR. HAYNES:
 18 A. Yes, there's a separate budget for Muskrat,
 19 for LIL and LT – and the Labrador
 20 Transmission assets.
 21 MR. COXWORTHY:
 22 Q. Is that presently in place or is that a work
 23 in progress?
 24 MR. HAYNES:
 25 A. That's a work in progress. I mean, they

Page 224

1 allow – they're preparing budgets now from
 2 that perspective as we're moving into that,
 3 but there are some, you know. It is a work
 4 in progress and has refinements happening.
 5 MR. COXWORTHY:
 6 Q. Will it be in place by the time Muskrat
 7 Falls is commissioned, recognizing, of
 8 course, that that's a moving target?
 9 MR. HAYNES:
 10 A. Yes, but there is a budget. Yes, there will
 11 be a budget. We're operating on some of
 12 that now.
 13 MR. COXWORTHY:
 14 Q. If we could move to page 22, 23 of Nalcor's
 15 evidence, the September 20 filing. And on
 16 page 22, I think starting from line 18, this
 17 details – and there's been some evidence
 18 from this panel about this – some of the
 19 information sharing, if I can call it that,
 20 that's already ongoing or planned between
 21 Hydro and Nalcor with respect to O&M and
 22 sustaining capital investments that are
 23 going to flow through the Hydro customers.
 24 There's a whole bunch of bullets starting on
 25 this page about the information sharing and

Page 225

1 it continues on the next page, and I just
 2 want to – and of course, on the next page
 3 refers to these two joint committees that
 4 you’ve already been asked some questions
 5 about by Mr. Browne, and perhaps by others
 6 as well.
 7 And I guess I would ask both for the
 8 Nalcor perspective from Mr. Haynes and the
 9 Hydro perspective from the other side. Is
 10 this also a work in progress? This
 11 information sharing, is there room for
 12 improvement or is everything there in place
 13 at a level that both Hydro and Nalcor are
 14 comfortable with in terms of that
 15 information sharing?
 16 MR. HAYNES:
 17 A. There’s always room for improvement, first
 18 of all, and basically what we’ve tried to
 19 do, what we’re attempting to do is that
 20 there’s a lot of transparency between what
 21 Nalcor is doing and with respect to the
 22 efforts on the Muskrat Falls Project itself,
 23 on the plant and LIL, LTA. I wouldn’t say
 24 there’s a lot of visibility on what we’re
 25 doing in Churchill Falls from that

Page 226

1 perspective, but certainly from a point of
 2 view of being open and transparent on the
 3 operating budgets, on any capital
 4 requirements from a sustaining capital point
 5 of view, from my perspective would be full
 6 disclosure.
 7 And I will admit too that we have some
 8 work to do from the point of view of on the
 9 capital budget, justifications from a Power
 10 Supply point of view. You know, bringing it
 11 more inline, if you will, with the Hydro
 12 approach with respect that there’s a lot of
 13 third party review. And so there’s some – I
 14 won’t say we’ll be 100 percent, but there’ll
 15 be a significant improvement in that part
 16 there. They still have to be justified and
 17 that they’re prudent and cost effective
 18 things to do.
 19 MR. COXWORTHY:
 20 Q. And what is going to be 100 percent? Is it
 21 going to be a presentation similar to the
 22 capital budget, annual capital budget
 23 presentation that Hydro makes to this Board?
 24 Is that the level of internal justification
 25 and documentation that’s going to be

Page 227

1 developed?
 2 MR. HAYNES:
 3 A. We’re still working to define that.
 4 Jennifer has already written me a letter and
 5 said this is what she wants and I don’t have
 6 any particular issues with that there
 7 because I think they have to be. You know,
 8 like we should not be putting forward
 9 capital budgets that don’t work. They need
 10 to be – you know, they need to be
 11 substantiated and justified and rational.
 12 You know, there will always be – you know,
 13 there will always be a desire to have more
 14 of everything from the point of view of I’ll
 15 even say a maintenance -- you won’t find any
 16 spare part that a maintenance person doesn’t
 17 want to have in inventory. That’s not
 18 always the right thing to do. So, you know,
 19 we expect to be challenged on that there and
 20 that’s all good.
 21 MR. COXWORTHY:
 22 Q. And if there’s already an existing model for
 23 presenting and justifying capital
 24 expenditure that Hydro has developed through
 25 the years and with some guidance, I’ll say,

Page 228

1 from the Board and maybe prodding from the
 2 intervenors, is there any reason not to use
 3 that same model, even if it’s only for
 4 internal justification as between Nalcor and
 5 Hydro when sustaining capital investments
 6 are being proposed for Muskrat Falls?
 7 MR. HAYNES:
 8 A. I wouldn’t commit that they’ll be 100
 9 percent but there’ll be a lot of alignment.
 10 I’ve already had that discussion with the VP
 11 of Engineering that we need to be bringing
 12 up the rationalization and the documentation
 13 for capital budgets particularly.
 14 MR. COXWORTHY:
 15 Q. Ms. Williams, anything you want to add?
 16 You’re the one who wrote the letter.
 17 MS. WILLIAMS:
 18 A. Yes. Like Jim said, “if anybody thinks
 19 Jennifer doesn’t challenge me, they haven’t
 20 met Jennifer.”
 21 MR. COXWORTHY:
 22 Q. I won’t put you on the spot any further, not
 23 yet anyway.
 24 MS. WILLIAMS:
 25 A. But I would add that this is the

Page 229

1 committee's, as is contemplated in the PPAs
 2 are basically just now kicking off. And
 3 that was the intention of my note to Jim was
 4 to lay very clear expectation, and Jim
 5 doesn't disagree and I wouldn't have done
 6 this – I wouldn't have done it with a knife
 7 to his throat. It was intended to document
 8 for he and I, but also for the people that
 9 work with us that it is our indication and
 10 requirement.
 11 We need to sit together and work out
 12 what are the documentation needs that we're
 13 going to want to prove that we have indeed
 14 question them, because we fully believe and
 15 expect that we would then, through
 16 proceedings with this Board, is provide for
 17 the documentation that we have indeed pushed
 18 it through a lot of review.
 19 We're making the best of the situation
 20 that we have with regards to that oversight
 21 and we take it seriously and we do want to
 22 make sure it looks a lot like the kinds of
 23 reviews that we currently do. So, that's
 24 really – so, it is starting and we have a
 25 lot of room to develop what those procedures

Page 230

1 indeed look like.
 2 MR. COXWORTHY:
 3 Q. And you've anticipated, you know, the area I
 4 was going to move onto, which I think is
 5 Slide 6 and Slide 7 of the Sustainable Cost
 6 Management presentation. So, perhaps if we
 7 can turn to Slide 6. And I just wanted to
 8 ask some more questions about the roles and
 9 responsibilities of these two joint
 10 committees. Mr. Haynes wasn't able to say
 11 who were precisely the members from Power
 12 Supply and Hydro that were on these
 13 committees or at least not at the time he
 14 was asked a question previously. I don't
 15 know if it's coming to mind now.
 16 MR. HAYNES:
 17 A. No, I didn't think about it since.
 18 MR. COXWORTHY:
 19 Q. Or if Ms. Williams perhaps knows who is
 20 sitting or proposed to be sitting on that
 21 committee from Hydro.
 22 MS. WILLIAMS:
 23 A. I have delegated the two folks for Hydro to
 24 be Ms. Hutchens, who's going to be on the
 25 panel, as well as Mr. Scott Crosbie. So,

Page 231

1 we, I guess -
 2 MR. COXWORTHY:
 3 Q. And what's Mr. Crosbie's function or
 4 position within Hydro?
 5 MS. WILLIAMS:
 6 A. So, he's currently our director of
 7 operations and Scott has had an extensive
 8 career within Hydro and very much knows
 9 Hydro's view of its operations. So, he's
 10 currently accountable for the day-to-day
 11 operations of all of transmission and rural
 12 operations, as well as all the production.
 13 I alluded to when I moved into this role, I
 14 removed a VP position. I did not backfill
 15 the VP of Production. I rolled that
 16 together and we expanded some of Scott's –
 17 Mr. Crosbie's accountability to include
 18 production operations as well. So, he's
 19 very familiar with, certainly from Hydro,
 20 what the maintenance plans and the
 21 approaches for both the generation and
 22 transmission assets within Hydro. So that
 23 is the purpose of his participation is to
 24 examine what is being proposed by Power
 25 Supply and put his tests against that. And

Page 232

1 then as well, it was important to have a
 2 financial person there to represent those
 3 kinds of questions.
 4 I will say that by no means will Scott
 5 and Lisa be alone. Hydro intends to have a
 6 group of people behind that would support
 7 their review. So, we expect – again, this
 8 is all to be determined – we would receive
 9 some sort of documentation and that, you
 10 know, we would go away and we would examine
 11 it and ask questions and have discussions.
 12 So, Scott and Lisa are, call it, official
 13 members of the committee, but there'll be a
 14 number of number of other people supporting
 15 the review of those costs.
 16 MR. COXWORTHY:
 17 Q. And with Ms. Hutchens there – and I'll
 18 apologize in advance if I'm forgetting
 19 somebody – am I correct in saying that
 20 that's having Hydro's most senior finance
 21 person on that committee?
 22 MS. WILLIAMS:
 23 A. Correct.
 24 MR. COXWORTHY:
 25 Q. And in the case of Mr. Crosbie, I think you

Page 233

1 probably partially answered the question. I
 2 was going to ask who does he report to. I
 3 think it would have been the VP Production,
 4 but you haven't backfilled that position.
 5 So, who does he report to now, if there
 6 isn't a VP Production?
 7 MS. WILLIAMS:
 8 A. Sure, yeah. He reports to Ron LeBlanc, who
 9 is our VP for the NLSO, as well as all the
 10 production – all of, sorry, operations.
 11 MR. COXWORTHY:
 12 Q. So, would Mr. Crosbie represent as senior a
 13 position vis-à-vis operational
 14 considerations as Ms. Hutchens represents
 15 vis-à-vis financial?
 16 MS. WILLIAMS:
 17 A. No, I think, no, Ron, Mr. LeBlanc is the
 18 more senior person, but Ron, like myself, is
 19 fairly new to Hydro. I think, for me, I
 20 felt comfortable with Scott being that
 21 person because he grew up – he's like Jim.
 22 He grew up in Hydro and has a lot more
 23 familiarity of exactly how things are being
 24 done. He's still quite senior and, but you
 25 know, is still quite close to how things are

Page 234

1 actually getting executed on the Hydro side
 2 of things these days.
 3 MR. COXWORTHY:
 4 Q. Will Mr. Crosbie, as Mr. LeBlanc gains
 5 experience with this particular
 6 organization, is the expectation though that
 7 Mr. Crosbie will take the information he
 8 gets from this committee up to Mr. LeBlanc?
 9 MS. WILLIAMS:
 10 A. I expect that both Ms. Hutchens and -
 11 MR. COXWORTHY:
 12 Q. Or up to that position.
 13 MS. WILLIAMS:
 14 A. - Mr. Crosbie together will be working with
 15 – even reporting to somebody like myself on
 16 how this is going to go. We know how
 17 important this initiative is and it will be
 18 resourced appropriately with the right
 19 number of people looking at the content.
 20 MR. COXWORTHY:
 21 Q. Are there any financial thresholds in terms
 22 of the cost implications for Hydro's
 23 customers in terms of what has to come up to
 24 you, Ms. Williams, from that committee for
 25 consideration or is that left to the

Page 235

1 judgment of the people on the committee, the
 2 Hydro people on the committee?
 3 (1:00 p.m.)
 4 MS. WILLIAMS:
 5 A. I might have mentioned it's brand new, so
 6 we're still determining exactly how is the
 7 relationship and the approval process going
 8 to work. So, there's currently no standards
 9 or approaches or thresholds in place. We're
 10 at the very beginning of exactly how this
 11 relationship is going to work.
 12 MR. COXWORTHY:
 13 Q. Will there be those standards thresholds in
 14 place?
 15 MS. WILLIAMS:
 16 A. To be determined. I mean, I think there's
 17 been some evidence, you know, here that a
 18 \$50,000 capital budget submittal can be
 19 difficult in this regulatory regime. I'm
 20 not suggesting that we would use that in the
 21 other one. I can't say that we'll have a
 22 threshold or not. I really can't comment.
 23 MR. COXWORTHY:
 24 Q. And I'm not suggesting \$50,000 either for
 25 the record.

Page 236

1 MS. WILLIAMS:
 2 A. No, I know. I know, yeah.
 3 MR. COXWORTHY:
 4 Q. But some objective threshold I think would
 5 bear some consideration?
 6 MS. WILLIAMS:
 7 A. I don't think we'd want to waste our time
 8 talking about \$1,000 items. There will
 9 certainly be appropriate judgment placed
 10 with regards to materiality.
 11 MR. COXWORTHY:
 12 Q. And still on the same slide, Slide 6 – well,
 13 perhaps before I move on from that
 14 particular area, the Power Supply members,
 15 Mr. Haynes you indicated that these would be
 16 senior people within Power Supply.
 17 MR. HAYNES:
 18 A. Yes.
 19 MR. COXWORTHY:
 20 Q. At a similar level of seniority to the Hydro
 21 people?
 22 MR. HAYNES:
 23 A. Yes, they are. I have the initials down
 24 here, but I have to confess, I can't
 25 confirm, but I'm pretty sure it's Mr.

Page 237

1 Henderson and Mr. Meaney at this point in
 2 time.
 3 MR. COXWORTHY:
 4 Q. Maybe they're just learning that for the
 5 first time.
 6 MR. HAYNES:
 7 A. We're also transitioning into operations as
 8 well. It may change over time obviously.
 9 MR. COXWORTHY:
 10 Q. Have they actually – is this committee up
 11 and running and functioning now or is it?
 12 MR. HAYNES:
 13 A. It's just started. It's just started. You
 14 know, they are both just starting to get
 15 traction as we move into operations.
 16 MR. COXWORTHY:
 17 Q. And is the commitment that you'll have the
 18 same level of seniority sitting on this
 19 committee going forward or is this just
 20 something necessary to get to steady state?
 21 MR. HAYNES:
 22 A. No, I wouldn't underestimate the seniority
 23 on this committee. These will be senior,
 24 seasoned people that will be there who know
 25 the assets. I would suggest that on the

Page 238

1 Muskrat Falls, you know, the Muskrat Falls
 2 Plant Committee, we both operate Hydro
 3 plants, unless there's something really
 4 unusual, I wouldn't suspect any big surprise
 5 in the way a Muskrat Falls plant operates
 6 and capital reinvestment required, so on.
 7 Obviously the DC line is a little bit
 8 different. So, there's an evolution there
 9 required.
 10 MR. COXWORTHY:
 11 Q. On Slide 6, the last bullet, "Decisions made
 12 by consensus". I guess I'm going to ask
 13 what does that mean or if the committee is
 14 only just up and running, do you know, Mr.
 15 Haynes, Ms. Williams, what that means or
 16 what it will mean?
 17 MR. HAYNES:
 18 A. It's a joint committee to go down through
 19 and review the operating and capital needs
 20 and I mean, there is – I'm not saying
 21 there's a goal, but basically there has to
 22 be consensus around the table this is the
 23 right thing to do from a reliability, safety
 24 perspective.
 25 MR. COXWORTHY:

Page 239

1 Q. So, if the two Hydro members don't agree
 2 that's a prudent, a reasonable cost to
 3 incur, does that mean that there isn't
 4 consensus?
 5 MR. HAYNES:
 6 A. No, if – there is a – and I don't recall the
 7 details, but there is a dispute mechanism
 8 there someone in that contract. I just
 9 forget what they are. But there is a
 10 process to elevate that or escalate it to
 11 see that through.
 12 MR. COXWORTHY:
 13 Q. It gets kicked upstairs and Mr. Haynes, you
 14 speak to Ms. Williams. Is that -
 15 MR. HAYNES:
 16 A. Kicked upstairs or kicked to another party.
 17 I just don't remember. And Mr. Meaney may
 18 be able to answer that question because he's
 19 been involved in that before.
 20 MR. COXWORTHY:
 21 Q. Okay, tomorrow's panel. Thank you for that.
 22 MR. HAYNES:
 23 A. Apologize to Mr. Meaney.
 24 MR. COXWORTHY:
 25 Q. And I just want to talk a little bit then

Page 240

1 about the – on the next slide, 7, the other
 2 joint operating committee. Now that one's a
 3 little different because it's not all in the
 4 family. It's not just Nalcor and Hydro
 5 people talk to each other. You have Emera
 6 people at the table and they have their
 7 distinct and from their perspective,
 8 appropriate interests that they want to look
 9 after in all of this.
 10 MR. HAYNES:
 11 A. Yes.
 12 MR. COXWORTHY:
 13 Q. Who from Power Supply is going to be – is it
 14 the same people that are going to be on the
 15 other committee? Is it different people?
 16 MR. HAYNES:
 17 A. There will be some of the same people, but
 18 basically it maybe the wires side of the
 19 business, I suppose at the end of the day
 20 when it's all fully functionally, maybe the
 21 wires people as opposed to the generation
 22 people.
 23 MR. COXWORTHY:
 24 Q. And from Hydro, Ms. Williams, do you know,
 25 you know, who's likely to be or is the Hydro

Page 241

1 nominee?
 2 MS. WILLIAMS:
 3 A. We do have a nominee there now. I'm going
 4 to characterize it this way and ask Mr.
 5 Haynes to correct me. This committee is
 6 already underway and it's more really
 7 dealing with the current decision making and
 8 operations. So, it may evolve exactly who
 9 that person is, but we do have a gentleman,
 10 Mr. Josh DeCoste, who is on that and up to
 11 when Jim moved over to Power Supply, Josh
 12 was reporting to Jim. So, he's – even
 13 though is title, he's a manager of
 14 integration, his title doesn't represent the
 15 most senior level in the organization, his
 16 accountability and responsibility is
 17 certainly to participate on that committee
 18 and understand what's happening and report
 19 back. He's currently reporting to Mr.
 20 LeBlanc as well. So, I would characterize
 21 that committee now as underway, but more
 22 operational, not as focused right now on
 23 exactly the future. So, would he be the
 24 person in the long-term basis, to be
 25 determined.

Page 242

1 MR. COXWORTHY:
 2 Q. It may be Mr. LeBlanc in the future?
 3 MS. WILLIAMS:
 4 A. Correct.
 5 MR. COXWORTHY:
 6 Q. There's no bullet down there at the bottom
 7 of this one about decisions being made by
 8 consensus. I don't want to read to much
 9 into that, but is the decision-making in
 10 that committee any different?
 11 MR. HAYNES:
 12 A. It is an Emera/Nalcor committee of which
 13 Nalcor has four seats and Emera has two.
 14 And Nalcor has decided that we should have
 15 somebody from Hydro there for transparency
 16 purposes, but basically, you know, basically
 17 the Nalcor Committee actually will, you
 18 know, will be the—are the majority obviously
 19 from that perspective. Obviously, we will
 20 look to have any issues between Nalcor and
 21 Hydro resolved long before we go to the
 22 table with them. So, there's a process we
 23 have to build there as well, but it's all
 24 for transparency purposes to ensure that,
 25

Page 243

1 you know, that everybody is challenged, and
 2 that we're actually doing what it is the
 3 right thing to do for the reliability and
 4 safety of these assets.
 5 MR. COXWORTHY:
 6 Q. And this committee, again looking to Slide
 7 Number 7, some of the responsibilities of
 8 the committee will be in relation to O&M
 9 activities, maintenance plan?
 10 MR. HAYNES:
 11 A. Yeah.
 12 MR. COXWORTHY:
 13 Q. O&M standards. And for the Muskrat Falls
 14 Project –
 15 MR. HAYNES:
 16 A. Similar.
 17 MR. COXWORTHY:
 18 Q. - assets?
 19 MR. HAYNES:
 20 A. Yeah.
 21 MR. COXWORTHY:
 22 Q. And those are going to be drivers. Whatever
 23 standards are adopted, whatever activities
 24 and maintenance plans are, those are going
 25

Page 244

1 to drivers of costs towards Hydro's
 2 customers, are they?
 3 MR. HAYNES:
 4 A. They will be drivers. Well, obviously not
 5 the Maritime Link, but certainly the LIL and
 6 LTA will be there, but I would also suggest
 7 that the interest of Emera and Hydro won't
 8 be different. They will both need
 9 reliability. You provide reliability to
 10 Hydro. You provide it to Emera as well for
 11 the Nova Scotia block.
 12 MR. COXWORTHY:
 13 Q. And you know, I've heard that before which I
 14 characterize, there's no daylight between
 15 the reliability needs and expectations of
 16 Hydro's customers and those of, to use your
 17 example, Emera's customers?
 18 MR. HAYNES:
 19 A. I don't think there's much difference in the
 20 two. I would—you know, there a few
 21 anomalies that we've created. The Bottom
 22 Brook Terminal Station is actually owned by
 23 Emera. Newfoundland Hydro provides the
 24 maintenance services to them for that. They
 25

Page 245

1 provide maintenance services on the AC
 2 Switch Yard to Power Supply for Soldier's
 3 Pond for similar reasons. It's like there
 4 are some integration things that were done,
 5 that are done. We can't undo them very
 6 easily, but Bottom Brook Terminal Station is
 7 not owned by Hydro, nor is it owned by
 8 Nalcor. It's owned by Emera, but the
 9 transmission lines go through it. So,
 10 obviously Hydro has a vested interest in
 11 making sure that is done properly as they
 12 would at Soldier's Pond. So, there's a fair
 13 bit of cooperation and collaboration of all
 14 parties there.
 15 MR. COXWORTHY:
 16 Q. Ms. Williams, anything you want to add to
 17 that?
 18 MS. WILLIAMS:
 19 A. No, I'm good.
 20 MR. COXWORTHY:
 21 Q. Well, either of you because of course Hydro
 22 is going to be on this committee. Can
 23 either of you conceive of the possibility on
 24 an ongoing basis that there could be an O&M
 25

Page 246

1 standard or some O&M activity or component
 2 or maintenance plan that Emera might want,
 3 but that Hydro, for instance, doesn't think
 4 is necessary or prudent for the reliability
 5 of its own customers? Is there absolutely
 6 no scope for that divergence?
 7 MR. HAYNES:
 8 A. There are no absolutes.
 9 MS. WILLIAMS:
 10 A. Um-hm.
 11 MR. COXWORTHY:
 12 Q. No.
 13 MR. HAYNES:
 14 A. But I can't think of something that would
 15 be—that we will be contrary-minded on at
 16 this point in time.
 17 MR. COXWORTHY:
 18 Q. What is that were to happen?
 19 MR. HAYNES:
 20 A. Well –
 21 MR. COXWORTHY:
 22 Q. How does that get resolved?
 23 MR. HAYNES:
 24 A. In that particular group there, Nalcor has
 25

Page 247

1 the hammer from that perspective as I
 2 understand it.
 3 MR. COXWORTHY:
 4 Q. Thank you. Go back to Mr. Jones for a
 5 moment or perhaps—not for a moment, I'm
 6 sorry. For a few minutes perhaps. Slide 21
 7 of the Nalcor Energy Marketing Presentation.
 8 The Water Management and Production
 9 Scheduling. And again, you know, I don't
 10 want to get into anything that's considered
 11 commercially sensitive or subject to some
 12 ongoing litigation, but I just want to have
 13 a better understanding of Nalcor Energy
 14 Marketing's responsibilities in relation to
 15 this because I understand from various
 16 descriptions in the slide and otherwise,
 17 that the responsibility rests with Nalcor
 18 Energy Marketing at the end of the day for
 19 the water management. Is that right?
 20 MR. JONES:
 21 A. That is correct, yes.
 22 MR. COXWORTHY:
 23 Q. And you know, at the risk, and probably not
 24 the risk, I know I'm stating the obvious.
 25

Page 248

1 You know, at least one of the things we're
 2 talking about is when to open the taps or
 3 shut down the taps at Churchill Falls to let
 4 the river—the water flow down towards
 5 Churchill—I'm sorry, towards Muskrat Falls.
 6 MR. JONES:
 7 A. Um-hm.
 8 MR. COXWORTHY:
 9 Q. You know, simplistically, that's what we're
 10 talking about when we're talking about water
 11 management?
 12 MR. JONES:
 13 A. No, this is water management of the
 14 provincial resources. So, it is –
 15 MR. COXWORTHY:
 16 Q. Of all the provincial resources. So, the
 17 ponding that you were talking about before
 18 as well would be included in that?
 19 MR. JONES:
 20 A. Ponding, releases at Bay D'Espoir to meet
 21 customer needs.
 22 MR. COXWORTHY:
 23 Q. Fair enough. So, there's all of that as
 24 well, but does it include the river flows,
 25

Page 249

1 the river flows on the Churchill River
 2 between Churchill Falls and Muskrat Falls or
 3 is that not part of Nalcor Energy
 4 Marketing's –
 5 MR. JONES:
 6 A. Not directly part of Nalcor Energy
 7 Marketing. Nalcor Energy Marketing will
 8 place its schedules into Muskrat Falls
 9 Generation Corporation. Muskrat Falls will
 10 then—there's an independent river
 11 coordinator on the Churchill River that will
 12 communicate with both Churchill Falls
 13 Labrador Corporation on its obligations to
 14 its customers and Muskrat Falls Corporation
 15 on its obligation to its customers, and
 16 then, basically, calculate and decide the
 17 most optimal operation of the river to meet
 18 those schedules and recognizing that there's
 19 a sharing of water between Muskrat and
 20 Churchill Falls, according to the water
 21 Management Agreement. That's not what this
 22 is. This water management is the activity
 23 of water management for the province.
 24 MR. COXWORTHY:
 25

Page 250

1 Q. Okay. And thank you. Perhaps it should
 2 have been obvious to me, but thank you for
 3 clarifying that.
 4 MR. JONES:
 5 A. Um-hm.
 6 MR. COXWORTHY:
 7 Q. With respect though that within the Nalcor
 8 organization and the management of the river
 9 flows between Churchill Falls and Muskrat
 10 Falls is the infrastructure in place, the
 11 capital investment in place, already to
 12 handle that management? Is it anticipated
 13 there's going to be future capital
 14 investment to facilitate that management?
 15 MR. HAYNES:
 16 A. I'm not aware of any future capital. It's
 17 more of a management process from the point
 18 of view that the schedules are integrated
 19 and this is an optimization done because
 20 there would be water stored in the Churchill
 21 reservoir that belongs to Muskrat Falls that
 22 either can generate. We obviously have to
 23 meet the contractual commitments we have to
 24 Hydro-Quebec and as well as from Muskrat
 25

Page 251

1 Falls to the plant. So, once that schedule
 2 is done, then optimization is kind of a sub-
 3 optimization, if you will, outside the
 4 broader system on that particular river
 5 system. And I mentioned before, you know,
 6 that, you know, it's a run of a river plant.
 7 What happens in Churchill Falls affects
 8 Muskrat Falls. So, we need to maximize—the
 9 intent is to maximize the, you know, the
 10 kilowatt hours per cubic metre that we
 11 discharged from both plants and still meet
 12 the contractual obligations, obviously, to
 13 Hydro-Quebec. And the independent river
 14 coordinator has been there for a while and
 15 they've been working on that system and so
 16 on, and it's being prepared to be—to go into
 17 operation.
 18 MR. COXWORTHY:
 19 Q. Is that within Power Supply, this, the
 20 function that we're talking about, the
 21 management?
 22 MR. HAYNES:
 23 A. No, the independent coordinator actually
 24 sits in the NLSO from that perspective, but
 25

Page 252

1 they will optimize the schedule and what
 2 gates get opened to reduce what water from
 3 that –
 4 MR. COXWORTHY:
 5 Q. The costs associated with managing those
 6 river flows, is -
 7 MR. HAYNES:
 8 A. I think they come back to Power Supply.
 9 MR. COXWORTHY:
 10 Q. They come back to Power Supply?
 11 MR. HAYNES:
 12 A. Yeah.
 13 MR. COXWORTHY:
 14 Q. So, if NLSO incurs costs or if costs need to
 15 be incurred –
 16 MR. HAYNES:
 17 A. Yeah, that particular position, that was
 18 thought to be the best place to put that
 19 particular position because, you know, it's
 20 obviously—they're dealing with the Energy
 21 Control Centre for opening and closing, you
 22 know, control structures to release water.
 23 MR. COXWORTHY:
 24 Q. So, the costs flow to Power Supply. Do they
 25

Page 253

1 then flow through to Hydro’s customers?
 2 MR. HAYNES:
 3 A. They should not. I don’t think they flow to
 4 Hydro customers. It’s a -
 5 MR. COXWORTHY:
 6 Q. That’s just another cost that has to be
 7 segregated from what flows through?
 8 MR. HAYNES:
 9 A. I don’t think it flows to customers. I’m
 10 quite sure it doesn’t actually.
 11 MR. COXWORTHY:
 12 Q. And again, will there be systems in place
 13 to—there’s transparency around that about
 14 what is and isn’t flowing to Hydro’s
 15 customers?
 16 MR. HAYNES:
 17 A. Yes, there should be. That may—it may be
 18 allocated based on an energy basis or
 19 whatever, but from that perspective, but
 20 that’s the way I suspect it will be done.
 21 MR. COXWORTHY:
 22 Q. I have no further questions. Thank you.
 23 Thank you, Madam Chair.
 24 CHAIR:
 25

Page 254

1 Q. Thank you, Mr. Coxworthy. Ms. Greene, I’m
 2 going to go on the assumption you won’t be
 3 finished in 15 minutes?
 4 GREENE, Q.C.:
 5 Q. No, that’s correct, Chair.
 6 CHAIR:
 7 Q. I’ll leave it up to you if you want to start
 8 now and you can tell me when would be a good
 9 time to –
 10 GREENE, Q.C.:
 11 Q. I can certainly start.
 12 CHAIR:
 13 Q. Okay.
 14 GREENE, Q.C.:
 15 Q. Okay.
 16 CHAIR:
 17 Q. That’s good. I’ll leave it to you to 1:30
 18 or –
 19 GREENE, Q.C.:
 20 Q. Okay. I wanted to talk first about the 2016
 21 reorganization. So, I’ll address these
 22 questions to Mr. Roberts, at least at the
 23 beginning. As I understand it, at the time
 24 that that occurred, it was a decision or a
 25

Page 255

1 direction from your new CEO, Mr. Marshall,
 2 is that correct?
 3 MR. ROBERTS:
 4 A. Yes, I mean, Mr. Marshall and I would have
 5 worked through various scenarios in terms of
 6 how to set that up and what the optimal
 7 structure was. And once he landed on the
 8 preferred structure that we ended up with,
 9 he then brought that back to the Nalcor
 10 Board of Directors for approval.
 11 GREENE, Q.C.:
 12 Q. So, it could be characterized as Mr.
 13 Marshall’s vision for the appropriate
 14 structure for Nalcor once he arrived in the
 15 organization? You helped work out the
 16 details? It was his vision?
 17 MR. ROBERTS:
 18 A. I wouldn’t take any credit for the vision,
 19 absolutely not.
 20 GREENE, Q.C.:
 21 Q. No.
 22 MR. ROBERTS:
 23 A. I would say that, yes, any CEO who sits in
 24 that chair has to think about what’s the
 25

Page 256

1 optimal structure and people around them to
 2 execute the priorities that they have, and
 3 then, make sure that they’re fully aligned
 4 with the Board. So, while it was Mr.
 5 Marshall’s preferred model and vision, it
 6 was certainly supported a hundred percent by
 7 the Nalcor Board of Directors.
 8 GREENE, Q.C.:
 9 Q. Okay.
 10 MR. ROBERTS:
 11 A. So, it’s a shared vision amongst them,
 12 amongst them all I would imagine.
 13 GREENE, Q.C.:
 14 Q. Okay. So, in the normal course, the CEO
 15 brings those sorts of things to a Board of
 16 Directors, but it—and that’s what happened
 17 in your case?
 18 MR. ROBERTS:
 19 A. That’s correct.
 20 GREENE, Q.C.:
 21 Q. Right. At that time, as I also understand
 22 it, there was no external consultant or
 23 expertise advice with respect to the
 24 appropriate structure. I believe it was in
 25

Page 257

1 evidence, it's been that it was based upon
 2 Mr. Marshall's vision, based on his
 3 experience in the industry. Is that
 4 correct?
 5 MR. ROBERTS:
 6 A. Yeah, I mean, I would want to toot my own
 7 horn for sure, but I've been doing this kind
 8 of work as well for 25 years. And so,
 9 obviously, I provided feedback through the
 10 process, but Mr. Marshall's experience far
 11 outweighs mine and it's quite obvious by his
 12 bio. And he's quite experienced at setting
 13 up these types of structures and bringing
 14 success to organizations. So, yes.
 15 GREENE, Q.C.:
 16 Q. Right. And the overall policy direction to
 17 create a Nalcor Power Supply for unregulated
 18 assets, I understood that to be Mr.
 19 Marshall's decision which he took to the
 20 Board of Directors for the, what I call the
 21 strategic structure in order to implement
 22 the overall mandate as he saw it?
 23 MR. ROBERTS:
 24 A. I don't know if I would quite characterize
 25

Page 258

1 it that way. I mean, at the end of the day,
 2 what we were trying to do is we were looking
 3 at who we had available to us, what was the
 4 right way to execute on the corporate
 5 priorities, and start it with obviously
 6 emphasis on the project. He felt that Mr.
 7 Bennett should focus on the generation
 8 aspect. It was big enough. And that he
 9 brought in Mr. MacIsaac out of—actually, he
 10 was at the time, the president of
 11 Newfoundland and Labrador Hydro. He brought
 12 him in to oversee the construction side, the
 13 completion of the construction side on the
 14 transmission components of it and was there
 15 then because of his operating experience as
 16 former VP, his engineering and so forth, to
 17 then be the one who would be operating and
 18 that's now Jim's role, of course, Mr.
 19 Haynes, in terms of being the future
 20 operator of those assets. Those assets by
 21 definition were already unregulated. You
 22 know, he would have identified this new
 23 operations group that was being created and
 24 labelled them Power Supply. And again,
 25

Page 259

1 that's sort of his label that he put on it
 2 in terms of how he views that entity because
 3 it's made up of Churchill Falls and Muskrat
 4 Falls which is providing a lot of power,
 5 power supply, to its customers, and
 6 ultimately, could have other operations in
 7 between as we've talked about in terms of
 8 Gull Island. So, that's kind of where it
 9 started, and then he looked at how to
 10 organize the rest of it and had the
 11 Corporate Services and the Offshore
 12 Development combined. He had obviously
 13 Hydro, and his vision for that was to make
 14 sure that his experience over the past 40
 15 years has been, you know, bring regulatory
 16 clarity and transparency to the regulator.
 17 And so, he wanted to make sure we moved the
 18 needle in terms of making that more
 19 autonomous, but as I testified again
 20 earlier, I think this morning, and doing so
 21 in a cost-efficient manner.
 22 GREENE, Q.C.:
 23 Q. Yes. I don't think we're saying anything
 24 different.
 25

Page 260

1 MR. ROBERTS:
 2 A. Okay.
 3 GREENE, Q.C.:
 4 Q. Because you kept saying "he." So, my point
 5 was it was Mr. Marshall's vision when he
 6 came in and at that time, yes, you were
 7 involved in helping roll out that vision and
 8 how it would look in the detail, but there
 9 was no external expertise sought at that
 10 time, was there?
 11 MR. ROBERTS:
 12 A. No, I mean, again I can say that through the
 13 course of my career when I was with X-Wave
 14 and we were acquiring companies and merging
 15 companies, my time in growing the call
 16 centre industry here in the province and
 17 outside the province and across Canada, I've
 18 advised many senior management members on
 19 how to structure that and organize that and
 20 give them feedback. It's ultimately always
 21 their decision in terms of how they
 22 structure the company with the support of
 23 their Board of Directors. So, you know,
 24 from time to time, an organization, if they
 25

Page 261

1 felt they needed a cold-eyes review of that,
 2 perhaps would go out and seek assistance
 3 from a third party if they felt that they
 4 needed it or they wanted a second opinion.
 5 There’s nothing wrong with that, but again,
 6 I think in this particular case, consistent
 7 with my experience in the past, is that we
 8 deemed that not to be necessary. We also
 9 have a very informed and educated Board of
 10 Directors with equally impressive
 11 credentials and they, too, weighed in on the
 12 structure that was being advocated and all
 13 felt very comfortable with it.
 14 GREENE, Q.C.:
 15 Q. So, the answer to the question was no, there
 16 was not external expertise sought. And
 17 since that time, up to the point in time
 18 when Power Advisory was retained, did you
 19 consider it appropriate at any time since
 20 then to ask for any external assistance in
 21 the appropriate structure?
 22 MR. ROBERTS:
 23 A. Well, actually, that’s interesting that you
 24 bring that up because that is the initial
 25

Page 262

1 purpose in which we reached out to Power
 2 Advisory. So, Mr. Marshall recognized that,
 3 you know, we’re nearing completion of
 4 construction, we’re starting to operate
 5 these assets and expect, you know, the full
 6 operation of these assets next year. And
 7 there’s been ongoing discussion inside the
 8 company in terms of the appropriate
 9 structure and how that structure could
 10 evolve. And it was agreed and the—actually,
 11 the Board’s Chair, Mr. Brendon Paddick,
 12 approached me and asked if I would actually
 13 provide some third-party assistance in terms
 14 of getting some advice as to how
 15 organizations that could be described as
 16 similar to ours would be structured. And
 17 so, on that request, we had reached out to--
 18 myself and Mr. Hull, it’s been referenced,
 19 have reached out to Power Advisory and asked
 20 them to begin this process and to conduct
 21 sort of an environmental scan as to how
 22 organizations similar to ours were
 23 structured, not necessarily from an internal
 24 perspective, but from the boarder
 25

Page 263

1 perspective. And then, of course, as that
 2 work was ongoing, we did have our initial
 3 meeting with the Board and the senior
 4 executive here, where they presented some
 5 initial findings. And it was actually after
 6 that that we recognized the value that they
 7 could bring in terms of coming into these
 8 proceedings. So, that is an example of
 9 where the Board has been engaged and with
 10 Mr. Marshall and the executive team in terms
 11 of looking to the future for that and
 12 getting some third-party advice.
 13 GREENE, Q.C.:
 14 Q. So, Power Advisory was retained in May of
 15 this year we understood from Mr. Dalton.
 16 MR. ROBERTS:
 17 A. That’s correct, yeah.
 18 GREENE, Q.C.:
 19 Q. While the reference work was—this particular
 20 reference work was ongoing?
 21 MR. ROBERTS:
 22 A. Yes, I would imagine. Yes.
 23 GREENE, Q.C.:
 24 Q. Can we go to your Slide 6, please? And that
 25

Page 264

1 would be—yes. One of the underlying
 2 objectives is stated there to have been
 3 ensuring efficiencies and you call it “cost
 4 optimization.” I say “lowest cost” or to
 5 ensure that the costs that are incurred are
 6 appropriate. Is that correct?
 7 MR. ROBERTS:
 8 A. That’s correct.
 9 GREENE, Q.C.:
 10 Q. And I’ll come back to that. Prior to 2016,
 11 what was the thought then about how you
 12 would actually operate and maintain the
 13 Muskrat Falls’ assets? I’ll ask Mr. Haynes.
 14 You weren’t there at that time, were you, in
 15 twenty—so, before you retired, was there any
 16 discussion then around the plan for
 17 operation and maintenance of the new assets?
 18 MR. HAYNES:
 19 A. Before I retired, the thought and the
 20 intention was that they would be operated by
 21 Hydro people. You know, there was no change
 22 in the PPAs and things like that, but there
 23 was no division called, quote on quote,
 24 called “Power Supply,” that they would be
 25

Page 265

1 operated through Newfoundland and Labrador
 2 Hydro, through operators and so on. That
 3 was the intent when I retired as my—as I
 4 recall.
 5 GREENE, Q.C.:
 6 Q. And can you explain why that would be? Is
 7 it because that Muskrat Falls would be
 8 another hydro plant similar to Churchill
 9 Falls? Is it correct that at one time,
 10 Hydro was also responsible for Churchill
 11 Falls?
 12 MR. HAYNES:
 13 A. Hydro provided service to Churchill Falls.
 14 GREENE, Q.C.:
 15 Q. Churchill Falls reported into Hydro.
 16 MR. HAYNES:
 17 A. Yes, it did, yes, but I think there were
 18 shared services from Hydro into CF(L)Co,
 19 from an HR financial point of view. When I
 20 went to Churchill Falls, most of the
 21 engineering was pretty well self contained
 22 in Churchill through contractors and I was
 23 part of effort, well the gentleman who was
 24 looking after that before moved out to Hydro
 25

Page 266

1 and engineering and was kind of a natural.
 2 Some of the engineering was done, but the
 3 capital program was growing obviously.
 4 GREENE, Q.C.:
 5 Q. Right. And at that time, who would have
 6 provided the overall executive direction
 7 with respect to the Churchill Falls plant?
 8 MR. ROBERTS:
 9 A. It would have been through—my boss was Dave
 10 Collins, he was the president of CF(L)Co and
 11 executive vice president of Hydro.
 12 GREENE, Q.C.:
 13 Q. Of Hydro, right. Moving up, Ms. Williams,
 14 you were—I may not have the correct title,
 15 but I understand you were responsible for
 16 Hydro production at Hydro prior to your
 17 appointment to—you were regulatory affairs
 18 and then responsible for Hydro production.
 19 Were you involved in any general planning or
 20 discussions around how the Hydro assets
 21 would operate?
 22 MS. WILLIAMS:
 23 A. No.
 24 GREENE, Q.C.:
 25 Q. Well, did you have any understanding,

Page 267

1 similar to Mr. Haynes expressed what he
 2 understood the plan to be or had that been—
 3 were you aware of that plan?
 4 MS. WILLIAMS:
 5 A. Yes, I believe I—this all happened fairly
 6 quickly after I took the role on, the change
 7 I’ll call it to the current organization and
 8 I believe a conversation at one point that
 9 Muskrat would probably come under the same
 10 purview as if consistent with what Mr.
 11 Haynes just said.
 12 GREENE, Q.C.:
 13 Q. Okay. Could we go to slide 10 now in Mr.
 14 Roberts’ presentation, please? I wanted to
 15 talk first about the growth in the FTEs from
 16 2016 to 2019. Can you give us an
 17 understanding of the areas where FTEs were
 18 added that caused it to grow from 1463 to
 19 1654?
 20 MR. ROBERTS:
 21 A. Yes, I can do that at a high level. So, the
 22 majority of the people that would have been
 23 added during this period of time are the
 24 people who are both tasked with helping to
 25 commission and test the equipment that’s

Page 268

1 coming into operation and the people who
 2 will ultimately operate the equipment. So,
 3 we are starting to staff up the number of
 4 people that will be there to run these
 5 assets over a period of time. So, that’s
 6 the majority of what’s driving those
 7 numbers. There are other things going on
 8 inside the company. In addition to the
 9 technical people, there would be corporate
 10 service type of people. Those numbers are
 11 much more modest, of course, but there are
 12 term and temporary people that have been
 13 brought into roles to help with the
 14 organization of things. Like for example,
 15 we have over 400 new environmental
 16 commitments that we have to manage and
 17 monitor. So, they’re helping to identify
 18 and set those up for my team then to
 19 administer after the fact. As I said, we’re
 20 implementing a new IT system, new software;
 21 that’s driving some of those numbers. So,
 22 it’s really the evolution of this
 23 organization and how it’s changing
 24 dramatically in terms of its profile of
 25 operations and assets that has led to having

Page 269

1 to bring in this additional resources to
 2 manage us through that period. And then as
 3 we approach and get towards the steady
 4 state, you see us return to the numbers that
 5 we were at before.
 6 GREENE, Q.C.:
 7 Q. It's almost 1:30. I wonder if when we
 8 reconvene tomorrow morning, Mr. Roberts, if
 9 you could have the breakdown of what that
 10 actually increase is between those who were
 11 hired between 2016 and 2019 that would have
 12 been responsible for the commissioning and
 13 testing and those who were hired for
 14 continued operations. I'd like a further
 15 breakdown of that approximate—we're talking
 16 about almost 200 people. So, can you—and
 17 then we'll talk about you see it decreasing
 18 after that, where those numbers are. So, if
 19 by tomorrow morning we could have—you gave
 20 us general areas, but you didn't give us any
 21 FTE how they add up for the difference.
 22 MR. ROBERTS:
 23 A. I will certainly do my best and endeavour to
 24 have my team pull that together.
 25 GREENE, Q.C.:

Page 271

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 10th 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 10th day of October, 2019

Judy Moss

Page 270

1 A. Well, it's the heads up where we'll begin
 2 tomorrow morning.
 3 MR. ROBERTS:
 4 A. I appreciate the heads up. Thanks you.
 5 CHAIR:
 6 A. Thank you. Thank you, Ms. Greene, we'll
 7 reconvene at 9:00 tomorrow morning.
 8 Upon conclusion at 1:28 p.m..
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25

<p style="text-align: center;">A</p> <p>Abide - 210:12 Ability - 6:13, 9:7, 56:5, 97:17, 99:24, 114:6, 126:9, 141:1, 193:25, 206:17, 212:2 Abitibi - 92:6 Able - 3:16, 15:9, 58:24, 64:23, 102:25, 104:5, 106:21, 108:13, 163:7, 164:23, 211:21, 230:10, 239:18 Above - 3:22 Absolute - 167:7 Absolutes - 246:8 Absorb - 214:16 Absorbed - 132:24 AC - 245:1 Accept - 3:3 Acceptable - 121:6 Acceptance - 34:7 Access - 14:3, 70:5, 82:5, 91:15, 107:13, 120:11, 211:12 Accommodate - 4 1:21 According - 249:2 0 Accordingly - 165: 23 Account - 4:11, 138:19, 142:12, 145:25, 146:1, 146:2, 148:7, 175:23, 175:24 Accountability - 8: 8, 179:1, 231:17, 241:16 Accountable - 197: 20, 231:10 Accounted - 165:2 0 Accounting - 12:7 Accuracy - 86:2 Accurate - 79:10, 98:21 Achieve - 3:18, 52:12, 56:6, 120:8, 124:13, 148:22, 151:13, 206:17 Achieved - 3:23, 70:7, 138:15, 206:9 Acknowledge - 27:</p>	<p>6 Acquiring - 260:14 Acronym - 126:20 Across - 10:19, 59:15, 68:10, 107:24, 151:2, 260:17 Actions - 78:14, 79:1, 79:3, 80:9 Active - 126:15, 130:24 Activities - 5:24, 6:4, 21:7, 134:4, 138:18, 142:8, 175:22, 179:23, 203:10, 243:9, 243:23 Activity - 103:24, 135:11, 141:5, 166:19, 194:11, 208:5, 246:1, 249:22 Actual - 120:2, 166:6, 166:8, 172:23, 212:15 Ad - 135:7 Add - 40:4, 69:6, 69:9, 145:14, 184:2, 186:24, 190:22, 197:4, 228:15, 228:25, 245:16, 269:21 Added - 183:16, 190:8, 191:23, 267:18, 267:23 Adding - 25:23 Addition - 113:2, 215:5, 268:8 Additions - 190:7 Address - 72:6, 90:25, 182:8, 254:21 Adequacy - 17:15, 60:14, 72:14 Admin - 169:5 Administer - 268:1 9 Administration - 1 27:5 Administrators - 1 26:16 Admit - 226:7 Adopted - 78:10, 243:23 Advance - 6:17, 9:19, 30:25, 32:16, 34:5, 232:18</p>	<p>Advantage - 118:6 Advantages - 42:2 4, 118:4, 118:20, 118:22 Advice - 77:13, 256:23, 262:14, 263:12 Advised - 260:18 Advisory - 2:16, 6:20, 7:19, 17:3, 73:21, 74:1, 129:24, 208:9, 261:18, 262:2, 262:19, 263:14 Advisory's - 207:3, 207:4 Advocate - 57:25 Advocated - 261:1 2 Affairs - 74:5, 176:21, 266:17 Affect - 56:24, 57:3, 167:2, 167:23, 183:11 Affects - 251:7 Afforded - 55:8 Afternoon - 1:5, 176:12 Against - 138:9, 142:20, 158:5, 231:25 Agency - 133:18 Agree - 38:8, 146:12, 179:13, 181:24, 184:5, 187:1, 188:2, 239:1 Agreed - 85:22, 161:5, 262:10 Agreement - 82:13 , 83:3, 83:22, 90:17, 106:20, 107:12, 107:13, 112:4, 134:3, 140:25, 152:25, 169:25, 173:24, 175:18, 249:21 Agreements - 108: 14, 112:2, 156:10, 158:18, 169:18, 169:19, 169:22, 170:18, 170:19, 193:19, 212:6 Ahead - 116:17, 148:20, 160:19, 161:12, 161:15, 197:6 Albeit - 34:18</p>	<p>Alberta - 74:25 Aligned - 40:15, 256:3 Alignment - 228:9 Allocate - 221:17, 221:19 Allocated - 253:18 Allocating - 218:7 Allow - 144:1, 224:1 Allowed - 197:11, 197:13 Alluded - 94:13, 231:13 Alone - 84:9, 97:5, 139:2, 232:5 Alternate - 131:8 Alternative - 96:8, 121:15, 150:16 Alternatives - 69:2 4, 70:1, 120:8, 121:8 America - 124:20 American - 109:24, 117:18 Among - 139:3 Amongst - 43:10, 256:11, 256:12 Amount - 17:17, 28:15, 124:24, 125:13, 137:11, 140:1, 144:7, 147:19, 149:21, 158:23, 164:2, 164:4, 164:17, 179:10, 191:14, 191:25, 199:1 Amounts - 28:24 Amplified - 72:13 Analogy - 9:13 Analyses - 139:6, 162:12 Analysis - 5:1, 31:6, 79:9, 95:20, 104:14, 115:13, 115:14, 116:9, 135:15, 167:10, 167:14 Analysts - 101:2 1 And/Or - 78:14 Anecdotally - 148: 2 Annual - 56:13, 61:3, 61:10, 65:4, 72:20, 73:13, 89:4, 113:15, 115:9,</p>	<p>181:15, 222:15, 226:22 Annually - 51:22, 168:20 Anomalies - 181:2, 244:21 Anticipate - 59:5 Anticipated - 55:11 , 230:3, 250:12 Anticipating - 59:2 2 Anticipation - 97:1 1 Antonuk - 26:21 Anytime - 103:11 Anyway - 55:13, 93:4, 145:11, 182:7, 184:6, 228:23 Apologize - 232:18 , 239:23 Appear - 166:14 Appears - 166:15 Appendix - 215:1 Appetite - 99:24 Apples - 37:17, 37:18 Applicable - 74:17 Application - 72:9, 91:3, 93:17, 176:1 Applied - 221:13 Applies - 173:18 Apply - 17:9 Appointment - 266 :17 Appreciate - 153:5, 270:4 Approach - 50:11, 226:12, 269:3 Approached - 26:5 , 262:12 Approaches - 231: 21, 235:9 Appropriate - 4:9, 75:18, 93:23, 135:8, 180:19, 236:9, 240:8, 255:13, 256:24, 261:19, 261:21, 262:8, 264:6 Appropriately - 45: 23, 181:2, 234:18 Approval - 11:5, 89:9, 178:15, 205:14, 205:19, 235:7, 255:10 Approve - 9:18, 21:9</p>
---	---	--	--	--

<p>Approved - 10:24, 203:18 Approximate - 269:15 Approximately - 36:22, 168:18 April - 120:7 Arbitrage - 203:12 Area - 6:22, 49:23, 53:13, 136:13, 161:24, 161:25, 170:4, 171:10, 230:3, 236:14 Areas - 6:21, 18:15, 25:18, 25:25, 35:14, 129:25, 267:17, 269:20 Aren't - 65:19, 189:6 Arrangement - 12:21, 121:6, 196:2 Arrangements - 122:1, 195:21, 204:22 Arrears - 158:1, 158:2 Arrived - 255:14 Ascertain - 96:12 Aspect - 42:6, 42:9, 173:2, 258:8 Assess - 104:5 Assessing - 103:25 Assessment - 5:2, 6:18, 95:15, 97:3, 97:22, 116:18, 116:23, 121:17, 150:18, 172:12, 177:1, 180:3 Asset - 30:4, 64:24, 73:12, 89:5, 91:7, 93:5, 97:1, 104:25, 123:16, 123:18, 188:21, 192:18, 192:19 Assigned - 88:8, 176:20, 216:3 Assistance - 261:2, 261:20, 262:13 Associated - 7:6, 43:22, 44:5, 127:19, 146:5, 252:5 Assumption - 254:2 Atlantic - 99:18, 130:15</p>	<p>Attach - 207:5 Attempted - 131:22 Attempting - 225:19 Attend - 67:10 Attention - 23:10, 95:5, 179:10 Attracts - 133:23 Attributes - 123:25, 127:18 Attributing - 176:25 Au - 171:5 Auction - 15:25 Audit - 7:22, 8:16, 10:22, 11:4 Audited - 46:2 Audits - 180:8 Authority - 203:14, 204:7 Authorizations - 156:11, 156:13, 156:15, 156:16 Authorized - 157:11, 157:13 Autonomous - 25:21, 259:19 Availability - 19:22, 19:24, 155:4, 168:17, 196:12, 196:13 Available - 14:18, 16:12, 17:17, 20:9, 105:5, 105:9, 112:11, 130:2, 140:2, 140:23, 156:1, 171:17, 191:14, 203:11, 258:3 Avalon - 155:19, 156:2, 198:15, 199:2 Avenue - 95:7, 188:9 Avenues - 97:20 Average - 140:17, 148:5 Avoid - 23:23, 27:15 Avoiding - 23:14, 23:18, 178:16 Aware - 250:16, 267:3</p> <div style="border: 1px solid black; width: 100px; margin: 10px auto; text-align: center;"> <p>B</p> </div> <p>Back - 38:23, 39:1,</p>	<p>40:21, 41:2, 41:12, 44:15, 47:15, 48:7, 67:5, 67:11, 71:25, 75:3, 80:5, 80:13, 82:24, 83:5, 97:2, 101:2, 104:11, 112:23, 120:1, 123:12, 137:2, 138:22, 142:20, 143:4, 143:12, 143:21, 144:24, 146:10, 163:18, 164:5, 169:10, 178:20, 179:8, 182:22, 189:12, 191:2, 191:18, 213:13, 216:9, 222:5, 241:19, 247:4, 252:8, 252:10, 255:9, 264:10 Backfill - 231:14 Backfilled - 233:4 Background - 1:22, 53:21, 53:24 Backstop - 112:16, 122:9, 210:17, 211:20, 211:22 Backup - 17:23, 147:2 Backwards - 10:9 Balance - 73:6, 73:19 Ball - 15:9 Ballpark - 61:17 Bandaid - 100:22 Bank - 159:10 Barriers - 46:19, 46:23 Base - 30:4, 64:24, 93:7, 93:25 Based - 34:1, 73:24, 74:10, 135:15, 145:15, 145:17, 169:4, 189:20, 192:6, 192:23, 219:3, 253:18, 257:1, 257:2 Basing - 123:22 Basis - 5:1, 5:5, 52:22, 61:10, 72:23, 94:18, 160:19, 162:22, 166:6, 180:25, 181:11, 192:25, 194:21, 207:15,</p>	<p>221:10, 241:24, 245:24, 253:18 Battery - 102:25 Bay - 41:1, 73:5, 191:2, 248:20 Bayside - 121:21, 121:24, 123:7, 123:9, 123:15, 123:16, 210:17, 211:20, 212:9 Bear - 79:25, 104:14, 193:13, 213:1, 213:9, 213:12, 236:5 Bearing - 180:24 Beat - 3:17 Beaton - 92:5 Became - 85:21, 216:10 Become - 25:24, 46:8, 48:2, 122:14, 167:7, 167:13 Becomes - 47:14 Behind - 23:18, 95:18, 232:6 Belongs - 143:7, 250:21 Belt - 51:4 Benchmarked - 190:6 Beneficial - 184:22 Benefit - 13:20, 29:13, 42:16, 46:10, 46:16, 46:21, 138:15, 144:8, 172:17, 187:9 Benefiting - 135:11 Benefits - 66:19, 185:14 Bennett - 216:5, 258:7 Bets - 130:12 Bi - 149:13, 197:11 Bidder - 132:9 Bidders - 121:10, 132:9 Bifurcate - 24:3 Big - 11:17, 34:13, 37:3, 145:24, 157:22, 157:23, 179:11, 238:4, 258:8 Billing - 41:23 Billion - 72:1, 113:6 Bio - 257:12</p>	<p>Birth - 95:6, 95:11 Bit - 1:21, 2:7, 5:17, 19:13, 30:7, 40:4, 44:8, 51:12, 53:20, 56:7, 62:6, 65:14, 67:21, 69:9, 74:10, 74:18, 82:5, 139:24, 144:6, 171:1, 178:23, 182:17, 182:19, 188:10, 188:13, 190:20, 196:10, 238:7, 239:25, 245:13 Black - 187:6 Blanc - 169:20, 170:21, 171:4 Block - 18:5, 83:18, 166:25, 168:17, 192:8, 210:2, 210:4, 244:11 Blocking - 199:22 Blocks - 14:8, 14:13, 15:18, 15:22 Blowing - 102:24 Boarder - 121:5, 262:24 Boards - 63:20 Board's - 75:9, 78:19, 178:15, 180:10, 182:3, 262:11 Bodies - 2:8 Bond - 47:9 Bonding - 157:8 Booking - 140:10 Borne - 44:3 Boss - 266:9 Boston - 129:25, 130:22, 132:2 Both - 16:21, 16:24, 21:6, 31:9, 39:19, 73:25, 77:14, 89:17, 117:14, 123:3, 123:9, 139:24, 157:23, 173:12, 177:5, 182:5, 196:18, 225:7, 225:13, 231:21, 234:10, 237:14, 238:2, 244:8, 249:12, 251:11, 267:24 Bottleneck - 114:25, 115:2</p>
--	---	---	--	---

<p>Bottom - 206:24, 242:6, 244:21, 245:6 Bought - 151:20, 151:22, 211:10 Bound - 105:3, 160:14 Bounds - 6:3 Box - 217:20 Brand - 235:5 Break - 2:6, 136:19 Breakdown - 269:9, 269:15 Brendon - 262:11 BRINCO - 85:12 Brings - 102:21, 103:25, 104:13, 140:7, 256:15 Broader - 251:4 Brook - 244:22, 245:6 Brought - 28:9, 34:4, 34:24, 69:24, 71:12, 71:21, 79:25, 93:12, 98:3, 134:8, 149:22, 150:3, 150:6, 150:25, 151:1, 151:8, 165:18, 173:20, 174:1, 203:23, 255:9, 258:9, 258:11, 268:13 Brunswick - 7:20, 10:21, 67:12, 69:22, 108:4, 109:4, 109:13, 113:25, 114:23, 117:8, 118:11, 118:14, 118:18, 122:1, 122:4, 122:5, 123:2, 123:10, 123:19, 123:22, 130:17, 130:18, 130:21, 132:1, 150:10, 150:12, 150:25, 151:5, 151:6, 155:8, 158:8, 158:9, 158:10, 158:20, 210:22, 211:4, 211:9, 211:13 Budget - 52:19, 72:9, 72:21, 72:22, 181:15, 218:1, 218:19, 221:8,</p>	<p>221:16, 222:16, 223:4, 223:5, 223:8, 223:11, 223:12, 223:14, 223:18, 224:10, 224:11, 226:9, 226:22, 235:18 Budgetary - 165:2 Budgets - 63:18, 89:7, 223:9, 224:1, 226:3, 227:9, 228:13 Build - 24:9, 64:6, 72:17, 95:7, 100:14, 216:2, 242:23 Building - 3:6, 4:25, 98:16, 98:22, 166:20, 186:21 Built - 3:15, 3:24, 11:21, 12:2, 13:17, 18:24, 153:24, 195:8, 209:23 Bulk - 33:18, 150:23 Bullet - 5:21, 49:25, 50:2, 238:11, 242:6 Bullets - 23:12, 224:24 Bumps - 73:2 Bunch - 217:22, 224:24 Business - 1:4, 25:8, 25:18, 27:19, 30:3, 34:20, 36:11, 65:20, 70:4, 132:25, 214:22, 222:3, 240:19 Businesses - 27:9, 63:2 Buy - 128:25, 129:1, 129:12, 131:22, 147:22, 147:24, 151:16, 151:18, 153:21, 163:17, 175:9 Buying - 127:17, 129:13, 129:14, 129:16, 150:22, 157:25, 158:6, 158:8, 165:15</p> <div style="border: 1px solid black; width: fit-content; margin: 10px auto; padding: 2px 10px;"> <p style="text-align: center; margin: 0;">C</p> </div> <p>Cable - 131:23 Calculate - 249:16</p>	<p>Calculations - 13:1 7 Call - 9:12, 115:4, 117:25, 122:9, 123:7, 123:10, 123:15, 124:6, 128:11, 152:24, 173:5, 173:9, 175:8, 187:21, 188:25, 197:23, 210:17, 211:13, 211:21, 212:10, 224:19, 232:12, 257:20, 260:15, 264:3, 267:7 Called - 86:18, 110:14, 121:21, 124:8, 124:9, 126:13, 128:3, 128:10, 128:18, 130:14, 131:5, 160:22, 264:23, 264:24 Calling - 127:22, 161:23, 213:10 Calls - 19:23, 211:17 Canada - 10:20, 68:11, 69:16, 70:2, 74:17, 99:18, 102:15, 102:18, 260:17 Canada's - 69:19 Canadian - 70:12, 99:15, 99:16, 99:17 Canal - 124:16 Can't - 7:11, 8:2, 11:7, 22:8, 22:11, 86:2, 101:2, 125:15, 126:19, 141:10, 149:17, 153:18, 154:19, 164:19, 164:25, 167:22, 186:10, 199:23, 204:1, 235:21, 235:22, 236:24, 245:5, 246:14 Capability - 19:25, 141:2, 147:25, 170:8, 170:15, 194:24, 199:25 Capacities - 177:6, 177:20 Capacity - 13:7, 17:14, 17:22, 18:4, 20:12, 31:2, 60:2,</p>	<p>60:5, 60:10, 60:21, 72:16, 101:24, 121:21, 122:9, 123:10, 123:15, 147:3, 154:6, 154:10, 154:13, 154:19, 154:24, 155:1, 156:7, 167:15, 167:16, 170:1, 170:6, 171:18, 185:22, 188:8, 189:15, 189:20, 190:1, 190:22, 191:14, 193:25, 211:12 Capital - 30:14, 41:10, 46:18, 48:17, 48:24, 51:14, 72:2, 72:9, 72:12, 72:20, 72:23, 73:13, 84:17, 94:1, 169:7, 181:15, 189:21, 190:17, 191:16, 192:16, 192:24, 193:16, 194:6, 194:11, 196:25, 197:22, 197:24, 198:7, 221:8, 223:12, 224:22, 226:3, 226:4, 226:9, 226:22, 227:9, 227:23, 228:5, 228:13, 235:18, 238:6, 238:19, 250:11, 250:13, 250:16, 266:3 Carbon - 139:8 Care - 179:24 Career - 231:8, 260:13 Careful - 2:19 Carefully - 74:13 Case - 14:16, 105:15, 117:13, 127:22, 144:14, 181:23, 184:7, 216:4, 232:25, 256:17, 261:6 Cases - 15:25, 34:10, 159:5, 161:21 Category - 187:21, 187:22, 188:21, 188:23 Caused - 213:10,</p>	<p>267:18 Cautious - 32:7, 32:8 Caveat - 10:18 Caveats - 84:2 Cent - 81:22 Centre - 252:21, 260:16 Centres - 59:8 Cents - 78:6, 78:13, 83:18, 117:24, 125:4, 125:25, 126:2, 137:12, 151:17, 153:8, 153:9, 168:12, 168:18 CEO - 255:1, 255:23, 256:14 Certain - 3:9, 4:6, 14:23, 20:13, 31:24, 32:10, 37:23, 42:6, 42:9, 130:13, 152:18, 163:24, 219:16 Certainly - 12:22, 13:25, 32:3, 54:11, 54:17, 55:10, 56:8, 56:15, 57:12, 59:15, 59:17, 60:19, 72:15, 74:9, 74:14, 74:20, 91:7, 91:13, 92:24, 99:13, 100:13, 100:17, 141:22, 153:8, 172:7, 177:18, 177:20, 177:24, 179:6, 180:22, 181:2, 181:14, 181:23, 184:9, 184:22, 204:17, 226:1, 231:19, 236:9, 241:17, 244:5, 254:11, 256:6, 269:23 Certificates - 124:6 Certification - 124:18 Certified - 129:2 Cetera - 36:18, 158:21, 212:2, 212:3, 221:1 CF - 24:20, 28:1, 63:9, 82:15, 82:19, 83:15, 105:3, 105:15, 168:4, 168:5, 168:7,</p>
--	--	--	--	---

<p>168:25, 169:4, 169:8, 169:12, 169:13, 191:23, 201:2, 201:15, 201:19, 265:18, 266:10 CHAIR - 1:2, 1:12, 57:24, 58:2, 136:12, 136:20, 137:1, 137:4, 176:8, 176:11, 253:23, 253:24, 254:5, 254:6, 254:12, 254:16, 255:24, 262:11, 270:5 Challenge - 32:2, 196:19, 228:19 Challenged - 29:12, 52:24, 84:20, 227:19, 243:1 Challenges - 98:5 Change - 31:21, 46:7, 47:22, 59:9, 59:20, 84:22, 90:16, 101:2, 103:14, 107:17, 115:16, 152:4, 168:13, 168:19, 168:20, 168:22, 237:8, 264:21, 267:6 Changed - 33:24, 96:22, 98:1, 98:19, 100:20, 103:14, 188:13 Changer - 98:8 Changes - 5:3, 16:1, 126:3, 126:21, 126:23, 139:10 Changing - 75:9, 96:10, 268:23 Characterization - 27:23 Characterize - 74:13, 180:20, 185:5, 241:4, 241:20, 244:14, 257:24 Characterized - 25:5:12 Charge - 3:14, 107:19, 109:12, 112:18, 113:4, 113:8, 114:15, 133:17, 152:19, 221:6, 221:11</p>	<p>Charged - 133:2 Charges - 113:1, 115:15, 116:11, 152:9 Charging - 108:7, 152:15, 174:10, 174:23 Chart - 38:20, 77:23, 80:2, 217:20 Charts - 31:20, 31:22 Cheaper - 147:23, 161:14 Cheapest - 101:9, 150:20, 150:22 Churchill - 24:19, 41:5, 48:11, 49:14, 82:9, 82:10, 104:2, 104:19, 104:20, 104:21, 168:11, 168:14, 189:11, 189:16, 189:19, 191:15, 200:3, 223:4, 223:7, 225:25, 248:3, 248:5, 249:1, 249:2, 249:11, 249:12, 249:20, 250:9, 250:20, 251:7, 259:3, 265:8, 265:10, 265:13, 265:15, 265:20, 265:22, 266:7 Circumstances - 7:2:3, 94:4, 97:25 Cite - 87:1 City - 169:22 Claim - 128:17 Clarifying - 250:3 Clarity - 54:18, 259:16 Classes - 76:22 Clean - 98:7, 126:8, 126:22, 128:23, 131:2 Clearing - 14:1, 150:14, 150:15 Clerk - 86:16, 149:2 Climate - 101:1 Close - 55:3, 78:6, 96:12, 162:13, 233:25 Closed - 205:16 Closely - 26:20, 73:19, 222:9</p>	<p>Closer - 195:19 Closing - 252:21 Co - 24:20, 28:1, 63:9, 82:15, 82:19, 83:15, 105:3, 105:15, 168:4, 168:5, 168:7, 168:25, 169:4, 169:8, 169:12, 169:13, 191:23, 201:2, 201:15, 265:18, 266:10 Coal - 71:6, 99:19, 100:24, 102:16, 102:18 Coalition - 132:3, 132:5, 132:14 Coast - 66:21, 67:9, 70:11 Cold - 261:1 Collaboration - 18:18, 18:23, 20:24, 39:21, 40:6, 41:12, 43:10, 43:12, 43:19, 69:20, 245:13 Collins - 266:10 Colour - 69:10 Combination - 15:21, 212:3 Combined - 121:24, 129:7, 211:1, 259:12 Combustion - 121:24, 211:1 Come - 33:19, 59:8, 59:15, 68:1, 73:3, 80:13, 121:11, 121:12, 124:10, 126:20, 128:23, 132:15, 143:25, 150:8, 150:24, 163:6, 164:24, 168:7, 169:5, 184:8, 191:17, 234:23, 252:8, 252:10, 264:10, 267:9 Comes - 80:10, 82:19, 85:11, 103:9, 103:19 Comfortable - 225:14, 233:20, 261:13 Coming - 33:19, 46:11, 65:10, 71:25, 83:14, 84:25, 85:9, 120:6, 134:18,</p>	<p>144:11, 164:5, 167:10, 171:14, 230:15, 263:7, 268:1 Comment - 60:10, 77:24, 107:2, 176:22, 182:19, 235:22 Commercial - 158:13, 158:17 Commercially - 15:3:3, 209:4, 247:11 Commission - 64:7, 180:7, 267:25 Commissioned - 2:24:7 Commissioners - 176:11 Commissioning - 12:2, 23:22, 26:10, 34:7, 122:24, 269:12 Commit - 228:8 Commitment - 38:24, 57:4, 237:17 Commitments - 18:4:20, 250:23, 268:16 Committed - 50:4, 53:18, 56:8, 160:18 Committee - 86:14, 86:15, 86:23, 87:21, 87:23, 88:3, 88:4, 88:17, 88:18, 89:2, 90:3, 90:4, 90:19, 92:18, 182:14, 182:15, 230:21, 232:13, 232:21, 234:8, 234:24, 235:1, 235:2, 237:10, 237:19, 237:23, 238:2, 238:13, 238:18, 240:2, 240:15, 241:5, 241:17, 241:21, 242:10, 242:12, 242:17, 243:6, 243:8, 245:22 Committees - 86:13, 86:19, 86:20, 86:21, 225:3, 230:10, 230:13 Committee's - 229:1 Committing - 54:5 Commodity - 163:</p>	<p>22 Communicate - 24:9:12 Companies - 121:12, 124:22, 128:16, 129:8, 260:14, 260:15 Company - 124:10, 222:24, 260:22, 262:8, 268:8 Comparable - 80:22, 81:5, 81:8, 81:14 Compared - 147:11 Comparison - 37:18 Compete - 153:23 Competed - 130:22 Competent - 45:14 Competing - 129:20 Complete - 97:22, 113:7, 122:15, 122:19, 154:15, 154:16 Completed - 171:22 Completely - 101:15, 193:11 Completion - 104:8, 258:13, 262:3 Complex - 199:13 Compliance - 7:2, 7:3, 7:23, 8:17, 8:18, 128:14, 128:19 Complicated - 183:9 Component - 24:6, 24:7, 24:8, 24:22, 34:18, 246:1 Components - 168:20, 200:24, 223:8, 258:14 Conceivably - 155:25 Conceive - 214:3, 245:23 Conceived - 96:1 Concern - 6:11, 6:21, 6:22, 32:6, 43:21, 97:9, 203:24, 204:11 Concerned - 161:3 Concerns - 6:8, 17:4 Concerted - 63:13, 178:2</p>
---	---	---	--	---

<p>Conclude - 121:6 Concluded - 97:2 Conclusion - 270:8 Conclusions - 184:20 Condenser - 51:2 Conditions - 14:19, 139:22 Conduct - 147:8, 262:20 Conferred - 123:21 Confers - 112:5 Confess - 236:24 Confidence - 4:25 Confident - 39:7, 194:10 Confidentiality - 2:13, 2:25, 3:1 Confines - 140:25 Confirm - 7:19, 62:17, 205:9, 236:25 Confirmed - 97:4 Conflict - 42:25, 43:4, 207:13 Confronting - 198:23 Congestion - 114:2, 115:5, 163:16 Connect - 44:24 Connections - 124:20 Consensus - 238:1, 2, 238:22, 239:4, 242:8 Consequences - 2:1, 20, 22:6 Consider - 7:25, 18:25, 27:14, 201:1, 261:19 Consideration - 72:16, 93:18, 234:25, 236:5 Considerations - 2:33, 14 Considered - 103:15, 115:24, 136:3, 247:10 Consistent - 261:6, 267:10 Constant - 40:2 Constraint - 156:6 Constraints - 22:1, 6, 190:22, 212:1 Construct - 143:5, 188:6, 192:24, 204:8, 206:9,</p>	<p>216:15 Construction - 24:5, 24:9, 48:22, 99:4, 258:12, 258:13, 262:4 Constructs - 145:1, 145:8 Consultant - 256:2, 2 Consumer - 57:25 Contact - 146:8 Contacted - 130:1 Contain - 174:2 Contained - 42:25, 169:8, 169:15, 215:17, 265:21 Contemplated - 20:3, 9, 229:1 Contemplates - 14:5, 10 Content - 234:19 Context - 7:3, 177:4 Contingent - 18:1, 35:11 Continue - 40:8, 77:13, 101:11 Continued - 269:1, 4 Continues - 225:1 Continuing - 31:20 Contract - 1:23, 2:13, 3:5, 3:16, 3:24, 4:7, 4:16, 4:21, 5:4, 5:10, 16:18, 51:16, 70:20, 95:15, 104:19, 107:8, 112:1, 118:3, 119:17, 119:19, 119:20, 119:22, 119:23, 120:3, 120:5, 120:10, 120:18, 121:3, 127:15, 131:14, 131:15, 145:1, 146:19, 160:21, 161:10, 168:12, 168:16, 168:17, 170:22, 171:2, 171:7, 197:10, 197:18, 203:18, 209:17, 210:11, 210:12, 212:4, 239:8 Contracted - 162:2 Contractor - 4:5,</p>	<p>135:23, 135:24 Contractors - 169:9, 216:7, 216:14, 265:22 Contracts - 7:5, 57:3, 99:23, 130:2, 130:12, 145:18, 145:21, 153:3, 155:2, 160:14, 161:12, 163:17, 164:10, 197:10, 208:25, 209:6, 209:7, 209:8, 209:23, 213:6, 214:18 Contractual - 195:21, 196:2, 250:23, 251:12 Contrary - 246:15 Contrast - 192:11 Contribute - 76:16 Contributes - 35:2 Contribution - 142:2 Control - 79:3, 79:5, 79:6, 252:21, 252:22 Conundrum - 106:8 Conversation - 40:23, 77:13, 204:17, 267:8 Cooperation - 68:1, 3, 245:13 Cooperatively - 25:2 Coordination - 41:2 Coordinator - 249:11, 251:14, 251:23 Core - 81:19 Corner - 218:13 Corporate - 24:25, 25:17, 27:25, 36:17, 63:10, 162:23, 164:6, 258:4, 259:11, 268:9 Corporation - 62:1, 0, 164:6, 249:9, 249:13, 249:14 Corrected - 165:23 Correctly - 29:3, 80:1 Corridor - 110:10, 110:21, 111:4, 111:19, 111:23,</p>	<p>112:24 Costed - 135:21 Costing - 133:4, 135:21 Costs - 11:11, 11:13, 11:16, 11:17, 11:20, 12:3, 12:7, 29:24, 43:21, 43:24, 44:2, 44:3, 45:18, 46:18, 49:8, 49:21, 61:4, 61:21, 62:25, 63:13, 86:18, 120:17, 132:14, 132:24, 134:16, 169:4, 173:14, 175:20, 180:5, 180:12, 180:19, 180:23, 187:14, 192:19, 196:1, 220:14, 220:25, 232:15, 244:1, 252:5, 252:14, 252:24, 264:5 Couldn't - 59:17 Council - 93:20 Count - 63:12 Counterparties - 1:57, 25, 158:4, 158:7, 158:20, 159:1, 159:8 Counterparts - 150:11, 150:12 Counterparty - 127:17, 150:18 Counts - 29:20 Couple - 31:7, 92:7, 97:22, 124:22, 159:18, 159:20, 159:22, 164:20, 178:4, 178:12, 190:16, 207:23, 222:6 Course - 4:10, 24:2, 24:17, 29:12, 34:10, 38:7, 58:6, 93:25, 105:14, 106:7, 118:24, 123:11, 143:13, 148:9, 155:12, 161:6, 161:16, 176:16, 187:20, 224:8, 225:2, 245:21, 256:14, 258:18, 260:13, 263:1, 268:11 Covenants - 47:8</p>	<p>Cover - 18:16, 25:25, 212:6 Covered - 49:3, 49:8 Covering - 43:23, 43:24 CPI - 168:21 Cracked - 83:8 Create - 24:10, 28:10, 41:17, 41:19, 175:16, 257:17 Created - 215:13, 244:21, 258:23 Creates - 21:3 Creating - 3:21, 14:14, 27:2 Credentials - 261:1, 1 Credit - 137:23, 138:7, 139:2, 157:18, 157:24, 158:9, 158:11, 158:13, 158:14, 158:18, 158:22, 158:25, 159:3, 159:9, 159:10, 159:11, 159:22, 159:23, 255:18 Credits - 124:1, 124:14, 124:19, 125:23, 126:7, 127:1, 127:11, 127:18, 129:1, 129:8, 129:13, 137:5 Criteria - 21:2, 21:5 Critical - 77:16 Crosbie - 230:25, 232:25, 233:12, 234:4, 234:7, 234:14 Crosbie's - 231:3, 231:17 Crown - 74:18 Crystallized - 217:15, 217:16 Cubic - 251:10 Culture - 32:8 Cumulative - 56:16 Current - 12:5, 32:13, 61:3, 72:22, 81:21, 90:6, 120:5, 126:11, 154:6, 175:5, 178:18, 188:5, 191:22, 192:7, 192:23,</p>
--	--	---	---	---

<p>194:5, 215:3, 241:7, 267:7 Currently - 46:24, 60:14, 82:19, 84:19, 122:3, 127:4, 142:6, 145:18, 145:21, 146:8, 146:19, 147:9, 147:20, 154:17, 180:24, 218:5, 229:23, 231:6, 231:10, 235:8, 241:19 Curtailed - 115:3, 214:13 Curve - 64:5, 190:12 Customer - 135:12 , 138:19, 176:13, 209:18, 212:16, 248:21 Customers - 11:21, 76:5, 76:16, 77:20, 78:25, 82:1, 82:21, 123:13, 167:19, 173:13, 183:8, 187:8, 187:25, 189:4, 191:18, 192:20, 198:3, 204:15, 207:17, 208:11, 208:17, 208:21, 209:7, 209:8, 209:24, 211:5, 219:15, 219:20, 220:17, 221:3, 224:23, 234:23, 244:2, 244:16, 244:17, 246:5, 249:14, 249:15, 253:1, 253:4, 253:9, 253:15, 259:5 Cyber - 41:19, 52:23 Cycle - 72:22, 75:2, 121:24, 211:1 Cycles - 72:21</p> <div style="border: 1px solid black; width: 100px; margin: 10px auto; text-align: center;"> <p>D</p> </div> <p>Daily - 19:23, 148:14, 148:16 Dalley - 24:24 Dalton - 9:6, 263:15 Data - 31:19, 59:8 Date - 31:23, 148:11</p>	<p>Dave - 266:9 Dawn - 24:24 Day - 9:10, 39:14, 48:3, 60:22, 115:16, 116:7, 116:17, 148:20, 150:10, 151:13, 160:19, 161:12, 161:15, 162:22, 196:6, 196:15, 196:16, 231:10, 240:19, 247:18, 258:1 Daylight - 244:14 Days - 4:20, 19:19, 116:7, 143:19, 234:2 DC - 51:1, 200:1, 238:7 Deal - 149:13, 152:23, 157:9, 183:22, 202:16, 209:9 Dealing - 101:22, 174:5, 180:11, 206:4, 241:7, 252:20 Dealings - 177:15 Decide - 78:21, 164:7, 249:16 Decided - 25:19, 242:14 Decides - 138:17 Decision - 5:6, 24:3, 60:18, 93:23, 95:24, 96:7, 97:2, 104:15, 107:6, 117:11, 135:10, 138:16, 142:24, 145:12, 146:9, 147:12, 147:13, 148:16, 187:5, 187:25, 188:16, 191:15, 206:14, 241:7, 242:9, 254:24, 257:19, 260:21 Decisions - 145:19 , 151:12, 207:14, 214:8, 238:11, 242:7 Decline - 32:11 Declining - 58:10 Decoste - 241:10 Decrease - 35:4 Decreasing - 269:1 7 Dedicated - 7:1,</p>	<p>30:2, 179:20, 216:21, 217:13, 218:20 Deemed - 197:12, 261:8 Deep - 182:20, 183:11, 184:18 Deeply - 139:9 Defaults - 158:5 Defer - 66:7 Deferral - 175:23, 175:24 Define - 227:3 Defining - 24:21 Definitely - 8:7, 13:13, 37:22, 73:16, 118:22, 162:11, 166:21 Definition - 258:21 Degree - 9:3, 9:5, 103:1, 209:15, 209:19 Degrees - 189:23 Delay - 94:15, 94:22, 195:24 Delegated - 230:23 Delineates - 200:2 0 Deliver - 119:4, 123:8, 151:5, 161:15, 196:6, 196:14, 197:19, 216:12, 217:4 Delivered - 141:21, 141:23, 196:8 Deliveries - 122:10 , 163:25, 166:7, 166:9 Delivering - 108:2, 140:22, 160:7, 160:8, 161:4, 161:7, 164:3, 214:14 Delivers - 32:14 Delivery - 109:21, 127:2, 219:14 Demonstrates - 78 :1 Department - 41:1 8, 69:14, 69:15, 126:18, 126:19, 163:2, 163:5, 164:9, 182:16, 216:5, 219:1 Dependent - 14:19, 59:7, 140:3, 156:4, 166:15</p>	<p>Describe - 63:2 Described - 36:12, 95:12, 128:3, 213:3, 262:15 Describing - 201:2 4 Descriptions - 247 :16 Deserved - 74:6 Design - 189:24, 189:25, 190:1, 191:8, 194:21, 197:17 Designed - 194:6 Desk - 218:14 Despite - 60:9 D'espoir - 41:1, 73:5, 191:3, 248:20 Detailed - 107:4, 107:9 Determine - 25:3 Determined - 53:11 , 120:10, 192:14, 232:8, 235:16, 241:25 Determining - 235: 6 Develop - 100:9, 229:25 Developed - 23:16, 227:1, 227:24 Developers - 131:1 6 Developing - 103:6 , 184:16 Development - 31: 3, 35:23, 42:8, 43:14, 44:5, 97:12, 132:25, 215:4, 215:10, 215:13, 215:19, 216:10, 216:20, 218:12, 218:17, 220:8, 222:3, 259:12 Developments - 31 :1, 104:4, 104:11, 185:18, 185:24, 189:4, 215:7, 216:22, 218:2, 218:21, 220:9 Diagram - 121:20 Dialog - 40:13 Dictate - 60:21 Didn't - 53:22, 58:17, 66:11, 132:6, 132:13, 134:11, 198:15, 199:10,</p>	<p>207:4, 230:17, 269:20 Diesel - 171:5 Differ - 28:15 Difference - 2:2, 2:9, 26:22, 37:4, 50:19, 108:19, 244:19, 269:21 Differences - 31:7 Different - 18:5, 25:14, 27:9, 27:16, 38:2, 62:17, 71:4, 74:19, 75:21, 105:10, 108:18, 115:20, 116:1, 116:2, 116:10, 119:23, 121:7, 126:3, 127:20, 129:3, 129:13, 139:10, 139:11, 141:4, 166:21, 184:8, 189:23, 191:9, 192:2, 195:12, 218:14, 238:8, 240:3, 240:15, 242:10, 244:8, 259:24 Difficult - 15:10, 15:13, 16:9, 31:18, 37:17, 235:19 Difficulties - 195:2 4 Difficulty - 18:10 Dilemma - 153:18 Diligence - 46:4 Diluting - 179:10 Dilution - 179:23 Dime - 54:13 Directed - 65:3, 145:22, 177:4 Directing - 3:18, 3:20 Direction - 21:22, 154:14, 162:20, 162:24, 255:1, 257:16, 266:6 Directions - 157:24 Directly - 54:3, 138:9, 144:19, 168:8, 187:12, 202:2, 202:8, 202:9, 249:6 Director - 74:5, 231:6 Directors - 8:9, 162:20, 163:1, 255:10, 256:7,</p>
--	--	---	--	---

<p>256:16, 257:20, 260:23, 261:10 Disagree - 229:5 Disagreement - 213:25 Disallow - 55:9 Disappear - 48:10, 102:19 Disappeared - 67:14 Discharged - 251:11 Disclosure - 226:6 Discounting - 102:13 Discussions - 19:8, 97:14, 232:11, 266:20 Disparaging - 31:15 Dispatch - 21:5, 194:1 Displace - 148:13, 152:18, 153:25, 154:3, 165:19 Displaced - 165:21 Displacement - 142:11, 166:3 Displacing - 102:16 Disposition - 175:24 Dispute - 239:7 Disrupted - 160:23, 161:17 Disruption - 161:12 Dissemble - 128:5 Distinct - 200:20, 200:22, 240:7 Distinction - 187:5, 187:7 Dive - 182:20, 183:11 Divergence - 246:6 Dividend - 85:7, 85:11, 85:23, 142:3 Dividends - 85:1, 85:2, 142:7, 144:24, 182:22 Dividing - 187:20 Division - 208:3, 223:1, 264:23 Divisions - 200:23 Document - 229:7 Documentation - 226:25, 228:12,</p>	<p>229:12, 229:17, 232:9 Doesn't - 8:22, 20:18, 100:18, 101:8, 122:14, 127:16, 155:12, 166:13, 168:13, 183:17, 185:19, 185:20, 186:6, 197:15, 200:4, 213:12, 219:20, 227:16, 228:19, 229:5, 241:14, 246:3, 253:10 Dollar - 13:15, 13:19, 15:9, 17:17, 35:8, 48:24, 50:13, 51:21, 52:2, 53:25, 61:13, 61:22, 85:3, 109:7, 117:23, 137:16, 141:15 Dollars - 11:16, 13:9, 48:17, 52:5, 53:19, 55:9, 56:17, 72:1, 84:18, 108:24, 110:19, 113:11, 113:12, 113:13, 125:4, 137:14, 157:23, 159:18, 162:5, 164:5, 165:1, 176:21, 218:7 Doubt - 129:23, 129:25 Drafting - 41:18 Dramatically - 126:3, 268:24 Draw - 23:10 Drive - 45:17, 95:18, 95:20 Driven - 71:1, 128:20, 130:25, 198:2 Drivers - 243:22, 244:1, 244:4 Drives - 19:25 Driving - 196:1, 268:6, 268:21 Dry - 147:10 Due - 98:13, 141:20, 161:21, 162:6, 165:3, 210:7 Duplicating - 9:15 Duplication - 23:18, 23:24, 26:14, 26:16, 26:18, 27:2, 27:14</p>	<p>Duplications - 23:14 <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 0 auto; padding: 2px 10px;">E</div> Each - 1:15, 9:7, 107:8, 115:19, 150:10, 151:12, 151:13, 152:10, 157:12, 158:22, 240:5 Earlier - 62:8, 134:1, 147:6, 148:3, 149:23, 149:25, 259:20 Early - 4:20, 96:6, 96:9 Earn - 138:21 Easier - 45:8 Easily - 45:20, 245:6 East - 14:11, 66:21, 67:9, 70:11 Eastern - 66:8, 69:16, 70:2, 70:12, 102:18 Easy - 220:11 Eco - 124:18 Economic - 51:17, 123:6, 166:3, 175:8, 215:25 Economics - 167:24 Economy - 102:15 Educated - 261:9 Effect - 66:10, 208:8 Effective - 122:14, 135:16, 147:23, 226:17 Effectively - 144:10 Effectiveness - 7:23, 8:18, 53:17 Efficiencies - 23:13, 39:10, 52:11, 264:3 Efficiency - 50:17, 53:17, 190:5, 190:12, 191:6 Efficient - 190:2, 259:21 Effort - 63:13, 74:21, 75:10, 148:12, 178:2, 265:23 Efforts - 178:6, 225:22</p>	<p>Eight - 56:19, 61:22 Electric - 82:1, 98:16, 98:17, 99:11, 141:2, 185:15 Electrical - 187:12, 187:15 Electricity - 78:16, 81:14, 98:6, 98:25, 99:2, 106:5, 127:8, 127:25, 129:4, 129:6, 142:16, 149:2, 152:16, 153:19, 165:18, 166:24, 173:17 Electrification - 77:15, 182:21 Element - 8:7, 8:10, 8:13, 8:15 Elements - 3:6, 159:5, 163:15 Elevate - 239:10 Eligible - 126:11, 126:25 Eliminate - 67:19, 76:3, 76:8 Eliminated - 51:10 Eliminating - 29:4 Embarrassed - 145:3, 145:4 Embedded - 208:24, 209:6, 210:11 Emera - 1:22, 2:25, 3:16, 4:20, 4:23, 5:9, 86:14, 88:3, 88:7, 88:18, 90:17, 90:22, 107:14, 108:25, 112:1, 112:2, 112:3, 112:5, 119:20, 120:18, 121:15, 122:2, 123:16, 123:18, 123:20, 130:16, 131:20, 152:16, 211:11, 240:5, 242:13, 244:7, 244:10, 244:23, 245:8, 246:2 Emera/Nalcor - 242:12 Emera's - 123:23, 244:17 Emergency - 170:6 Emitting - 98:7, 126:9 Emphasis - 185:10, 258:6</p>	<p>Emphasize - 40:21 Employed - 7:16 Employees - 34:3, 168:6, 168:24, 169:2 Enable - 203:15 Enables - 146:21, 146:22 Enabling - 149:23, 158:17, 212:5 Encouraging - 40:5 Endeavour - 269:23 Ends - 135:11 ENEL - 92:6 Energies - 141:20, 141:22 Engaged - 263:9 Engagement - 206:12 Engineering - 28:7, 28:8, 29:2, 29:4, 29:9, 30:2, 40:6, 40:14, 41:25, 169:9, 179:17, 215:21, 218:25, 219:1, 221:7, 228:11, 258:16, 265:21, 266:1, 266:2 England - 3:20, 14:10, 15:16, 98:5, 106:22, 106:23, 106:24, 109:11, 109:22, 110:1, 114:19, 114:23, 118:13, 118:17, 122:10, 123:9, 123:13, 124:7, 125:22, 126:12, 126:14, 127:2, 127:24, 128:18, 129:24, 130:10, 140:13, 140:19, 150:15, 151:1, 152:1, 158:19 Enhance - 70:1, 192:18, 208:6 Enhancements - 194:7 Ensure - 20:8, 23:12, 44:10, 89:11, 242:24, 264:5 Ensuring - 32:9, 264:3 Enter - 142:10,</p>
--	--	--	--	---

<p>142:11, 160:20, 163:15, 163:23, 164:9 Entered - 123:12, 160:15, 161:11 Entering - 123:5 Enterprise - 82:25 Entire - 9:15 Entirely - 84:8, 211:6, 211:9 Entities - 10:19, 30:14, 45:9, 134:6, 158:23 Entitled - 106:5 Entity - 8:3, 24:12, 157:12, 202:7, 202:13, 202:16, 206:5, 259:2 Envelope - 219:15 Environment - 17:6 Environmental - 25:16, 262:21, 268:15 Envision - 219:22 Equally - 261:10 Equation - 4:3, 201:16 Equipment - 190:10, 267:25, 268:2 Equivalent - 125:25, 126:18, 137:18 Era - 140:24 Escalate - 239:10 Escalating - 78:7 Essentially - 9:14, 75:4, 134:23 Established - 182:14, 206:10 Establishes - 206:11 Estimate - 61:3 Estimates - 219:3 Estimation - 79:9 Et - 36:18, 158:21, 212:2, 212:3, 220:25 Europe - 195:16 Evaluated - 97:4 Evaluation - 120:7 Events - 162:6 Eventuality - 212:6 Eventually - 83:10, 143:8 Eversource - 131:4, 132:11 Everybody - 1:3,</p>	<p>44:6, 63:24, 218:13, 243:1 Everyone - 94:9, 103:17 Everything - 10:13, 33:8, 33:9, 79:19, 132:14, 225:12, 227:14 Evidence - 6:7, 7:19, 26:8, 50:10, 98:13, 119:8, 127:7, 176:14, 176:18, 184:16, 185:4, 189:14, 201:22, 206:20, 206:23, 207:9, 210:15, 214:25, 220:4, 224:15, 224:17, 235:17, 257:1 Evolution - 238:8, 268:22 Evolve - 31:21, 241:8, 262:10 Exacerbate - 72:17 Examine - 231:24, 232:10 Examining - 216:21 Example - 3:20, 17:21, 17:23, 18:1, 25:9, 25:15, 28:7, 29:2, 32:14, 63:17, 74:25, 78:5, 108:3, 116:25, 118:10, 124:11, 124:15, 125:10, 140:10, 158:11, 160:15, 178:5, 178:18, 194:25, 195:11, 195:12, 203:3, 213:2, 220:11, 244:17, 263:8, 268:14 Examples - 149:11, 178:4 Exception - 142:9, 165:6, 210:1 Excess - 106:20, 106:25, 134:20, 142:16, 144:5, 144:16, 151:24 Excesses - 144:17 Exchange - 164:1, 164:8, 164:9 Excluded - 44:14 Excluding - 180:7 Execute - 95:17,</p>	<p>215:16, 256:2, 258:4 Executed - 181:3, 234:1 Executes - 163:3 Executing - 203:19 Executive - 263:4, 263:10, 266:6, 266:11 Exercise - 215:24 Exists - 8:10, 26:17, 187:22 Expand - 19:13, 221:23 Expanded - 231:16 Expansion - 93:25 Expect - 59:2, 84:22, 90:21, 93:2, 141:3, 166:2, 166:5, 181:4, 181:13, 201:19, 227:19, 229:15, 232:7, 234:10, 262:5 Expectation - 172:13, 181:25, 229:4, 234:6 Expectations - 244:15 Expected - 15:2, 15:4, 15:8, 96:18, 173:14, 173:16, 178:12, 180:25 Expecting - 60:16 Expenditure - 227:24 Expenditures - 89:19, 94:1 Expense - 133:12 Expensive - 116:12, 161:25 Experience - 5:2, 51:3, 202:17, 202:18, 234:5, 257:3, 257:10, 258:15, 259:14, 261:7 Experienced - 257:12 Experiences - 40:7 Expert - 74:14 Expertise - 104:13, 256:23, 260:9, 261:16 Experts - 98:13, 185:2 Expired - 119:20</p>	<p>Expiring - 120:6 Explain - 265:6 Explicitly - 10:23, 99:16 Exploit's - 91:3, 91:5, 91:20 Explore - 187:3 Export - 17:18, 104:12, 135:11, 156:22, 186:4, 193:24, 194:2, 195:3, 208:13, 209:2, 209:10, 211:19 Exported - 143:20 Exports - 189:3 Exposure - 162:13, 164:7 Expressed - 38:24, 267:1 Expropriation - 91:22, 91:24, 92:1, 92:15 Extending - 6:8, 6:11 Extensive - 207:2, 231:7 Extent - 6:12, 16:11, 16:12, 69:25, 126:6, 160:12, 177:7, 187:10, 213:8, 217:16, 220:24 External - 7:22, 8:16, 8:25, 21:7, 138:18, 145:23, 222:10, 256:22, 260:9, 261:16, 261:20 Extra - 106:6, 184:18, 193:25 Eyes - 261:1</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> <p>F</p> </div> <p>Face - 106:8, 115:2 Facilitate - 71:16, 250:14 Facilities - 21:25, 62:4, 98:17, 151:24 Facility - 22:1, 44:22, 84:7, 85:1, 85:12, 85:21, 145:17, 159:9, 159:10, 159:12, 210:22, 210:23, 211:24, 212:4 Factored - 199:9,</p>	<p>199:11 Failed - 97:21 Fair - 5:24, 6:9, 11:22, 12:25, 13:11, 14:25, 20:25, 23:6, 31:12, 31:14, 33:15, 37:6, 39:23, 42:6, 48:14, 56:13, 60:8, 60:25, 65:17, 75:20, 82:5, 89:24, 107:2, 182:16, 190:20, 217:12, 245:12, 248:23 Fairly - 59:9, 63:5, 73:3, 74:13, 74:22, 74:25, 112:16, 160:16, 187:6, 233:19, 267:5 Fall - 45:5, 55:8, 96:5 Falls' - 61:3, 144:6, 264:13 Familiarity - 233:23 Family - 240:4 Famous - 77:25 Fancy - 106:24 Far - 2:25, 98:17, 120:16, 135:16, 149:24, 150:23, 161:3, 206:10, 257:10 Farmed - 216:11 Fashion - 10:4, 12:13, 16:24, 212:11 Fast - 17:5 Fault - 90:9, 197:12, 197:14 Federal - 47:8, 69:15, 70:25, 90:23, 98:3 Fee - 3:13, 108:25, 115:9, 117:9, 133:18, 174:10 Feedback - 257:9, 260:20 Feeds - 170:3 Feel - 64:23, 180:19 Feeling - 32:15 Fees - 117:19, 117:21, 117:23, 117:25, 169:5, 172:23 Felt - 53:23, 205:15, 233:20,</p>
---	--	---	---	--

<p>258:6, 261:1, 261:3, 261:13 Fence - 179:8 Fermont - 169:20, 170:5, 170:7 Fifth - 193:7 Fifty - 117:23 Figure - 2:8, 15:9, 35:7, 37:15, 38:14, 51:20, 52:2, 53:21, 53:25, 55:3, 62:9, 62:11, 78:1, 138:25 Figured - 36:3, 57:17 Figures - 37:11, 38:11 Filed - 6:7 Files - 181:8 Filing - 206:20, 224:15 Filings - 178:1 Fill - 123:23, 160:24 Filling - 140:9, 213:5 Final - 55:7, 95:24, 131:17 Finalizing - 131:17 Finance - 36:17, 47:2, 65:10, 90:19, 92:18, 144:22, 182:18, 232:20 Financial - 34:25, 80:4, 120:15, 163:5, 165:9, 165:12, 180:21, 232:2, 233:15, 234:21, 265:19 Financially - 160:22 Find - 38:22, 39:8, 39:9, 53:11, 94:4, 136:17, 227:15 Finding - 26:23, 50:4 Findings - 263:5 Fire - 66:3 Fired - 100:24, 211:1 Firm - 14:2, 15:21, 15:22, 16:19, 16:21, 18:1, 108:17, 108:22, 110:8, 110:10, 111:2, 114:2, 149:15, 160:21, 160:22, 167:7,</p>	<p>167:13 Firming - 102:22 First - 22:13, 24:1, 33:13, 76:2, 76:13, 76:20, 144:4, 144:11, 170:13, 177:18, 203:9, 212:21, 225:17, 237:5, 254:20, 267:15 FITZGERALD - 58:1, 58:14, 58:19, 59:1, 59:11, 59:21, 60:7, 60:24, 61:9, 61:16, 61:24, 62:5, 62:18, 64:8, 64:12, 64:18, 64:25, 65:11, 65:16, 65:21, 66:2, 66:6, 66:23, 67:2, 68:5, 68:23, 69:3, 70:24, 71:8, 71:13, 71:19, 73:20, 75:19, 76:10, 76:25, 77:8, 77:21, 79:7, 79:13, 79:18, 80:6, 80:19, 80:25, 166:11 Five - 25:11, 25:12, 29:16, 62:24, 69:2, 72:1, 72:22, 72:24, 75:2, 75:3, 125:25, 152:4, 197:14, 211:11 Fix - 136:17, 197:23, 198:7 Fixed - 3:13, 3:14, 119:16, 119:19 Flagged - 219:19 Flagging - 220:24 Flat - 63:1, 63:5, 63:10, 63:11, 64:1 Flavour - 19:8 Fleeting - 30:17 Flexible - 30:24, 39:6 Flow - 104:22, 160:22, 210:8, 219:20, 220:15, 220:16, 224:23, 248:4, 252:24, 253:1, 253:3 Flowed - 221:3 Flowing - 209:17, 253:14 Flows - 248:24, 249:1, 250:9, 252:6, 253:7, 253:9</p>	<p>Focus - 23:5, 42:5, 70:25, 71:3, 96:22, 178:19, 179:21, 180:22, 184:18, 217:4, 258:7 Focused - 27:20, 28:5, 30:3, 30:16, 30:18, 42:7, 42:9, 51:5, 63:24, 69:16, 241:22 Fold - 220:7 Folded - 215:11, 218:17 Folks - 1:13, 25:4, 40:14, 132:25, 133:1, 144:22, 165:12, 179:17, 182:18, 215:21, 230:23 Follow - 177:3, 186:23 Followed - 176:22 Following - 19:18, 20:3, 20:17, 145:16 Forecast - 14:24, 33:13, 35:5, 58:9, 58:13, 58:18, 59:6, 65:4, 72:20, 72:23, 145:15, 164:3 Forecasted - 15:6, 33:25 Forecasting - 14:15, 58:8, 185:21 Foreign - 163:25, 164:8, 164:9 Foremost - 22:13, 23:3 Forensic - 180:8 Foresee - 66:19 Foreseeable - 48:18, 98:15, 104:10 Forever - 101:1 Forget - 101:18, 239:9 Forgetting - 232:18 Forgiveness - 214:17 Forgot - 172:15 Forgotten - 164:25 Form - 99:10 Formal - 112:2, 222:15 Former - 258:16 Formula - 105:10 Forth - 41:3, 41:12, 63:8, 258:16</p>	<p>Forthrightness - 176:5 Fortis - 92:1, 92:4, 92:12 Forum - 7:4 Forward - 5:1, 12:20, 14:17, 21:5, 30:21, 35:7, 42:6, 46:17, 69:24, 96:18, 98:3, 121:17, 127:11, 134:2, 164:24, 181:25, 207:15, 219:23, 227:8, 237:19 Found - 71:24 Four - 55:9, 56:5, 56:18, 63:17, 88:1, 88:7, 88:9, 223:9, 242:13 Fourteen - 141:17 Framework - 9:21, 55:4, 152:24, 180:14, 180:16 Free - 135:6 Front - 23:3 FTE - 41:22, 41:23, 57:15, 63:11, 269:21 Ftes - 28:19, 33:1, 33:12, 35:10, 37:12, 57:12, 62:12, 267:15, 267:17 FTE's - 4:15, 4:17, 6:25 Fuel - 142:11, 148:9, 148:13, 152:18, 153:6, 153:21, 165:19, 165:21, 166:3 Fulfilling - 20:22 Fulfills - 20:23 Full - 108:24, 108:25, 141:1, 141:3, 145:16, 154:13, 179:20, 226:5, 262:5 Fully - 27:6, 48:20, 56:5, 56:7, 201:18, 229:14, 240:20, 256:3 Function - 180:10, 231:3, 251:20 Functionally - 240:20 Functioning - 237:</p>	<p>11 Functions - 200:20, 200:22, 220:5 Fund - 83:4 Fundamental - 200:1, 200:8, 200:13 Funded - 48:20 Funding - 80:15, 89:8 Funds - 75:25, 76:20, 94:20 Further - 24:8, 57:22, 58:23, 72:17, 97:4, 117:18, 117:21, 172:1, 187:3, 189:8, 228:22, 253:22, 269:14 Future - 16:11, 23:19, 42:8, 43:14, 48:18, 75:16, 98:15, 98:18, 104:10, 104:11, 137:6, 137:22, 143:24, 145:20, 175:25, 176:1, 181:14, 189:16, 192:13, 193:16, 205:24, 218:12, 220:9, 241:23, 242:2, 250:13, 250:16, 258:19, 263:11</p> <div style="border: 1px solid black; text-align: center; padding: 2px;">G</div> <p>Gain - 50:17, 56:5, 60:1, 60:2, 60:5 Gains - 234:4 Game - 98:8 Gas - 33:8, 69:19, 71:6, 80:11, 82:5, 98:2, 98:14, 99:8, 99:10, 100:21, 100:22, 102:16, 124:1, 127:10, 137:5, 137:23, 138:7, 138:24, 139:2, 210:24, 211:2 Gates - 252:2 Gathered - 95:5 Gating - 51:8, 51:9 Gave - 22:24, 23:1, 29:11, 77:12, 120:13, 121:15, 137:10, 269:19 GE - 32:14, 195:21,</p>
--	--	--	---	--

<p>196:3, 196:7, 197:8 Gears - 96:10, 96:22 General - 58:8, 60:25, 65:1, 66:14, 125:3, 266:19, 269:20 Generalist - 25:24 Generally - 16:19, 74:17, 76:21, 115:18, 141:8, 146:17, 155:7, 159:14, 161:17, 161:25, 214:7 Generate - 80:17, 190:2, 193:25, 250:22 Generating - 217:4 Generation - 20:10, 167:16, 189:8, 189:17, 192:17, 192:18, 210:22, 210:23, 220:12, 231:21, 240:21, 249:9, 258:7 Gentleman - 222:3, 222:13, 241:9, 265:23 Gets - 82:20, 144:8, 146:10, 152:8, 156:16, 160:23, 197:21, 215:19, 216:17, 216:18, 234:8, 239:13 Gigawatt - 150:2, 150:5, 150:7, 192:1 Gilbert - 216:5, 216:25, 222:11 Give - 1:21, 15:10, 25:9, 53:24, 119:12, 149:11, 164:23, 203:3, 260:20, 267:16, 269:20 Given - 25:14, 35:7, 55:8, 74:16, 74:24, 85:23, 94:3, 119:8, 136:17, 140:2, 147:18, 154:19, 159:16, 177:4, 181:13, 181:16, 182:9, 185:3, 185:9, 204:19, 204:23, 206:15 Gives - 70:5, 126:9, 149:3, 166:4</p>	<p>Global - 66:15 Goal - 38:24, 42:22, 100:9, 238:21 Gone - 25:11, 97:19, 99:14, 103:18 Good - 1:3, 1:8, 1:10, 1:12, 31:17, 38:19, 39:5, 39:6, 58:6, 64:23, 70:4, 77:12, 97:11, 103:10, 136:19, 160:2, 176:12, 176:24, 177:2, 179:3, 184:13, 195:18, 227:20, 245:19, 254:8, 254:17 Got - 29:9, 38:13, 97:15, 98:1, 110:9, 127:23, 184:12, 190:13, 201:8, 209:18, 209:20, 211:18, 220:23 Govern - 134:3 Governed - 22:17, 214:10 Government - 63:2, 3, 75:25, 78:20, 80:10, 80:13, 80:14, 90:22, 90:23, 92:14, 126:16, 183:22, 185:9 Governments - 98:3, 98:4, 126:5, 139:11 GRA - 55:6, 55:10, 55:12, 56:9, 75:6, 78:24, 179:15, 181:5 Granite - 124:16 Grant - 46:2 Graphic - 78:4, 79:8 Greater - 3:18, 70:5, 116:6, 140:15, 217:16 Greatest - 120:9, 120:13, 121:16, 150:19, 151:14 Green - 124:12, 124:14, 125:1, 126:10, 126:21, 127:1, 127:17, 127:18, 128:11,</p>	<p>128:17, 129:1, 129:2, 129:8, 129:13 GREENE - 18:8, 254:1, 254:4, 254:10, 254:14, 254:19, 255:11, 255:20, 256:8, 256:13, 256:20, 257:15, 259:22, 260:3, 261:14, 263:13, 263:18, 263:23, 264:9, 265:5, 265:14, 266:4, 266:12, 266:24, 267:12, 269:6, 269:25, 270:6 Greenhouse - 69:1, 9, 71:6, 98:2, 100:22, 124:1, 127:10, 137:4, 138:6, 138:24, 139:2 Greg - 69:6, 222:9 Grew - 233:21, 233:22 Ground - 188:3, 188:5 Groundwork - 29:2, 2 Group - 19:17, 22:14, 22:15, 36:6, 36:17, 41:19, 44:16, 45:13, 45:14, 176:13, 184:8, 215:18, 216:12, 222:3, 222:8, 232:6, 246:24, 258:23 Groups - 63:10 Grow - 30:22, 52:23, 178:25, 179:1, 222:2, 267:18 Growing - 41:11, 260:15, 266:3 Growth - 5:7, 5:11, 59:3, 63:6, 64:2, 64:4, 95:18, 96:8, 96:24, 97:5, 166:14, 167:1, 167:23, 267:15 Guarantee - 47:9, 90:24, 157:19, 159:7, 165:2, 168:16</p>	<p>Guarantor - 159:3 Guess - 1:3, 5:20, 5:22, 6:6, 7:18, 8:12, 9:3, 13:10, 16:10, 17:16, 19:6, 23:21, 26:9, 26:12, 31:6, 31:9, 32:19, 33:13, 33:14, 42:4, 43:8, 43:18, 47:20, 49:18, 50:9, 60:19, 61:1, 70:25, 107:1, 107:14, 115:13, 119:14, 125:5, 134:21, 144:22, 180:4, 207:2, 219:9, 225:7, 231:1, 238:12 Guessing - 9:12, 9:20, 10:8 Guidance - 227:25 Guiding - 18:17 Gull - 70:14, 70:17, 95:7, 96:14, 96:17, 96:25, 97:12, 97:13, 97:17, 97:20, 98:8, 99:25, 100:5, 100:6, 100:9, 100:15, 102:14, 103:6, 103:15, 103:18, 104:1, 215:7, 215:15, 215:18, 216:10, 217:15, 259:8 Guys - 31:11 GWAC - 83:23, 83:25, 84:2</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> H </div> <p>Half - 37:4, 37:8, 60:16, 72:1, 126:2, 145:24, 146:1, 168:21 Hammer - 247:1 Hampshire - 131:5, 131:7 Hand - 141:10 Handle - 250:12 Happening - 16:2, 69:20, 75:11, 75:14, 224:4, 241:18 Happy - 24:1 Harbour - 130:22, 132:2 Hard - 29:11, 29:25, 41:5, 62:24 Hardwired - 193:4</p>	<p>Hasn't - 102:25, 119:2, 131:12, 170:10 Hat - 191:23 Haven't - 13:21, 133:7, 164:19, 223:6, 228:19, 233:4 Hazard - 62:15 Head - 52:7, 61:15, 62:15, 87:2, 89:9, 191:25 Headed - 96:15 Heard - 99:21, 127:7, 244:13 Hearing - 18:11, 58:22, 175:25, 178:10, 178:13, 178:16, 195:15 Heat - 82:1 Heavily - 84:17 Heavy - 74:22, 74:25 Hedge - 130:12, 162:21, 165:13 Hedged - 163:11, 164:19 Hedges - 163:21, 163:22, 164:1 Hedging - 162:16, 162:19, 162:22, 163:15, 164:13, 165:2, 165:7 Held - 97:14, 178:3, 197:20, 203:16 He'll - 222:5 Help - 34:21, 58:24, 69:19, 182:23, 183:6, 183:7, 183:17, 268:13 Helped - 255:15 Helpful - 13:6, 22:25, 23:2, 144:12 Helping - 179:12, 260:7, 267:24, 268:17 Helps - 183:19 Henderson - 237:1 Here's - 88:14 He's - 195:16, 231:6, 231:9, 231:18, 233:21, 233:24, 239:18, 241:12, 241:13, 241:19, 257:12</p>
---	---	---	---	---

<p>High - 80:24, 137:20, 140:19, 140:20, 175:11, 195:23, 196:13, 203:13, 207:19, 267:21 Higher - 50:15, 67:21, 221:15 Highest - 208:11, 208:18, 208:22 Highlight - 207:8 Highly - 153:2 Hire - 45:19 Hired - 269:11, 269:13 Hiring - 135:23 Historically - 147:12, 155:15, 155:17 History - 32:4, 184:12 Hitting - 33:25 Hodgepodge - 223:3 Hold - 94:8 Holders - 73:12 Holistically - 47:13 Holyhood - 35:12, 35:13, 35:19, 36:21, 38:10, 38:13, 59:25, 147:24, 148:9, 148:13, 149:24, 153:7, 153:12, 153:21, 154:5, 154:21, 155:12, 166:3, 171:12, 171:13, 172:4, 172:20, 188:8 Honest - 53:4, 58:18 Hope - 222:7 Hoped - 74:7, 177:12 Hopeful - 59:23 Hopefully - 105:6, 195:17, 222:6 Hoping - 177:11 Horizon - 206:4 Horn - 257:7 Hour - 3:7, 3:8, 78:6, 78:13, 79:15, 83:18, 109:6, 109:7, 112:9, 112:13, 117:1, 117:4, 117:24, 125:24, 125:25, 126:2, 137:14,</p>	<p>137:16, 137:20, 140:22, 151:12, 154:19, 168:13, 196:16 Hours - 113:11, 116:7, 148:5, 149:18, 149:19, 150:2, 150:5, 150:7, 192:1, 251:10 HR - 36:18, 265:19 Huge - 101:21, 183:21 Hull - 262:18 Human - 25:11 Hundred - 61:12, 190:16, 256:6 Hundreds - 157:4, 157:6 Hutchens - 230:24, 232:17, 233:14, 234:10 Hydraulic - 170:23 Hydro's - 22:14, 58:13, 76:7, 134:1, 142:10, 142:12, 143:4, 143:8, 143:10, 147:20, 149:12, 175:5, 175:14, 177:13, 180:17, 192:7, 192:20, 198:3, 204:12, 204:14, 206:12, 207:16, 208:11, 208:18, 219:14, 219:20, 220:4, 231:9, 232:20, 234:22, 244:1, 244:16, 253:1, 253:14 Hypothetical - 195:12, 211:17 Hypothetically - 192:12 <div style="border: 1px solid black; width: 100px; height: 15px; margin: 10px auto; text-align: center;">I</div> IBA - 61:20 I'd - 58:7, 62:17, 77:24, 173:5, 173:9, 176:13, 189:7, 192:11, 269:14 Ideally - 54:6 Identified - 20:10, 29:3, 37:13, 38:3, 38:5, 38:20, 95:16, 99:16, 203:10,</p>	<p>220:10, 258:22 Identifies - 154:23, 156:6, 194:23 I'll - 30:1, 52:19, 53:4, 154:4, 187:21, 191:2, 196:10, 197:23, 207:12, 227:14, 227:25, 232:17, 254:7, 254:17, 254:21, 264:10, 264:13, 267:7 Illustrates - 78:2 Imagine - 43:11, 92:14, 256:12, 263:22 Impact - 17:16, 20:2, 20:3, 20:4, 20:6, 78:25, 79:5, 94:14, 94:16, 94:20, 133:10, 168:10, 192:9, 204:13, 204:24, 210:8 Impacted - 76:23 Impair - 206:6 Impaired - 202:15, 202:23, 203:1 Impairment - 206:16 Impediment - 204:19, 205:10 Impediments - 47:6, 206:3 Implement - 74:21, 74:23, 257:21 Implementing - 77:2, 268:20 Implications - 77:19, 197:9, 234:22 Implies - 100:4 Import - 117:25, 154:19, 156:7 Importance - 185:7 Important - 34:6, 207:7, 232:1, 234:17 Imported - 148:4 Imports - 162:1 Impressive - 261:10 Improve - 184:19, 196:23 Improvement - 177:12, 177:14, 177:15, 178:6, 191:6, 225:12,</p>	<p>225:17, 226:15 Inappropriate - 180:24 Incented - 74:20 Incentives - 3:15 Incidental - 71:3, 117:23, 118:1, 125:13, 125:16, 157:4 Income - 83:5, 163:24, 165:15, 168:15 Increase - 33:12, 34:16, 59:6, 70:7, 93:7, 161:22, 189:15, 189:20, 191:13, 195:1, 208:6, 269:10 Increases - 63:16 Increasing - 78:16 Incremental - 14:9, 116:19, 172:23, 195:4 Incur - 120:17, 239:3 Incurred - 159:25, 160:3, 160:4, 160:6, 162:4, 164:12, 180:5, 220:14, 252:15, 264:5 Incurs - 252:14 Indeed - 129:24, 184:19, 229:13, 229:17, 230:1 Indicated - 9:6, 12:18, 13:8, 23:4, 26:14, 39:20, 61:2, 62:9, 134:1, 236:15 Indicating - 218:16 Indication - 229:9 Indicative - 64:4 Industrial - 176:13, 183:8 Industry - 183:8, 257:3, 260:16 Infinitum - 135:7 Inflation - 56:23 Informed - 261:9 Infrastructure - 250:10 Inhibitions - 155:21 Initial - 55:14, 75:10, 261:24, 263:2, 263:5 Initially - 74:23</p>	<p>Initials - 236:23 Initiated - 96:5, 96:23, 120:7 Initiative - 66:17, 67:6, 69:13, 70:9, 234:17 Initiatives - 54:12, 69:11, 98:1, 98:2, 126:4 Inline - 226:11 Input - 60:19, 93:22, 218:25 Inputs - 178:1 Inquiries - 182:4 Inquiry - 178:23, 180:7 Inside - 25:6, 30:22, 31:2, 39:9, 262:7, 268:8 Insight - 61:6, 88:13, 177:8, 198:12, 204:10 Insightful - 190:14 Insisted - 131:1 Installed - 17:22 Instruction - 20:23, 22:5, 22:8, 147:21, 148:19 Instrument - 165:13, 165:14 Insurance - 165:16 Integrate - 32:9 Integrated - 41:7, 250:18 Integration - 38:4, 63:4, 241:14, 245:4 Intended - 84:5, 88:6, 229:7 Intends - 232:5 Intent - 188:16, 193:21, 251:9, 265:3 Intention - 89:10, 134:2, 177:21, 229:3, 264:20 Interact - 186:6, 202:8 Intercompany - 46:1 Interconnect - 76:16, 143:23 Interest - 59:18, 67:17, 92:4, 93:13, 94:2, 105:15, 133:23, 177:19, 244:7, 245:10</p>
---	--	---	--	---

<p>Interesting - 261:2 3 Interests - 240:8 Interface - 114:23, 118:9, 118:10 Interfacing - 202:2 Interim - 174:8, 175:17 Interject - 143:3 Internal - 4:5, 4:13, 4:25, 5:7, 5:11, 95:18, 96:8, 96:24, 97:5, 226:24, 228:4, 262:23 Internally - 1:25, 4:7, 73:11, 73:17, 180:23 Interrupt - 209:18, 211:18, 214:8 Interrupted - 160:1 3, 208:14, 209:3, 209:11, 212:24, 214:20 Interruption - 161: 18, 161:21, 211:23, 212:15, 213:3, 213:9, 213:11, 214:2 Interruptions - 210 :8 Interveners - 177:2 5, 178:8 Intervenors - 60:15 , 60:20, 228:2 Intervenors' - 93:2 2 Intervenor's - 93:1 8 Intuitive - 101:9 Invaluable - 104:18 Inventory - 227:17 Invest - 73:18, 168:11, 192:5 Investment - 72:12 , 72:25, 73:7, 73:9, 189:21, 190:17, 196:20, 196:21, 250:11, 250:14 Investments - 91:1 6, 92:9, 191:17, 192:16, 193:17, 224:22, 228:5 Invited - 121:10 Involve - 89:6, 89:7 Involvement - 4:22 , 8:24, 88:11 Ish - 36:6, 38:23</p>	<p>Isn't - 79:12, 82:12, 189:3, 233:6, 239:3, 253:14 ISO - 68:9 Isolated - 171:3, 171:10 Issue - 31:11, 165:3, 179:18, 182:8, 182:13, 183:22, 193:12, 195:7, 198:24, 199:7, 200:13 Issues - 97:9, 172:4, 183:3, 190:10, 227:6, 242:20 Item - 165:22, 217:25, 218:1, 218:5, 218:18 Items - 174:3, 236:8 It'll - 190:11 I've - 74:16, 74:24, 137:19, 137:20, 228:10, 244:13, 257:7, 260:17</p> <p style="text-align: center;">J</p> <p>Jeff - 125:15 Jennifer - 12:17, 134:10, 154:4, 179:13, 227:4, 228:19, 228:20 Jim - 65:24, 69:10, 145:14, 187:1, 228:18, 229:3, 229:4, 233:21, 241:11, 241:12 Jim's - 258:18 Job - 27:8, 116:16, 176:24, 177:2, 180:1 Jobs - 44:6, 51:10 JOC - 86:13, 86:19 John - 121:25 JOHNES - 111:20 John's - 124:25 Joined - 100:8 Joint - 86:12, 86:14, 86:18, 87:23, 225:3, 230:9, 238:18, 240:2 Josh - 241:10, 241:11 Judgment - 235:1, 236:9</p>	<p>July - 101:18 Jump - 30:9 Jumping - 62:6 Juno's - 124:24, 125:1, 125:10, 125:12, 128:10, 128:14 Jurisdiction - 67:1 6, 68:12, 115:19, 116:5, 126:13, 152:10, 214:12 Jurisdictions - 106 :12, 116:3, 126:14, 152:15, 155:10 Justification - 105: 20, 226:24, 228:4 Justifications - 22 6:9 Justified - 133:13, 226:16, 227:11 Justify - 116:23, 186:21 Justifying - 227:23</p> <p style="text-align: center;">K</p> <p>Keeps - 71:25 Kick - 109:24 Kicked - 239:13, 239:16 Kicking - 125:17, 229:2 Kilowatt - 78:6, 78:13, 79:15, 83:18, 125:25, 137:11, 151:18, 168:13, 251:10 Kinds - 167:18, 182:20, 229:22, 232:3 Knife - 229:6 Knowledge - 172:5 Knows - 230:19, 231:8 KV - 170:2</p> <p style="text-align: center;">L</p> <p>Label - 259:1 Labelled - 258:24 Labour - 57:3 Laid - 29:22 Lake - 92:7 Land - 28:23, 31:5, 94:10, 107:23 Landed - 255:7 Language - 165:6, 212:5</p>	<p>L'anse - 171:5 Large - 24:18, 28:2, 40:25, 72:16, 73:9, 103:1, 105:16 Largely - 11:12, 104:10, 130:10, 141:20 Larger - 181:1, 215:19 Later - 31:22, 59:24, 186:17 Lateral - 149:13 Latest - 222:7 Lawyers - 204:1, 204:2 Lead - 199:12 Leading - 30:13, 215:23 Leaks - 198:17 Learn - 64:6 Learning - 34:8, 237:4 Leave - 189:1, 222:13, 254:7, 254:17 Leaves - 16:10, 170:3 Leblanc - 233:8, 233:17, 234:4, 234:8, 241:20, 242:2 Led - 24:2, 268:25 Left - 65:9, 140:4, 186:18, 234:25 Legislation - 46:7 Legislative - 46:19, 47:7 Legs - 44:8, 215:20, 216:17 Lengthy - 178:22 Let's - 32:19, 95:13, 106:4, 145:16, 189:1, 192:1, 220:3 Letter - 157:17, 158:14, 159:3, 227:4, 228:16 Letters - 158:22, 159:23 Level - 7:15, 7:20, 8:23, 8:24, 10:20, 26:17, 64:1, 78:17, 78:21, 162:23, 164:6, 186:11, 188:1, 195:23, 207:19, 209:21, 209:22, 221:15,</p>	<p>225:13, 226:24, 236:20, 237:18, 241:15, 267:21 Levels - 51:6, 62:13 Lewisporte - 59:19 Liberty - 26:9, 28:5, 28:16, 31:16, 37:13, 40:23, 53:22, 54:3, 54:4, 71:22, 76:1, 77:22, 78:10, 172:9, 184:10, 184:15 Liberty's - 26:8, 31:6 License - 157:8, 204:20 Licenses - 45:18, 52:20 Light - 21:4, 207:9 Likeminded - 40:1 6 LIL - 17:23, 18:2, 34:11, 44:4, 45:5, 46:25, 51:1, 59:22, 88:20, 136:18, 141:23, 195:1, 215:17, 223:19, 225:23, 244:5 Limit - 6:13, 164:7 Limitation - 205:15 Limited - 31:17, 170:1 Limits - 89:15 Line - 15:16, 30:3, 58:23, 74:7, 130:20, 131:6, 170:2, 176:23, 187:20, 193:16, 199:12, 200:1, 217:25, 218:1, 218:5, 218:11, 218:18, 224:16, 238:7 Lines - 23:14, 25:7, 25:17, 27:19, 50:10, 68:4, 68:11, 97:18, 200:3, 245:9 Link - 88:21, 106:10, 106:14, 106:16, 107:18, 107:19, 107:21, 108:14, 122:17, 124:19, 130:15, 131:6, 136:15, 144:17, 146:16, 148:1, 148:12,</p>
---	--	---	--	---

<p>149:25, 150:1, 150:3, 150:6, 150:17, 153:20, 154:7, 154:10, 154:13, 154:24, 155:20, 156:7, 188:9, 199:8, 200:2, 244:5 Linkage - 199:10 Lisa - 232:5, 232:12 Lists - 220:5 Literally - 152:4 Litigation - 247:12 Load - 21:6, 58:8, 58:9, 58:12, 58:13, 58:18, 59:2, 59:5, 59:6, 140:3, 140:8, 140:19, 166:12, 167:6, 185:21, 190:24, 211:14 Loan - 47:9, 90:24, 165:2 Local - 161:23, 161:24 Located - 121:25 Locked - 193:1 Logo - 124:18 Long - 1:13, 5:5, 12:20, 14:2, 14:17, 17:23, 18:2, 20:17, 51:17, 67:5, 67:6, 70:19, 91:15, 101:23, 102:6, 103:18, 121:18, 125:8, 130:11, 134:2, 147:22, 173:24, 182:12, 205:18, 241:24, 242:21 Longer - 32:1 Look - 9:18, 19:5, 19:12, 20:7, 20:11, 21:11, 32:19, 33:11, 44:21, 51:15, 55:6, 59:14, 67:18, 73:18, 76:18, 76:21, 101:4, 101:6, 101:10, 125:22, 129:12, 134:10, 139:7, 183:10, 183:15, 186:13, 215:22, 219:1, 230:1, 240:8, 242:20, 260:8 Looked - 13:21,</p>	<p>26:15, 29:10, 81:17, 100:6, 100:8, 101:14, 121:1, 121:7, 148:2, 182:17, 259:9 Looking - 10:9, 12:12, 13:18, 23:20, 30:21, 31:24, 32:24, 37:5, 40:24, 43:13, 43:14, 44:21, 46:18, 48:19, 50:11, 50:15, 50:17, 52:11, 52:16, 56:12, 68:19, 69:23, 72:5, 72:10, 78:12, 100:5, 100:19, 102:2, 120:23, 125:14, 126:5, 126:24, 136:4, 145:4, 149:4, 150:13, 191:11, 216:6, 217:21, 217:22, 218:24, 234:19, 243:6, 258:2, 263:11, 265:24 Looksee - 106:21 Looming - 72:4 Lose - 165:14, 213:5 Loss - 212:22, 213:8, 213:10, 213:11 Losses - 159:25, 160:3, 160:4, 160:6, 162:4, 162:8, 164:12 Lost - 165:1, 203:20 Lot - 29:22, 39:21, 40:5, 40:13, 41:2, 41:8, 41:11, 41:14, 42:1, 42:21, 42:23, 46:3, 52:18, 54:17, 63:18, 67:15, 68:10, 68:13, 68:14, 71:11, 75:11, 75:14, 77:17, 83:4, 140:11, 141:4, 151:23, 165:5, 179:1, 179:25, 184:13, 186:19, 190:21, 202:1, 219:6, 225:20, 225:24, 226:12,</p>	<p>228:9, 229:18, 229:22, 229:25, 233:22, 259:4 Lots - 27:17, 178:25 Loup - 171:5 Low - 126:1, 137:19, 140:8, 140:21, 147:11, 151:20, 151:22, 167:1, 175:10, 203:12 Lower - 140:16, 223:7 Lowering - 73:13 Lowest - 95:3, 95:4, 136:4, 264:4 LT - 223:19 LTA - 44:4, 45:6, 88:21, 199:9, 225:23, 244:6 <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;">M</div> Macisaac - 258:9 Madam - 1:12, 86:16, 149:1, 176:11, 253:23 Madame - 58:2 Magnitude - 34:23, 167:6 Main - 163:14, 163:15 Maine - 130:18, 131:8, 131:18 Maintain - 4:6, 4:16, 20:12, 195:7, 264:12 Maintained - 175:1 Maintaining - 4:14, 41:8, 50:25, 206:13, 208:9 Maintenance - 88:20, 89:5, 227:15, 227:16, 231:20, 243:9, 243:24, 244:24, 245:1, 246:2, 264:17 Major - 95:16, 97:1 Majority - 64:21, 242:18, 267:22, 268:6 Make - 4:8, 5:4, 6:2, 6:18, 25:20, 30:16, 30:23, 40:15, 67:21, 73:8, 93:23, 116:18, 116:22, 117:11,</p>	<p>134:10, 139:1, 142:19, 142:25, 152:20, 154:4, 161:16, 163:19, 165:14, 207:15, 211:23, 229:22, 256:3, 259:13, 259:17 Making - 46:23, 55:11, 55:15, 63:24, 70:13, 103:21, 104:15, 107:5, 126:24, 127:3, 137:23, 139:15, 146:15, 150:17, 184:21, 187:5, 199:25, 200:1, 206:14, 229:19, 241:7, 242:9, 245:11, 259:18 Manage - 4:7, 4:10, 5:4, 48:25, 63:13, 64:24, 268:16, 269:2 Managed - 20:8, 48:21, 91:12, 91:13, 150:4 Management - 5:1 6, 5:22, 9:9, 19:17, 29:10, 39:17, 63:16, 86:11, 86:17, 89:6, 147:4, 147:5, 147:7, 147:17, 148:3, 163:2, 163:16, 180:21, 230:6, 247:8, 247:19, 248:11, 248:13, 249:21, 249:22, 249:23, 250:8, 250:12, 250:14, 250:17, 251:21, 260:18 Manager - 241:13 Managing - 7:4, 8:19, 102:23, 252:5 Mandate - 74:19, 75:21, 179:22, 183:24, 185:1, 185:6, 185:8, 185:11, 187:3, 188:25, 208:19, 257:22 Mandates - 27:8 Manual - 5:18, 8:17, 9:19, 10:23, 10:25, 11:4, 11:9 Many - 1:14, 100:6,</p>	<p>104:8, 117:13, 148:11, 190:13, 204:1, 260:18 March - 149:15, 149:16, 149:22 Maritime - 69:17, 88:21, 106:10, 106:14, 106:16, 107:18, 107:21, 108:13, 116:22, 122:17, 124:19, 136:15, 146:16, 147:25, 148:12, 150:6, 150:17, 151:10, 153:19, 154:7, 154:10, 154:13, 154:24, 155:20, 156:6, 188:9, 199:8, 200:2, 244:5 Maritimes - 70:3, 155:23 Mark - 61:22 Marketed - 134:25 Marketer - 128:12 Marketers - 148:19 Marketing's - 142:6, 142:8, 175:7, 247:14, 249:4 Marketplace - 69:1 8, 103:25, 138:21, 151:1, 175:10 Marketplaces - 12 5:23 Markets - 14:1, 14:2, 14:4, 16:19, 70:5, 101:24, 103:7, 104:6, 108:2, 124:5, 124:8, 126:6, 126:10, 128:20, 129:23, 130:1, 130:9, 142:18, 145:23, 150:14, 150:15, 156:12, 157:9, 157:13, 160:11, 161:13, 163:25, 208:14, 209:3, 209:11 Markup - 172:18, 172:22, 173:3, 173:9 Markups - 175:20 Marshall - 27:15, 31:9, 61:2, 66:8, 73:23, 74:1, 99:21, 103:11, 105:8,</p>
---	---	--	--	--

<p>176:14, 177:11, 180:9, 185:5, 189:13, 190:15, 195:15, 255:1, 255:4, 262:2, 263:10 Marshall's - 24:3, 176:17, 193:4, 255:13, 256:5, 257:2, 257:10, 257:19, 260:5 Massachusetts - 9 9:14, 126:15, 126:17, 127:2, 127:5, 130:9, 132:10 Material - 20:19, 94:16 Materiality - 236:1 0 Materialize - 132:6, 172:11 Materially - 62:16 Matters - 86:15, 88:19, 157:20, 174:6 Maximize - 6:13, 185:13, 192:17, 251:8, 251:9 Maximizing - 189:2 , 189:8 Maximum - 162:13, 190:1 Meaney - 90:24, 237:1, 239:17, 239:23 Meaningful - 170:7 Means - 48:10, 100:3, 161:19, 187:4, 208:12, 232:4, 238:15 Measure - 7:22, 8:17, 30:1 Measures - 78:9 Mechanics - 90:20 Mechanism - 3:24, 135:9, 165:24, 239:7 Media - 59:14 Meet - 5:9, 5:10, 20:9, 128:24, 130:13, 214:18, 248:20, 249:17, 250:23, 251:11 Meeting - 21:15, 67:11, 67:13, 263:3 Meetings - 21:11,</p>	<p>147:7, 147:17 Megawatt - 3:7, 3:8, 13:9, 13:10, 109:6, 109:7, 110:21, 111:1, 117:1, 117:4, 117:24, 125:24, 126:1, 137:14, 137:16, 137:19, 140:10, 154:6, 170:5 Megawatts - 15:19, 15:20, 99:8, 102:18, 108:22, 110:9, 111:14, 113:7, 114:2, 114:7, 114:19, 121:21, 140:21, 148:5, 149:17, 149:18, 154:14, 154:18, 155:1, 155:2, 160:25, 190:7, 190:13, 190:16, 191:7, 191:24, 195:2, 199:2 Member - 90:4 Members - 90:2, 176:4, 230:11, 232:13, 236:14, 239:1, 260:18 Memory - 28:17, 29:2 Menihek - 48:19, 49:15, 171:8, 220:12, 221:1, 221:8, 221:18, 223:5 Merchant - 15:15 Merging - 260:14 Mesina - 110:15 Met - 104:10, 112:15, 228:20 Method - 12:7 Metre - 251:10 Microphone - 189: 25 Mike - 51:8, 66:1 Milieu - 75:23 Million - 11:15, 35:8, 48:16, 48:24, 50:12, 50:14, 51:21, 52:2, 52:5, 53:19, 54:5, 54:7, 55:9, 56:5, 56:9, 56:16, 56:18, 57:7, 57:8, 57:15, 61:12, 61:22, 72:24,</p>	<p>84:18, 85:3, 85:24, 108:24, 110:19, 112:25, 113:10, 113:12, 113:13, 116:8, 118:4, 141:12, 141:15, 141:18, 159:15, 159:18, 159:20, 159:22, 165:1, 176:21, 181:1 Millions - 30:15, 162:9, 162:11, 162:14 Minded - 246:15 Minds - 38:4, 184:14 Mine - 257:11 Mines - 59:8, 69:15, 167:9 Minimum - 183:6 Miniscule - 170:15 Minority - 105:16 Mistake - 101:21 Mitigate - 16:13, 138:8, 142:20 Mitigated - 78:3, 78:8 Mitigation - 13:19, 17:18, 23:5, 66:16, 70:23, 75:23, 76:1, 80:3, 143:12, 145:10, 171:12, 182:1, 182:8, 182:13, 182:15, 183:21 Mix - 124:2, 143:9, 183:1 Model - 5:7, 5:11, 12:5, 96:24, 227:22, 228:3, 256:5 Modelled - 172:12 Modelling - 172:8, 190:10 Modest - 168:22, 268:11 Momentum - 44:8 Monday - 9:12 Monetization - 186 :4 Monetize - 188:10 Money - 52:17, 55:16, 80:10, 83:14, 84:3, 84:25, 132:15, 137:23, 139:13, 139:15, 145:5, 158:2,</p>	<p>159:14, 161:16, 165:14, 171:6, 182:4, 182:6, 182:11 Monies - 138:20 Monitor - 268:17 Month - 13:10, 149:16, 149:22 Monthly - 3:14, 148:14, 166:6 Months - 15:20, 16:3, 32:15, 54:13, 114:3, 114:5, 114:6, 114:8, 140:8, 155:5, 155:13, 205:21, 211:13, 211:15, 217:14, 222:6 Morning - 1:3, 1:8, 1:10, 1:12, 9:12, 58:6, 115:23, 259:20, 269:8, 269:19, 270:2, 270:7 Move - 3:7, 13:4, 25:19, 53:15, 91:4, 91:10, 116:19, 136:12, 179:7, 184:25, 200:15, 207:21, 224:14, 230:4, 236:13, 237:15 Moved - 3:8, 217:9, 231:13, 241:11, 259:17, 265:24 Mover - 98:9 Moving - 26:11, 71:20, 116:23, 224:2, 224:8, 266:13 Much - 4:22, 34:19, 35:18, 57:23, 71:2, 79:1, 80:18, 84:23, 90:25, 136:23, 141:4, 153:8, 153:22, 159:14, 166:14, 176:3, 178:12, 178:24, 180:17, 182:21, 185:1, 212:20, 221:17, 221:18, 221:21, 231:8, 242:8, 244:19, 268:11 Multiple - 27:18 <table border="1" data-bbox="1040 1843 1273 1881"> <tr> <td style="text-align: center;">N</td> </tr> </table> Nail - 190:11</p>	N	<p>Nalcor's - 5:21, 6:7, 51:20, 66:18, 143:6, 143:11, 144:7, 146:8, 163:1, 185:1, 185:6, 188:25, 200:21, 206:20, 214:25, 222:20, 224:14 Names - 86:24, 87:1 Native - 21:6, 211:14 Natural - 31:1, 98:14, 102:16, 182:16, 211:2, 266:1 NB - 211:6 Near - 170:4, 181:14, 206:24 Nearing - 262:3 NEB - 156:21 Necessary - 83:6, 187:8, 187:12, 187:14, 187:24, 189:3, 193:18, 198:7, 237:20, 246:4, 261:8 Needed - 24:4, 44:23, 136:17, 148:17, 198:13, 198:25, 199:7, 199:8, 203:23, 261:1, 261:4 Needle - 98:9, 259:18 Negligible - 20:7 Negotiated - 16:1, 105:12, 108:12, 149:13, 152:23, 165:3, 178:9, 178:17, 192:4 Negotiation - 186: 20, 215:23 Negotiations - 67: 15, 100:11, 123:21 Neither - 74:15, 208:5 NEM - 16:23, 18:19, 19:9, 19:21, 19:22, 20:22, 21:3, 21:21, 21:25, 22:4, 138:20, 147:8, 150:4, 201:18, 203:14, 204:8, 204:18, 205:14, 209:24, 213:1,</p>
N					

<p>213:9, 213:11, 214:1, 214:3 NEM's - 5:24, 22:15, 206:16, 212:16 Net - 60:1, 60:2, 60:5, 65:4, 142:7, 175:19, 175:22 Network - 104:23 Nevertheless - 48:21 Newfoundland - 12:16, 12:18, 19:20, 22:17, 25:4, 30:6, 58:12, 69:22, 72:2, 76:4, 83:17, 86:25, 87:14, 102:15, 105:4, 116:20, 124:17, 126:25, 135:6, 140:5, 145:25, 146:3, 146:4, 146:6, 146:21, 146:24, 148:7, 154:22, 155:8, 156:5, 168:10, 174:11, 175:18, 185:20, 190:23, 192:7, 208:10, 208:17, 208:19, 208:21, 214:9, 215:8, 221:19, 244:23, 258:11, 265:1 News - 160:2, 195:18 Nice - 125:19 Night - 115:23 Nimble - 17:7, 202:14 Nimbleness - 202:24, 203:1, 206:6 Nineties - 67:11 NLSO - 233:9, 251:24, 252:14 Nobody - 98:22 Nodes - 118:12 Nominee - 241:1, 241:3 Non - 15:22, 16:21, 75:22, 98:7, 126:8 Nor - 245:7 Normal - 165:4, 180:15, 256:14 North - 14:11, 78:12, 124:20, 170:25 Nose - 152:21</p>	<p>Note - 7:18, 71:20, 229:3 Noted - 73:21 Notify - 157:12 Nuances - 199:22 Nuclear - 151:24 Numbers - 25:10, 28:16, 29:15, 31:8, 35:24, 36:21, 37:1, 145:24, 219:4, 268:7, 268:10, 268:21, 269:4, 269:18 Nursing - 83:9, 83:10</p> <div style="border: 1px solid black; text-align: center; width: 100px; margin: 10px auto;"> <p>O</p> </div> <p>O&M - 46:18, 49:25, 50:4, 50:13, 61:8, 61:21, 224:21, 243:8, 243:13, 245:24, 246:1 Objective - 84:7, 236:4 Objectives - 69:19, 130:13, 130:25, 264:2 Obligated - 138:4 Obligation - 112:14, 112:15, 192:22, 210:4, 249:15 Obligations - 106:19, 123:23, 210:3, 210:5, 249:13, 251:12 Observation - 71:23, 90:10 Obtain - 205:18 Occasion - 14:12 Occasionally - 160:6 Occasions - 151:7, 174:1 Occur - 19:9 Occurred - 23:22, 254:24 October - 176:18 Offer - 17:25, 66:15, 106:24, 130:19 Offered - 131:22, 153:9 Offering - 107:5 Official - 232:12 Offline - 59:25 Offset - 188:7</p>	<p>Offsetting - 29:24, 30:20 Offshore - 259:11 Often - 118:17, 170:10 Oil - 33:8, 65:1, 65:5, 65:20, 80:11, 82:6, 100:24, 171:12 Old - 143:19 Ones - 25:6, 37:12, 38:12, 181:10 One's - 240:2 Ongoing - 17:15, 51:14, 182:23, 224:20, 245:24, 247:12, 262:7, 263:2, 263:20 Ontario - 118:13, 118:18, 150:14, 151:2, 151:5, 151:22, 152:1 Open - 74:1, 105:10, 226:2, 248:2 Opened - 252:2 Opening - 167:9, 252:21 Openness - 74:3 Operate - 21:3, 21:25, 22:8, 24:12, 34:3, 34:9, 42:19, 48:18, 89:11, 155:12, 204:20, 214:12, 238:2, 262:4, 264:12, 266:21, 268:2 Operated - 264:20, 265:1 Operates - 21:3, 21:21, 22:1, 22:4, 238:5 Operating - 11:11, 34:12, 34:20, 40:14, 43:1, 52:17, 52:18, 53:19, 61:4, 62:4, 86:13, 86:14, 86:19, 87:23, 223:11, 224:11, 226:3, 238:19, 240:2, 258:15, 258:17 Operation - 9:15, 9:25, 25:6, 31:20, 88:20, 94:23, 173:11, 220:12, 221:23, 223:15,</p>	<p>249:17, 251:17, 262:6, 264:17, 268:1 Operational - 59:23, 233:13, 241:22 Operations - 28:7, 28:8, 33:15, 36:5, 41:25, 42:10, 43:13, 46:8, 62:25, 169:7, 175:2, 177:9, 214:11, 231:7, 231:9, 231:11, 231:12, 231:18, 233:10, 237:7, 237:15, 241:8, 258:23, 259:6, 268:25, 269:14 Operator - 22:18, 110:2, 154:23, 156:5, 160:20, 214:10, 214:15, 214:16, 214:19, 258:20 Operators - 19:23, 34:13, 98:6, 214:11, 265:2 OPG - 158:20 Opinion - 261:4 Opportunities - 191:1, 191:13, 203:11, 203:20, 222:10 Opposed - 25:25, 27:2, 29:17, 41:23, 105:22, 170:7, 178:10, 191:6, 193:23, 221:1, 240:21 Optimal - 29:14, 249:17, 255:6, 256:1 Optimistic - 68:24, 69:1 Optimization - 12:21, 23:13, 186:12, 250:19, 251:2, 251:3, 264:4 Optimize - 191:9, 252:1 Options - 95:3, 104:1, 189:19, 222:12 Order - 1:4, 20:15, 45:5, 48:20, 55:7, 55:15, 61:23, 76:2, 93:20, 106:9, 221:5, 221:10,</p>	<p>257:21 Ordered - 56:10 Orders - 44:10, 45:9, 45:22 Org - 31:19, 31:22 Organization - 24:10, 30:24, 39:9, 66:10, 66:14, 66:22, 67:10, 70:12, 201:8, 206:7, 208:2, 217:20, 220:22, 234:6, 241:15, 250:8, 255:15, 260:24, 267:7, 268:14, 268:23 Organizational - 40:22, 185:7 Organizations - 27:17, 27:18, 68:3, 92:9, 257:14, 262:15, 262:22 Organize - 259:10, 260:19 Origin - 53:21, 53:25 Original - 96:12 Originally - 96:3 Originate - 130:21 Originates - 110:13 Otherwise - 3:22, 94:2, 104:24, 211:4, 247:16 Ours - 82:2, 262:16, 262:22 Ourselves - 72:19, 94:4, 120:11, 120:12, 121:2, 136:18 Outage - 160:17, 178:23 Outcome - 17:20, 183:12 Outcomes - 21:21, 178:22 Outlook - 21:18 Output - 208:6, 208:8 Outsiders - 99:23 Outweighs - 257:11 Overlap - 37:23, 52:1, 57:9, 57:11, 58:5 Overlaps - 37:15 Overload - 199:24 Overly - 8:20, 8:23,</p>
--	--	---	---	--

<p>47:18 Overnight - 116:2 Overruns - 195:22 Oversaw - 25:19 Oversee - 4:8, 9:7, 88:19, 258:12 Overseen - 9:11, 45:24 Oversight - 5:19, 5:23, 6:2, 6:8, 6:11, 7:6, 7:16, 7:21, 8:10, 8:14, 8:15, 8:16, 8:24, 9:5, 9:14, 19:12, 21:13, 24:5, 41:10, 48:23, 86:12, 86:18, 90:12, 229:20 Oversights - 6:12 Overt - 11:1 Owing - 158:2 Own - 4:25, 67:17, 116:9, 132:24, 144:8, 160:9, 175:6, 184:16, 207:9, 246:5, 257:6 Owned - 122:3, 124:16, 174:19, 244:22, 245:7, 245:8 Owners - 15:23, 16:5 Ownership - 91:10, 122:2</p>	<p>1 Paraphrasing - 14:22, 185:13 Parent - 159:6 Parental - 159:6 Park - 15:9 Parse - 37:20 Partially - 233:1 Participate - 156:12, 156:14, 241:17 Participated - 130:8, 130:14 Participation - 93:19, 149:2, 157:16, 231:23 Particularly - 14:9, 189:22, 228:13 Parties - 67:25, 73:4, 73:17, 77:19, 178:8, 178:14, 245:14 Partner - 131:4, 131:20, 131:22, 132:11 Partnered - 130:16 Partnership - 66:13 Parts - 218:14 Party - 8:25, 121:4, 135:18, 226:13, 239:16, 261:3, 262:13, 263:12 Pass - 169:9, 175:20 Passage - 207:7, 207:12, 208:16 Past - 46:20, 69:12, 148:2, 177:6, 177:20, 178:7, 181:24, 259:14, 261:7 Path - 32:12, 32:19, 96:18, 112:6, 116:21, 116:22, 163:20 Paths - 117:14 Pattern - 141:4 Paul - 176:12 Pay - 4:4, 76:5, 107:16, 108:4, 108:7, 108:20, 108:23, 108:24, 109:5, 109:6, 109:21, 109:23, 110:17, 111:8, 111:10, 111:19, 112:25, 113:10,</p>	<p>113:11, 113:13, 117:2, 117:9, 122:6, 122:8, 123:1, 123:3, 123:9, 124:14, 134:17, 134:22, 135:2, 135:13, 135:17, 135:18, 138:4, 148:8, 152:9, 161:5, 161:8, 162:2, 173:14, 173:16, 191:19, 218:8 Payer - 44:3, 67:18, 89:25, 95:2, 134:22, 134:23, 134:25, 136:8, 138:3, 138:8, 145:4, 185:19, 193:12, 194:4, 195:6 Payers - 43:23, 46:12, 46:16, 66:19, 82:20, 89:20, 93:13, 94:3, 95:2, 103:8, 133:5, 133:6, 133:11, 134:15, 134:20, 138:3, 142:17, 144:18, 165:5, 169:10, 172:5, 173:16, 174:25, 187:10, 187:11, 189:7 Paying - 85:13, 90:10, 95:4, 108:25, 109:11, 109:13, 109:17, 111:3, 111:13, 111:14, 112:18, 112:25, 114:10, 114:15, 115:8, 116:6, 116:8, 116:10, 116:13, 134:15, 134:18, 142:17, 152:20, 153:6, 194:5 Payment - 112:23 Payments - 61:20 Pays - 168:5 Peak - 34:1, 77:16, 115:20, 115:21, 115:24, 115:25, 149:19 Peaking - 155:9 Peaks - 140:13 PEI - 69:22</p>	<p>Pen - 16:6 Penalties - 112:16, 197:8 Peninsula - 198:15, 199:3 Penstocks - 73:4, 73:9 Percent - 2:2, 2:17, 63:16, 81:25, 82:2, 105:15, 124:11, 128:22, 179:18, 179:19, 179:20, 226:14, 226:20, 228:9, 256:6 Percentage - 129:7 Perception - 79:21 Perfect - 73:1 Perfected - 131:12 Performance - 19:11, 73:24, 74:10 Perhaps - 58:22, 61:1, 65:3, 181:19, 184:21, 189:8, 189:11, 189:12, 195:11, 220:3, 221:2, 225:5, 230:6, 230:19, 236:13, 247:5, 247:6, 250:1, 261:2 Period - 63:14, 112:9, 112:13, 115:22, 115:24, 116:1, 116:2, 143:10, 179:20, 195:9, 267:23, 268:5, 269:2 Periods - 115:21 Permit - 156:22, 157:8 Permits - 7:4, 131:18, 156:11, 156:13, 156:14, 156:16, 156:21, 157:1 Permitted - 6:3, 9:24 Person - 220:25, 227:16, 232:2, 232:21, 233:18, 233:21, 241:9, 241:24 Personal - 182:11 Personnel - 11:12, 11:15, 11:16 Phase - 15:14, 16:2 Philosophy - 178:3 Physical - 160:8,</p>	<p>160:9, 163:18 Pick - 60:16, 118:15 Piece - 118:15 Piggyback - 41:20 Pivoted - 101:20 Place - 82:13, 96:13, 99:23, 102:19, 102:20, 126:4, 145:19, 145:21, 146:19, 169:23, 178:25, 204:23, 219:22, 219:23, 223:22, 224:6, 225:12, 235:9, 235:14, 249:8, 250:10, 250:11, 252:18, 253:12 Placed - 236:9 Plan - 19:18, 20:2, 20:16, 20:18, 20:19, 20:22, 20:23, 21:6, 21:9, 21:17, 21:22, 35:6, 35:16, 38:19, 39:5, 39:6, 39:9, 53:17, 54:21, 64:21, 72:25, 73:1, 89:5, 89:6, 96:13, 134:21, 135:3, 153:25, 243:9, 246:2, 264:16, 267:2, 267:3 Planned - 33:19, 35:15, 96:1, 96:3, 224:20 Planning - 19:10, 22:14, 44:16, 45:13, 45:14, 131:24, 186:9, 218:8, 266:19 Plans - 21:4, 133:23, 173:7, 178:11, 231:20, 243:24 Plant - 19:23, 41:5, 83:6, 84:5, 84:17, 122:3, 123:7, 154:6, 170:24, 171:5, 171:8, 191:1, 191:3, 192:6, 217:5, 225:23, 238:2, 238:5, 251:1, 251:6, 265:8, 266:7 Plants - 41:1,</p>
<p style="text-align: center;">P</p> <p>Pace - 5:19 Paced - 17:5 Package - 148:3 Paddick - 262:11 Paid - 3:9, 92:12, 132:16, 134:19, 134:21, 138:5, 144:18, 168:25, 172:23, 174:25, 220:25, 221:2 Panacea - 100:25 Pancake - 67:20 Panel - 47:2, 57:23, 58:6, 61:1, 65:10, 176:3, 176:4, 224:18, 230:25, 239:21 Panel's - 79:4 Pans - 35:12 Paramount - 206:14 Paraphrase - 185:1</p>				

<p>238:3, 251:11 Plate - 59:15 Platform - 34:21 Platforms - 129:3 Ploughed - 80:5, 83:5 Plowed - 182:22 Pole - 197:11, 197:14 Policy - 126:4, 126:23, 130:25, 183:3, 183:24, 188:1, 257:16 Pond - 199:3, 245:3, 245:12 Ponding - 175:8, 175:13, 175:17, 175:22, 203:10, 204:22, 248:17, 248:20 Portfolio - 6:14, 126:22 Portion - 4:13, 11:17, 24:18, 34:13, 57:14, 57:19, 146:7, 163:24 Position - 29:20, 212:9, 217:20, 231:4, 231:14, 233:4, 233:13, 234:12, 252:17, 252:19 Positions - 29:5, 87:2, 163:18 Positive - 179:12 Possibilities - 136:16, 139:4 Possibility - 10:10, 10:13, 29:4, 104:23, 209:9, 212:8, 245:23 Post - 94:10, 140:24, 157:24, 158:9, 158:10, 159:11 Posted - 111:10, 158:18 Posting - 158:13 Potential - 8:13, 10:3, 10:6, 26:11, 72:15, 74:11, 121:4, 186:4, 190:16, 215:6, 216:21, 218:2, 218:21, 220:9 Potentially - 8:14, 18:3, 210:9</p>	<p>Power's - 76:4, 211:6 PPA - 94:19, 194:23 Ppas - 143:5, 229:1, 264:22 Practically - 82:18 Practice - 201:11, 201:14 Pre - 6:7, 64:3 Precisely - 230:11 Predicated - 96:24, 96:25 Predictable - 181:18 Prefer - 91:9 Preference - 101:17 Preferred - 85:5, 85:7, 85:11, 85:22, 95:6, 96:7, 96:18, 97:6, 120:12, 121:15, 255:8, 256:5 Prejudice - 94:11, 94:13, 94:21, 94:22 Preliminary - 190:9 Premature - 67:22, 68:15, 68:21 Premium - 14:11, 152:14, 152:19 Preparation - 58:18, 82:10, 82:11 Prepare - 19:18 Prepared - 7:25, 251:16 Preparing - 224:1 Prerequisite - 70:13 Present - 63:20, 63:22, 98:5, 177:6, 222:16 Presentation - 5:14, 22:22, 39:17, 41:17, 97:8, 106:5, 176:17, 200:18, 226:21, 226:23, 230:6, 247:7, 267:14 Presentations - 1:15, 185:3 Presented - 32:12, 86:11, 263:4 Presenting - 227:3 President - 24:25, 258:10, 266:10,</p>	<p>266:11 Pressure - 72:18 Presumably - 70:21, 71:6, 135:5, 139:15 Presuming - 6:6 Prevent - 84:2 Previous - 55:10, 148:4, 149:1 Previously - 162:1, 230:14 Price - 3:6, 3:7, 3:9, 16:1, 106:22, 106:23, 106:25, 119:16, 119:19, 139:8, 148:22, 150:21, 150:22, 151:18, 152:3, 152:18, 161:23 Prices - 116:23, 116:25, 140:17, 140:18, 151:17, 152:2, 152:3, 152:4, 161:20, 175:10, 175:11 Pricing - 71:2, 77:16, 152:24, 192:3 Principle - 17:8, 18:24, 209:6 Principles - 18:18, 197:17 Prior - 62:12, 264:10, 266:16 Priorities - 256:2, 258:5 Prioritize - 73:15 Priority - 76:3, 76:8, 76:14, 76:21, 208:11, 208:18, 208:22, 210:6, 210:7 Privately - 98:16 Privilege - 108:21 Problem - 72:11, 80:24, 153:20, 195:25, 198:13, 198:18, 198:23, 198:25, 199:16, 199:21, 209:20 Problems - 195:13, 199:13 Procedures - 229:25 Proceed - 5:8, 16:5, 191:16 Proceedings - 229:</p>	<p>16, 263:8 Proceeds - 175:19, 175:22 Processes - 180:6 Procure - 131:2, 147:19 Prodding - 228:1 Product - 18:2, 139:25, 140:1, 160:8 Production - 19:10, 19:17, 20:2, 22:14, 231:12, 231:15, 231:18, 233:3, 233:6, 233:10, 247:8, 266:16, 266:18 Profile - 268:24 Profit - 141:7, 141:25, 142:19, 142:20 Profitable - 14:14 Profits - 142:7, 163:11 Program - 41:10, 48:17, 48:24, 84:17, 266:3 Progress - 53:5, 179:9, 223:23, 223:25, 224:4, 225:10 Prohibitive - 7:9, 8:5, 8:20, 8:23, 10:11, 181:11 Project - 24:4, 36:11, 95:17, 95:19, 101:15, 101:17, 122:15, 130:14, 130:15, 186:21, 192:13, 203:17, 215:16, 217:2, 223:15, 225:22, 243:14, 258:6 Projection - 32:13 Projects - 54:11, 94:2, 104:3, 105:22, 154:15, 186:2, 221:13 Properly - 32:9, 245:11 Proposal - 221:8 Proposals - 12:13 Propose - 78:15 Proposed - 20:2, 127:3, 204:13, 205:4, 220:7, 228:6, 230:20,</p>	<p>231:24 Prospect - 203:9 Protect - 67:18, 165:15 Protected - 158:4 Provide - 4:23, 10:24, 31:19, 46:6, 75:25, 91:15, 112:14, 121:13, 177:21, 179:2, 187:14, 198:11, 219:2, 229:16, 244:9, 244:10, 245:1, 262:13 Provided - 14:1, 159:6, 161:9, 184:15, 184:17, 207:10, 257:9, 265:13, 266:6 Provider - 135:18 Providers - 98:7, 121:11, 129:17, 129:21, 130:18, 130:23 Provides - 21:2, 171:2, 180:22, 244:23 Providing - 135:6, 173:12, 174:11, 259:4 Province - 42:8, 67:16, 70:19, 74:12, 85:23, 94:3, 101:12, 104:4, 104:9, 134:20, 138:20, 147:15, 148:18, 183:12, 185:14, 185:16, 186:5, 187:11, 187:16, 187:22, 189:7, 249:23, 260:16, 260:17 Provinces - 69:21, 99:18, 151:10 Province's - 141:2 Provincial - 66:9, 68:12, 80:14, 85:17, 90:22, 106:6, 183:22, 189:4, 248:14, 248:16 Provision - 209:9 Provisions - 186:16, 193:7 Prudence - 9:8, 178:21 Prudent - 165:5,</p>
--	---	---	---	---

<p>226:17, 239:2, 246:4 PUB - 183:2 Public - 45:24, 85:21, 97:9, 121:9, 153:1, 186:1, 215:2 Pull - 269:24 Purchase - 107:6, 119:13, 119:16, 146:24, 153:23 Purchased - 110:1 1, 119:1, 150:5, 158:3 Purchases - 146:1 4, 146:22 Purchasing - 14:13 , 22:3, 172:16 Pure - 188:25 Purposed - 188:11 Pursue - 29:21, 58:22, 58:25, 75:16, 193:24 Pursued - 131:9 Purview - 267:10 Pushed - 229:17 Puts - 21:5, 157:19, 172:19 Putting - 207:8, 227:8 Puzzle - 134:7</p>	<p>Ranged - 125:24 Ranges - 29:16, 35:8 Rapidity - 209:22 Rarely - 169:25 Rates - 11:21, 16:14, 49:3, 49:8, 49:15, 67:20, 76:17, 77:1, 77:2, 77:3, 77:6, 77:15, 78:3, 78:5, 78:8, 78:16, 80:5, 81:21, 83:17, 115:19, 134:22, 138:5, 138:6, 138:9, 142:21, 144:19, 145:5, 146:10, 191:19, 192:9 Rating - 47:9, 195:1 Rational - 227:11 Rationale - 95:18 Rationalization - 1 05:21, 228:12 Rationalized - 105: 23 Re - 97:4 Reached - 262:1, 262:17, 262:19 React - 154:25 Readiness - 172:1 Ready - 171:14 Realism - 102:11 Realistic - 38:13 Reality - 102:10 Realize - 82:4 Realized - 14:18, 14:24 Reason - 21:21, 79:12, 98:10, 161:2, 194:25, 205:12, 205:13, 228:2 Reasonable - 181: 13, 181:25, 239:2 Reasons - 38:2, 191:4, 245:3 Reassessed - 97:3 Recapture - 95:14, 119:4, 140:1, 140:2, 140:25, 143:8, 143:15, 143:19, 143:22, 143:24, 144:10, 151:8, 168:12, 192:8 Recapturing - 119: 8</p>	<p>Receive - 78:22, 232:8 Received - 55:15 Recent - 50:12, 69:13, 178:5, 180:16 Recently - 126:17 Reciprocation - 16 9:21 Recognition - 124: 13 Recognize - 180:1 0 Recognized - 182: 12, 262:2, 263:6 Recognizing - 5:3, 24:4, 126:8, 224:7, 249:18 Recommendations - 172:9 Recommended - 7 8:9 Reconsider - 47:15 , 47:19, 48:8 Reconvene - 136:2 1, 136:25, 269:8, 270:7 Recover - 173:10, 196:2 Recovered - 12:8 Recovers - 197:16 Recs - 124:6, 126:12 Recurrent - 52:22 Redacted - 153:1 Redirect - 118:9, 118:16 Redirected - 146:1 0, 151:3 Redone - 190:11 Reduce - 252:2 Reduced - 37:13 Reducing - 72:23 Reduction - 71:7 Reductions - 35:10 , 35:13, 35:14, 50:13 Referenced - 6:1, 81:20, 173:25, 262:18 Referred - 66:8, 111:2, 121:20, 180:8 Refers - 225:3 Refinements - 224: 4 Reflected - 63:7</p>	<p>Refurbished - 84:8 , 171:20 Refurbishing - 168 :3, 168:4, 168:6, 171:21 Refurbishment - 8 2:9, 82:14 Refurbishments - 83:6 Regards - 166:19, 229:20, 236:10 Regime - 90:6, 167:24, 175:5, 235:19 Region - 69:25, 98:9 Regional - 66:9 Regular - 180:13, 180:15 Regularly - 14:8 Regulated - 33:6, 46:9, 47:14, 47:23, 48:2, 75:22, 91:12, 178:19, 187:13, 202:13, 202:16, 204:12, 206:5, 206:16 Regulation - 6:22, 10:20, 17:5, 46:11, 46:17, 73:25, 74:2, 74:11, 176:19 Regulator - 89:15, 97:16, 115:19, 165:21, 259:16 Regulators - 91:16 Regulatory - 7:2, 7:15, 7:21, 74:5, 75:14, 93:21, 176:20, 177:16, 179:22, 180:5, 180:10, 180:14, 180:15, 235:19, 259:15, 266:17 Reinforced - 100:1 6 Reintegrating - 26: 12 Reintegration - 27: 22 Reinvested - 82:24 , 85:2 Reinvesting - 84:1 6 Reinvestment - 82: 18, 238:6 Rejected - 131:7 Relation - 220:14,</p>	<p>220:23, 221:23, 243:8, 247:14 Relationship - 177: 22, 235:7, 235:11 Release - 252:22 Releases - 248:20 Reliability - 17:14, 19:6, 19:14, 20:4, 20:6, 22:16, 32:6, 60:13, 73:7, 73:19, 196:12, 196:23, 197:9, 204:14, 204:24, 207:16, 208:6, 208:7, 208:10, 208:16, 208:20, 210:3, 210:5, 211:15, 238:23, 243:3, 244:9, 244:15, 246:4 Reliable - 196:17 Reliably - 89:11 Relief - 66:16 Relying - 4:23 Remainder - 38:16 Remains - 50:3 Removed - 231:14 Removing - 75:6 Renewable - 100:2 0, 123:25, 124:6, 125:23, 126:7, 128:21, 128:25 Renewal - 120:6 Renewals - 120:2 Renewed - 16:3, 119:22, 121:3 Rental - 61:20 Reorg - 23:1, 23:3, 23:5 Reorganization - 2 54:21 Repair - 195:4 Repeated - 205:24 Replace - 83:11, 99:19, 103:1 Replaced - 83:7, 190:3 Report - 31:25, 54:18, 54:19, 54:22, 71:23, 77:23, 77:25, 78:20, 166:8, 171:24, 172:2, 182:25, 183:4, 207:3, 207:4, 233:2, 233:5, 241:18</p>
<p>Q</p>				
<p>Qualify - 127:1 Quality - 63:16 Quantification - 12 5:3 Quantities - 13:9 Quarterback - 9:13 Quarterly - 166:7 Quarters - 139:15, 139:20 Questioning - 184: 15 Quickly - 59:10, 73:3, 267:6 Quote - 207:2, 264:23</p>				
<p>R</p>				
<p>Radially - 75:9 Raising - 97:8 Range - 9:24, 38:15, 50:14, 61:13, 81:22, 141:15, 181:1, 181:3</p>				

<p>Reported - 133:4, 165:20, 265:15 Reporting - 166:6, 234:15, 241:12, 241:19 Reports - 233:8 Representation - 8 9:25 Representatives - 24:23, 87:9 Repurposing - 95:13 Request - 31:22, 262:17 Requests - 52:17 Require - 68:13, 90:16, 157:7, 192:24, 197:22, 208:12, 208:13, 209:2, 209:10 Required - 17:6, 105:6, 119:4, 143:22, 196:22, 203:16, 238:6, 238:9 Requirement - 76:4, 203:13, 229:10 Requirements - 20 :12, 185:23, 226:4 Requires - 41:22, 183:10 Requiring - 7:22 Reserve - 83:4, 111:13, 111:19, 113:15, 114:10, 123:8 Reserves - 20:5, 20:13, 147:1, 147:2 Reservoir - 250:21 Reservoirs - 141:3, 147:10, 174:15, 174:19, 174:25, 175:6, 175:14 Resolution - 195:19 Resolved - 198:14, 242:21, 246:22 Resource - 17:15, 31:1, 60:13, 70:15, 72:13, 99:17, 124:16 Resourced - 234:18 Resources - 20:3, 20:9, 25:11, 45:21, 51:13, 71:11, 124:12, 128:24,</p>	<p>147:16, 148:18, 161:24, 170:23, 182:16, 185:15, 186:8, 218:7, 218:20, 248:14, 248:16, 269:1 Respect - 19:10, 22:25, 31:6, 42:20, 47:8, 50:23, 51:4, 52:19, 68:4, 92:7, 145:9, 189:10, 189:16, 195:14, 196:6, 198:22, 209:16, 215:15, 215:24, 224:21, 225:21, 226:12, 250:7, 256:23, 266:7 Respecting - 2:12, 2:25 Respond - 182:3, 212:9, 212:10, 222:8 Response - 209:22, 210:16 Responsibilities - 25:15, 88:12, 230:9, 243:7, 247:14 Responsibility - 24 1:16, 247:17 Responsible - 195:22, 201:9, 215:5, 215:6, 265:10, 266:15, 266:18, 269:12 Responsive - 177:23 Resting - 175:23 Restraints - 155:18 Restrictive - 68:12 Restructuring - 24:2, 31:11 Rests - 169:12, 247:17 Result - 48:3 Resulting - 103:8 Results - 97:15 Retained - 143:22, 146:5, 261:18, 263:14 Retainer - 3:13 Retired - 264:15, 264:19, 265:3 Return - 82:12, 269:4 Returned - 138:22</p>	<p>Revenue - 82:19, 94:16, 94:18 Revenues - 65:2, 65:5, 182:21 Reviewed - 26:8, 63:8 Reviewing - 84:19 Reviews - 21:8, 229:23 Revisit - 188:15 Rfis - 55:13 RFP - 130:9, 132:10 Rights - 14:3, 15:15, 15:24, 16:2, 108:17, 112:5, 114:22, 115:4, 115:5, 122:2, 122:4, 122:6, 123:20, 151:3 Ring - 179:8, 194:17, 194:18 Risk - 4:10, 5:16, 5:18, 5:21, 6:2, 8:17, 8:19, 9:9, 9:19, 95:4, 115:3, 163:2, 189:6, 213:1, 247:23, 247:24 Risks - 172:10, 172:11 River - 40:25, 41:1, 42:19, 101:12, 170:4, 170:24, 248:4, 248:24, 249:1, 249:10, 249:11, 249:17, 250:8, 251:4, 251:6, 251:13, 252:6 Road - 97:11, 103:13, 186:15 Roberts' - 52:1, 267:14 Robertson - 170:24 Role - 10:2, 10:3, 10:6, 40:9, 74:11, 75:9, 184:11, 231:13, 258:18, 267:6 Roles - 25:14, 27:6, 27:7, 27:16, 38:6, 230:8, 268:13 Roll - 216:9, 223:10, 260:7 Rolled - 223:6,</p>	<p>231:15 Ron - 233:8, 233:17, 233:18 Room - 77:1, 178:25, 179:1, 204:2, 214:6, 225:11, 225:17, 229:25 Root - 199:16 Rough - 35:24 Round - 118:7, 145:24 Route - 113:20, 120:12, 131:8, 135:17 Routes - 119:10 Routine - 181:4, 181:11 Rule - 127:3 Rules - 109:24, 206:11 Run - 251:6, 268:4 Runner - 83:8, 104:1, 189:24, 189:25, 190:1, 190:4, 191:8, 193:8 Runners - 189:23, 191:4 Running - 41:1, 101:11, 237:11, 238:14 Runs - 15:16, 128:16 Rural - 76:5, 76:17, 231:11</p> <div style="border: 1px solid black; text-align: center; width: 100px; margin: 10px auto;"> <p>S</p> </div> <p>Sablon - 169:20, 170:21, 171:4 Safely - 62:4, 89:12 Safety - 36:18, 238:23, 243:4 Saint - 121:25 Salary - 220:25 Sale - 85:12, 107:16, 167:22 Sales - 17:18, 208:13, 209:2, 209:10 Sanction - 97:1, 122:23, 216:18 Sat - 25:1 Save - 85:2, 171:6 Saving - 148:9 Savings - 1:24, 35:9, 49:25, 50:5, 50:13, 53:11, 53:19,</p>	<p>55:25, 56:13, 57:15, 68:19 Saw - 162:16, 257:22 Scan - 262:21 Scenario - 29:24 Scenarios - 17:25, 255:5 Scene - 119:10, 119:20, 166:15 Schedule - 34:2, 143:7, 144:9, 251:1, 252:1 Scheduled - 107:7 Schedules - 20:10, 22:15, 249:8, 249:18, 250:18 Scheduling - 19:17, 22:15, 247:9 Schefferville - 171:9 Scope - 181:18, 246:6 Scotia's - 81:17, 82:1 Scott - 230:25, 231:7, 232:4, 232:12, 233:20 Scott's - 231:16 Scroll - 206:23 Scrutinized - 63:21 Scrutiny - 63:19, 186:1 Season - 140:3, 140:17 Seasonal - 77:2 Seasoned - 237:24 Seats - 88:9, 242:13 Second - 9:12, 9:20, 10:8, 23:11, 126:13, 144:5, 165:2, 261:4 Secondary - 34:18 Secure - 32:15, 163:23 Security - 41:19, 206:13 See - 5:22, 6:15, 7:9, 7:24, 8:20, 9:17, 10:9, 10:25, 26:14, 26:16, 26:23, 31:8, 32:11, 33:12, 33:19, 34:16, 35:4, 35:9, 37:3, 38:7, 38:12, 42:25, 46:7, 62:19,</p>
--	--	---	---	---

<p>64:22, 67:22, 75:17, 77:1, 94:13, 94:15, 106:7, 106:21, 130:1, 141:3, 144:14, 149:1, 152:1, 156:10, 197:15, 206:4, 206:15, 239:11, 269:4, 269:17 Seeing - 35:2, 178:13 Seek - 14:8, 155:2, 261:2 Seeking - 95:2, 99:14, 99:15, 99:18 Seen - 26:7, 34:14, 64:2, 137:19, 137:20, 177:12, 223:6 Sees - 94:9 Segregated - 219:1 8, 253:7 Selecting - 121:14 Self - 67:17, 80:17, 169:8, 169:15, 265:21 Sell - 18:4, 105:3, 109:4, 109:6, 110:1, 118:17, 119:10, 124:19, 124:23, 126:10, 128:13, 175:10, 203:12, 203:14, 204:8, 205:14 Selling - 106:15, 106:18, 108:3, 109:10, 121:2, 121:4, 127:9, 142:16, 142:18, 158:10 Sending - 73:16 Senior - 87:2, 232:20, 233:12, 233:18, 233:24, 236:16, 237:23, 241:15, 260:18, 263:3 Seniority - 236:20, 237:18, 237:22 Sensitive - 153:2, 153:3, 209:5, 247:11 Sensitivity - 209:1 5, 209:23, 211:21 Sent - 213:12 Sentences - 207:2</p>	<p>3 Separate - 41:5, 45:9, 52:3, 52:10, 92:8, 193:12, 194:8, 195:11, 216:12, 218:18, 223:9, 223:14, 223:18 Separating - 42:16 Separation - 43:20 September - 71:23, 77:23, 206:20, 206:21, 206:22, 224:15 Series - 196:9 Serious - 101:1 Seriously - 229:21 Serve - 171:9, 187:8, 187:12, 187:24, 193:18, 210:4, 211:5 Served - 25:17 Serves - 29:2, 30:4 Service - 12:10, 18:3, 75:4, 81:18, 121:13, 135:6, 145:17, 150:1, 173:3, 173:12, 178:9, 187:15, 208:10, 208:17, 208:20, 210:6, 210:7, 265:13, 268:10 Services - 4:24, 24:25, 27:25, 36:17, 63:10, 109:1, 135:19, 169:6, 174:10, 175:14, 244:24, 245:1, 259:11, 265:18 Serving - 180:15, 185:8 Set - 12:6, 20:15, 20:16, 20:20, 22:15, 23:23, 44:9, 45:5, 45:12, 45:17, 83:3, 91:12, 107:8, 115:18, 115:25, 152:3, 216:5, 221:5, 221:16, 255:6, 268:18 Sets - 9:20, 9:24, 128:21, 154:23, 194:21 Setting - 45:22, 123:22, 257:12</p>	<p>Settle - 4:11 Settled - 105:7, 161:13 Setup - 45:9 Seven - 19:19, 85:24, 114:3, 114:5, 114:7, 220:4 Shaking - 52:7 Share - 40:7, 129:18 Shared - 12:9, 134:5, 256:11, 265:18 Shareholder - 8:8, 38:25, 91:17, 105:16, 133:5, 138:16, 138:17, 142:22, 142:25, 145:12, 145:19 Shareholders - 84: 4, 91:9 Shareholders' - 83 :3, 91:7, 91:10 Shareholder's - 14 6:9 Shares - 92:1 Sharing - 3:24, 135:9, 224:19, 224:25, 225:11, 225:15, 249:19 Shifting - 208:7 Shining - 102:23 Shipped - 151:2 Shock - 72:4 Shore - 147:16, 148:17, 170:25 Shouldn't - 2:20, 100:19, 101:10, 145:3, 145:4, 220:15 Show - 19:14, 178:6 Shown - 120:16 Shows - 78:4, 78:8 Shut - 20:15, 75:12, 248:3 Shutdown - 149:23 Sick - 222:5, 222:13 Side - 4:10, 24:10, 25:16, 39:19, 46:8, 51:1, 51:2, 65:19, 74:15, 170:19, 225:9, 234:1, 240:18, 258:12, 258:13 Sight - 109:21</p>	<p>Signal - 73:11, 73:16 Signed - 131:14, 131:15, 194:22 Significance - 207: 5 Significant - 20:18, 48:12, 55:16, 59:2, 59:5, 75:10, 112:16, 156:21, 164:20, 181:8, 226:15 Similar - 27:8, 27:16, 37:12, 37:15, 114:1, 213:2, 226:21, 236:20, 243:16, 245:3, 262:16, 262:22, 265:8, 267:1 Simplistically - 24 8:9 Simply - 94:18 Single - 197:13, 217:19 Sit - 6:17, 19:19, 91:11, 101:2, 229:11 Site - 110:14 Sits - 19:22, 159:8, 251:24, 255:23 Sitting - 230:20, 237:18 Situation - 98:14, 171:13, 212:23, 229:19 Six - 15:20, 32:14, 54:13, 56:18, 62:24, 205:21 Size - 44:25 Skill - 81:19 Skillset - 45:19 Slide - 5:13, 5:15, 13:4, 16:18, 17:13, 19:5, 22:23, 32:23, 33:11, 49:25, 50:1, 53:15, 53:16, 62:7, 96:3, 103:23, 149:1, 200:17, 200:19, 230:5, 230:7, 236:12, 238:11, 240:1, 243:6, 247:6, 247:16, 263:24, 267:13 Slides - 18:16, 201:23 Small - 60:5, 64:4, 104:4, 124:24,</p>	<p>222:8 Smaller - 34:19, 72:20 Social - 183:2 Soft - 128:15 Software - 45:18, 52:20, 153:20, 195:13, 195:25, 196:9, 198:13, 198:17, 198:23, 199:13, 199:15, 199:16, 199:21, 199:25, 200:11, 268:20 Solar - 102:20 Sold - 105:10, 127:14, 128:13, 144:16, 192:3 Soldier's - 199:3, 245:2, 245:12 Solely - 216:21, 218:2 Solicitation - 121:1 0 Solution - 100:23, 167:18 Solutions - 77:16 Solved - 199:1 Solving - 195:25 Somewhat - 181:1 7 Sooner - 59:24 Sorts - 256:15 Sought - 260:9, 261:16 Sound - 8:22 Sounds - 23:4, 40:2 Source - 98:7, 100:21, 166:24, 167:15, 196:3 Spare - 227:16 Spearheaded - 69: 14 Specialists - 26:1, 191:8 Specialty - 25:18 Specific - 112:10, 218:11 Speculate - 204:5 Speculating - 44:1 7, 160:10 Spell - 147:10 Spend - 72:21, 73:14, 101:25, 168:14, 221:7 Spending - 72:2,</p>
--	--	---	--	---

<p>89:1, 179:17, 217:22, 220:22 Spent - 182:4, 182:7, 182:12, 216:25 Spinning - 20:13 Split - 25:22 Spot - 127:8, 127:9, 127:14, 127:16, 130:10, 228:22 Spotlight - 184:17 Spread - 66:3 Spreads - 160:10 St - 124:25 Stability - 154:21 Staff - 4:6, 5:9, 268:3 Staffing - 5:10, 28:3, 62:13 Stage - 112:19, 113:21 Stakeholders - 47:1, 89:12 Stan - 222:11 Stand - 73:24, 185:25 Standard - 128:25, 246:1 Standards - 88:22, 126:22, 128:21, 235:8, 235:13, 243:13, 243:23 Star - 92:7 Stark - 78:4 Start - 1:16, 20:15, 24:10, 32:11, 58:3, 58:7, 64:6, 176:14, 212:2, 215:16, 218:6, 218:7, 254:7, 254:11, 258:5 Started - 4:21, 4:24, 67:7, 67:8, 72:10, 72:19, 95:12, 203:19, 215:14, 237:13, 259:9 Starting - 24:20, 34:5, 77:12, 200:17, 224:16, 224:24, 229:24, 237:14, 262:4, 268:3 Starts - 44:7, 216:1, 216:17 State - 63:2, 64:15,</p>	<p>68:9, 68:11, 99:13, 99:15, 126:11, 128:20, 129:11, 130:13, 130:24, 130:25, 131:1, 160:19, 161:1, 237:20, 269:4 Statement - 81:23, 154:4 Stating - 97:10, 247:24 Station - 170:3, 220:12, 244:22, 245:6 Stay - 6:2, 25:6, 39:6 Stayed - 25:12, 63:10, 63:11 Staying - 63:25 Stays - 105:18, 221:20 Steady - 63:2, 64:15, 237:20, 269:3 Steam - 60:17 Steps - 55:2, 55:16, 72:5, 73:10, 107:9, 148:24 Stick - 29:1 Stock - 160:1 Stone - 12:6 Stood - 190:21 Stop - 29:19 Storage - 102:24, 174:14 Store - 127:24 Stored - 250:20 Straight - 142:15 Stranded - 104:25 Strategic - 95:15, 96:6, 97:3, 121:17, 257:21 Stream - 94:16, 94:18, 103:9, 165:15 Streams - 163:24 Street - 45:20 Strength - 159:11 Stresses - 180:12 Stretch - 56:8, 75:13 Strictly - 193:18, 201:18 Strides - 179:4, 179:14 Strike - 73:6 Strikes - 138:2</p>	<p>Striking - 71:25 Strive - 58:5 Strived - 177:14 Striving - 62:10, 62:11, 64:14 Strong - 73:11 Structure - 23:23, 24:21, 27:18, 40:22, 47:15, 47:19, 90:7, 185:8, 191:22, 192:3, 192:15, 215:4, 255:7, 255:8, 255:14, 256:1, 256:24, 257:21, 260:19, 260:22, 261:12, 261:21, 262:9 Structured - 262:16, 262:23 Structures - 63:25, 88:6, 252:22, 257:13 Structuring - 30:24 Studied - 101:16 Studies - 101:5 Study - 17:15, 17:21, 60:14, 72:14, 120:15, 167:5 Sub - 251:2 Submission - 51:20 Submissions - 138:24 Submittal - 55:14, 235:18 Submitted - 171:25 Submitting - 93:16 Subset - 57:12, 57:14, 57:20 Subsidiaries - 63:19 Subsidization - 76:24, 144:23 Subsidize - 78:22 Subsidy - 76:5, 76:9, 76:17 Substantial - 149:21, 160:17 Substantially - 153:11, 153:14, 154:7 Substantiated - 227:11 Success - 257:14 Successful - 14:12, 15:17, 100:13,</p>	<p>131:3, 131:4, 132:8, 133:7, 133:8 Suffered - 212:22 Sufficient - 20:5, 95:20 Sufficiently - 207:7 Suggested - 26:9, 76:2, 77:4, 126:21, 172:9 Suggestion - 66:12, 73:24 Suggestions - 126:23 Suitable - 196:17 Suits - 106:23 Summary - 103:23, 215:1 Summer - 114:5, 114:8, 140:8, 155:13, 211:13 Summertime - 140:16 Sun - 102:23 Supplied - 124:12, 161:19, 162:3 Supplying - 201:17 Supply's - 218:1, 218:19, 223:10 Support - 25:5, 25:7, 35:1, 147:1, 232:6, 260:22 Supported - 256:6 Supporting - 104:14, 133:1, 232:14 Suppose - 60:2, 214:6, 240:19 Supposed - 220:16 Surely - 93:7 Surface - 8:22 Surmise - 11:8 Surplus - 95:14, 145:22, 211:6, 211:9 Surpluses - 70:8 Surprise - 238:4 Survey - 82:4 Suspect - 238:4, 253:20 Sustain - 84:5 Sustainable - 39:16, 50:4, 86:10, 86:17, 230:5 Sustained - 183:9 Sustaining - 30:14, 51:14, 192:24, 194:6, 194:10, 194:11, 196:25,</p>	<p>197:24, 224:22, 226:4, 228:5 Switch - 245:2 Synapse - 14:1, 77:7, 77:9, 77:11 Synapse's - 13:17 Synchronized - 51:2 Synergies - 38:3, 68:19 Synergy - 26:23, 28:10, 28:16, 77:3 Systems - 116:10, 196:8, 219:17, 253:12</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> <p>T</p> </div> <p>Table - 38:22, 44:7, 65:19, 90:6, 97:21, 186:18, 238:22, 240:6, 242:22 Tag - 144:2 Taker - 186:20 Takers - 89:13 Taking - 55:16, 73:10, 79:1, 160:10, 179:24, 182:20, 211:24 Tap - 189:24 Taps - 248:2, 248:3 Target - 38:11, 38:16, 50:15, 51:6, 51:21, 147:18, 224:8 Tariff - 108:5, 108:7, 108:8, 109:7, 111:10 Task - 202:15, 219:13, 219:18 Tasked - 38:21, 267:24 Tax - 187:10 Taxes - 85:17 Taxing - 47:19 Taxpayer - 49:12, 49:17, 80:15, 80:16 Team - 25:1, 25:17, 26:21, 30:2, 30:16, 35:23, 36:5, 36:11, 38:21, 263:10, 268:18, 269:24 Teams - 29:10 Technical - 205:15, 205:19, 215:25, 268:9 Technological - 198:12, 198:25</p>
--	---	---	---	--

<p>Technology - 102:25, 103:14 Telling - 98:13 Temporarily - 216:14 Temporary - 268:12 Ten - 25:10, 36:6, 103:12, 103:14, 197:13 Tens - 30:15, 99:7 Term - 5:5, 12:20, 14:2, 14:17, 17:23, 70:19, 91:15, 121:18, 125:8, 130:11, 134:2, 173:24, 179:7, 193:6, 194:12, 199:23, 241:24, 268:12 Termed - 26:12 Terminal - 170:3, 244:22, 245:6 Terminate - 130:21 Terminates - 110:14 Test - 166:1, 267:25 Testimony - 185:3 Testing - 124:23, 190:6, 190:9, 269:13 Testings - 34:8 Tests - 231:25 Thanks - 65:24, 66:7, 73:21, 77:25, 270:4 That'll - 45:6 Theirs - 54:5 Theory - 67:20, 70:6 Thereabouts - 64:14, 125:20 Therefore - 94:19, 165:22 There'll - 45:4, 60:5, 218:18, 226:14, 228:9, 232:13 Thermal - 153:23 These - 15:22, 18:17, 24:13, 25:9, 31:1, 32:10, 34:3, 34:8, 38:6, 64:6, 64:7, 74:8, 86:10, 86:20, 88:12, 89:11, 89:15, 99:21,</p>	<p>103:9, 116:9, 130:1, 144:17, 147:6, 152:14, 153:2, 156:14, 157:1, 157:20, 160:4, 174:5, 177:2, 177:9, 181:1, 181:10, 221:13, 225:3, 230:9, 230:12, 234:2, 236:15, 237:23, 243:4, 254:21, 257:13, 262:5, 262:6, 263:7, 268:4 They'd - 88:10, 119:16 They'll - 106:24, 163:6, 221:9, 228:8 They're - 11:12, 16:5, 29:25, 30:18, 34:6, 35:18, 45:23, 47:22, 52:24, 75:2, 76:23, 85:13, 86:17, 107:15, 108:7, 117:8, 117:25, 126:24, 129:14, 129:16, 133:16, 140:16, 150:13, 162:6, 180:9, 216:1, 224:1, 226:17, 237:4, 252:20, 256:3, 268:17 They've - 26:12, 26:13, 38:3, 38:5, 100:12, 171:20, 191:23, 251:15 Third - 8:25, 23:12, 121:4, 135:18, 201:10, 226:13, 261:3, 262:13, 263:12 Thornton - 46:2 Thousands - 99:7, 162:5, 162:8, 164:17 Threaten - 208:5 Three - 21:18, 29:16, 31:22, 65:19, 88:9, 101:19, 120:2, 163:14, 196:23, 200:20, 200:22, 201:11, 222:6, 223:9 Threshold - 235:22, 236:4</p>	<p>Thresholds - 234:21, 235:9, 235:13 Throat - 229:7 Tied - 122:23 Tier - 126:13 Timely - 212:11 Times - 100:7, 104:8, 112:10, 117:13, 119:24, 214:13 Timesheet - 221:9 Timing - 31:10, 50:19, 165:3, 181:18, 208:7, 214:1, 216:8 Tipping - 6:15 Tires - 125:17 Title - 27:8, 241:13, 241:14, 266:14 Today - 24:19, 35:25, 103:16, 103:18, 139:25, 171:25, 178:25, 184:21 Tomorrow - 44:15, 269:8, 269:19, 270:2, 270:7 Tomorrow's - 239:21 Took - 28:6, 257:19, 267:6 Toot - 257:6 Top - 3:15, 20:11, 55:21, 55:23, 56:9, 57:7, 61:15, 62:15, 87:1, 89:8, 191:25, 220:6 Topic - 25:25, 71:20, 136:13 Total - 33:1, 33:5, 87:25, 116:8 Tough - 6:18, 16:7 Toward - 56:1, 56:6, 56:23, 144:19 Towards - 39:1, 55:16, 145:5, 198:3, 221:1, 221:18, 221:19, 244:1, 248:4, 248:5, 269:3 Tracked - 45:23 Traction - 216:1, 216:17, 218:6, 219:7, 237:15 Trade - 16:23, 106:6, 126:6, 126:12, 129:4,</p>	<p>141:5 Traded - 13:9, 127:19, 127:20, 129:3 Traders - 116:16, 116:17, 148:20, 150:10, 156:9, 157:6 Trades - 9:21, 163:3 Trading - 1:23, 13:7, 118:12, 121:12, 129:3, 142:8, 156:10, 157:12, 160:1, 214:21 Traditional - 100:24, 163:21 Transact - 117:11, 117:24, 157:13 Transaction - 3:21, 9:8, 9:10, 123:6, 123:12, 158:14, 163:19 Transactions - 46:2, 142:9, 142:11, 148:11, 149:12, 150:9, 151:11, 158:24, 160:12, 160:18, 163:23, 173:2, 175:9, 203:15, 207:25, 208:1 Transfer - 45:22, 199:22 Transferred - 93:5, 93:6, 109:2, 123:19, 195:6, 216:14 Transition - 23:21, 33:14, 36:1, 36:5, 36:7, 36:13, 36:19, 36:20 Transitional - 38:6 Transitioning - 23:19, 237:7 Transmit - 97:17, 106:9, 106:15 Transmitting - 107:15, 152:19 Transparency - 88:10, 90:5, 179:2, 225:20, 242:15, 242:24, 253:13, 259:16 Transparent - 226:2</p>	<p>Treasury - 5:21, 63:23, 163:1, 163:2, 163:5, 164:8 Trend - 62:19 Trends - 32:24 Triggered - 219:17 Trip - 197:11 Tripping - 196:15 Trips - 199:23 Trump - 19:14 Trumping - 19:6, 19:7 Truthful - 27:22 Turbine - 121:25, 210:24, 211:1 Turn - 22:21, 39:16, 54:13, 59:16, 81:1, 176:16, 200:17, 206:19, 214:24, 220:3, 230:7 Turned - 84:3 Twenty - 141:12, 141:14, 264:15 Twin - 83:18, 192:7 Twinco - 166:25, 168:17 Two - 42:16, 53:19, 54:4, 54:6, 56:16, 56:18, 57:14, 69:2, 72:10, 72:21, 86:24, 86:25, 87:14, 88:1, 88:7, 90:2, 94:15, 94:22, 101:19, 119:10, 124:8, 126:14, 141:12, 159:5, 163:14, 196:7, 196:22, 222:6, 225:3, 230:9, 230:23, 239:1, 242:13, 244:20 Types - 184:14, 208:1, 257:13 Typically - 140:13, 146:25, 160:7, 161:20, 162:6, 162:23, 163:14</p> <div style="border: 1px solid black; width: fit-content; margin: 10px auto; padding: 2px 10px;"> <p style="text-align: center; margin: 0;">U</p> </div> <p>Ultimate - 22:16 Umbrella - 200:22 Unavoidable - 182:24 Uncertainty - 16:4, 50:23 Underestimate - 2</p>
---	---	---	--	--

<p>37:22 Underlying - 264:1 Understands - 208:9 Understood - 257:18, 263:15, 267:2 Undertake - 75:7 Undertaken - 82:14, 134:4, 168:5 Underwater - 131:23 Underway - 241:6, 241:21 Undo - 245:5 Unfair - 185:12 Unfortunately - 188:12 Unintelligible - 171:4, 212:21 Union - 63:18 Unique - 45:19, 98:5 Uniquely - 196:10 Unit - 92:5, 149:24, 190:8, 212:2 United - 68:2, 98:14, 98:22, 164:4 Units - 19:22, 19:24, 20:16, 154:21, 171:14, 171:17, 171:21 Unless - 79:25, 99:22, 238:3 Unloading - 151:23 Unmitigated - 78:3, 78:4 Unregulated - 33:6, 41:6, 46:24, 83:20, 90:7, 185:15, 186:5, 187:7, 188:1, 188:6, 257:17, 258:21 Unusual - 238:4 Updated - 219:3 Upfront - 10:10, 19:11, 20:23 Upgrade - 34:22, 191:1 Upgraded - 191:3 Upgrades - 104:2, 154:16, 169:7 Upgrading - 169:3 Upside - 3:21, 14:15 Upstairs - 239:13, 239:16</p>	<p>Upward - 62:19 Usage - 81:15, 114:11, 114:13 Useable - 110:22 Used - 2:16, 14:1, 16:13, 28:19, 70:22, 71:16, 122:12, 129:6, 144:4, 145:11, 167:21, 167:22, 170:1, 170:10, 170:12, 170:14, 173:1, 179:8, 190:15, 194:12, 211:4 Uses - 211:14 Using - 45:21, 46:1, 51:12, 113:16, 117:14, 144:23, 174:15, 175:5, 175:13, 216:13 Utilities - 45:25, 74:18, 75:22, 129:12, 130:11, 131:1, 186:1 Utility - 32:8, 77:2, 131:14, 215:3 Utility's - 128:22 Utilization - 112:4 Utilize - 170:23 Utilized - 94:17</p> <p style="text-align: center;">V</p> <p>Vacancies - 31:24 Vacant - 32:1 Vacation - 74:6, 74:7 Value - 3:18, 3:23, 4:9, 6:14, 9:17, 13:15, 13:20, 16:13, 41:8, 45:20, 68:16, 68:17, 70:7, 70:13, 70:18, 70:20, 101:12, 102:14, 103:25, 105:24, 116:6, 120:9, 120:13, 121:16, 134:5, 135:8, 135:10, 135:22, 137:6, 137:10, 138:14, 138:16, 138:18, 146:5, 150:19, 151:14, 175:16, 183:16, 186:4, 191:10, 203:11, 206:17, 207:25,</p>	<p>263:6 Values - 119:14, 120:23, 135:23, 136:3 Vary - 13:10, 20:18 Vehicle - 138:14 Vendor - 190:9 Verses - 116:24, 135:22 Version - 119:23 Versus - 9:19, 11:5, 43:13, 45:9, 218:21 Vested - 245:10 Via - 94:1, 135:2, 155:19 Vice - 24:24, 266:11 View - 11:9, 41:9, 45:25, 47:7, 48:23, 67:19, 69:17, 70:14, 80:16, 100:21, 102:22, 182:11, 183:15, 183:23, 186:7, 186:12, 189:22, 193:15, 198:9, 217:3, 226:2, 226:5, 226:8, 226:10, 227:14, 231:9, 250:18, 265:19 Views - 259:2 Virtue - 103:24 Vis - 180:6, 233:13, 233:15 Visibility - 88:10, 166:4, 225:24 Vision - 255:13, 255:16, 255:18, 256:5, 256:11, 257:2, 259:13, 260:5, 260:7 Visited - 192:20 Voice - 90:5 Void - 160:24 Voltage - 45:4, 186:11 Volume - 158:24 Volumes - 140:15, 157:22, 157:23, 164:20 Voluntary - 124:9, 124:21, 128:10, 128:15 VP - 216:6, 228:10, 231:14, 231:15, 233:3, 233:6,</p>	<p>233:9, 258:16 Vps - 29:9</p> <p style="text-align: center;">W</p> <p>Wabush - 170:3 Wage - 183:6 Wait - 78:19 Walk - 23:22 Walmart - 124:10, 127:22, 128:9 Walsh's - 170:4 Wanting - 31:15, 73:5, 128:17 Wants - 227:5 Warranted - 41:24 Wasn't - 28:1, 61:5, 80:11, 97:18, 179:16, 199:8, 205:12, 230:10 Waste - 236:7 Watch - 160:1 Water - 20:8, 20:9, 61:20, 101:11, 147:4, 147:5, 147:7, 147:16, 147:17, 148:3, 148:17, 247:8, 247:19, 248:4, 248:10, 248:13, 249:19, 249:20, 249:22, 249:23, 250:20, 252:2, 252:22 Waters - 124:23 Wave - 260:13 Ways - 191:9 We'd - 14:23, 20:16, 33:25, 72:18, 76:18, 116:22, 123:1, 236:7 Week - 19:16, 19:18, 20:3, 20:17, 21:12, 21:13, 21:16, 21:17, 148:2, 148:4, 148:6, 178:13, 195:17, 196:16 Weekly - 21:11, 147:9, 147:17, 148:14, 221:9 Weeks - 31:22, 101:19, 101:20 Weigh - 154:5 Weighed - 261:11 Welcome - 176:7 We'll - 6:16, 32:16,</p>	<p>47:14, 54:6, 54:17, 56:23, 58:5, 66:7, 69:1, 84:19, 117:11, 122:7, 136:21, 226:14, 235:21, 269:17, 270:1, 270:6 Weren't - 264:14 We've - 5:6, 13:24, 14:12, 15:17, 29:22, 30:22, 32:5, 34:11, 34:14, 34:19, 34:25, 38:24, 62:23, 63:14, 63:15, 64:2, 73:5, 74:9, 83:8, 98:1, 126:15, 127:7, 130:8, 135:16, 140:20, 151:1, 151:20, 152:23, 173:25, 190:8, 195:15, 208:24, 209:18, 209:20, 211:18, 219:4, 225:18, 244:21, 259:7 What's - 5:1, 6:1, 11:3, 15:8, 21:17, 44:25, 114:19, 121:22, 130:6, 133:6, 136:16, 136:17, 139:7, 140:23, 153:25, 169:12, 171:13, 173:20, 175:16, 186:10, 193:17, 200:23, 209:15, 231:3, 241:18, 255:24, 268:6 White - 187:7 Whole - 8:2, 41:9, 91:13, 91:14, 141:4, 161:8, 167:24, 207:12, 224:24 Who's - 195:22, 220:22, 230:24, 240:25 Willing - 128:13 Wills - 139:11 Win - 213:4 Wind - 102:20, 102:24, 104:3, 130:17 Winter - 153:21, 155:4, 155:9, 155:18, 165:19,</p>
---	---	---	--	--

<p>171:14, 171:18, 171:25, 172:5, 211:15 Winters - 211:12 Wintertime - 140:1 4, 140:18 Wires - 90:4, 217:9, 240:18, 240:21 Wisdom - 188:15 Wished - 158:4 Won't - 22:11, 54:12, 60:1, 226:14, 227:15, 228:22, 244:7, 254:2 Word - 3:17, 71:24, 125:19, 133:22, 173:1 Words - 196:13 Workable - 197:22 Worked - 25:2, 26:20, 217:1, 255:5 Working - 39:12, 56:1, 56:6, 60:14, 61:13, 62:24, 91:8, 127:4, 131:11, 157:7, 168:24, 169:2, 172:8, 178:19, 218:14, 221:7, 227:3, 234:14, 251:15 Works - 22:14, 42:21, 89:10, 183:12, 201:10, 214:22 Worried - 179:17, 183:4 Worry - 198:16 Worrying - 199:11 Worth - 16:6, 137:11 Worthiness - 158:2 5 Wouldn't - 29:21, 29:23, 47:18, 56:15, 56:16, 56:18, 71:1, 81:19, 225:23, 228:8, 229:5, 229:6, 237:22, 238:4, 255:18 Written - 227:4 Wrote - 31:25, 228:16</p>	<div style="border: 1px solid black; text-align: center; width: fit-content; margin: 0 auto; padding: 2px;">Y</div> <p>Yard - 245:2 Year - 15:21, 21:18, 33:20, 54:13, 54:19, 54:21, 56:7, 56:17, 63:17, 72:1, 72:22, 72:25, 75:2, 83:7, 84:18, 94:15, 94:21, 95:22, 101:18, 107:8, 108:24, 109:4, 110:19, 114:8, 116:7, 118:7, 141:21, 149:15, 149:25, 150:23, 160:16, 166:1, 170:12, 181:4, 181:5, 181:14, 190:3, 190:11, 190:21, 195:9, 196:22, 197:14, 262:6, 263:15 Years - 32:5, 38:25, 39:22, 62:25, 63:17, 67:24, 69:2, 72:10, 75:3, 97:23, 100:7, 100:12, 102:2, 103:12, 103:15, 104:20, 105:6, 119:24, 124:25, 130:8, 164:21, 169:19, 170:14, 177:9, 178:7, 178:18, 178:20, 180:16, 181:7, 181:24, 197:13, 217:14, 227:25, 257:8, 259:15 Yesterday - 1:5, 1:24, 5:17, 9:6, 11:12, 22:24, 23:15, 32:13, 35:6, 38:15, 73:21, 94:14, 95:13, 99:22, 171:9 York - 3:19, 3:23, 68:9, 98:4, 99:15, 110:15, 116:25, 117:12, 118:13, 118:17, 125:23, 140:14, 150:15, 158:19, 160:19, 160:20, 160:25, 214:14, 214:15 You'd - 35:7, 75:5, 108:7 You'll - 129:7,</p>	<p>181:15, 237:17 You're - 34:2, 34:23, 35:2, 37:5, 38:16, 39:12, 42:18, 62:7, 62:10, 64:14, 68:24, 91:3, 92:17, 97:8, 97:9, 106:18, 109:10, 109:11, 109:12, 112:24, 114:15, 115:21, 116:6, 116:7, 116:12, 117:17, 123:15, 127:9, 135:21, 136:14, 139:20, 140:12, 146:15, 149:4, 153:5, 159:25, 162:16, 163:12, 163:21, 172:16, 175:13, 176:7, 181:6, 191:11, 194:10, 201:9, 218:16, 228:16 Yours - 58:15 Yourselves - 205:4 You've - 5:20, 13:8, 26:7, 26:8, 42:14, 42:15, 55:2, 71:21, 82:8, 86:11, 101:20, 115:13, 119:8, 129:23, 129:25, 139:16, 194:17, 201:8, 210:15, 219:10, 225:4, 230:3</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 0 auto; padding: 2px;">Z</div> <p>Zero - 63:15, 151:20, 151:22, 152:9, 153:9</p>		
---	--	--	--	--