

Page 1

1 October 21, 2015  
 2 (9:05 a.m.)  
 3 CHAIR:  
 4 Q. So there are no preliminary matters, so we're  
 5 going to go right to Mr. Johnson for his  
 6 cross-examination.  
 7 MR. PAUL HUMPHRIES  
 8 MR. ROBERT MOULTON  
 9 MR. PAUL STRATTON  
 10 MR. KEVIN GOULDING  
 11 CROSS-EXAMINATION BY JOHNSON, Q.C.:  
 12 JOHNSON, Q.C.:  
 13 Q. Good morning, Commissioners. Good morning,  
 14 members of the panel. Tom Johnson, Consumer  
 15 Advocate. Some questions this morning if I  
 16 could start off by discussing a moment or two  
 17 the P50 versus P90 in demand forecasting, and  
 18 as you'll recall yesterday, I think it was Mr.  
 19 Stratton who indicated that the P50 demand  
 20 forecast essentially means that you could be  
 21 above your peak demand forecast 50 percent of  
 22 the time or below it 50 percent of the time,  
 23 and he explained that with P90 there would  
 24 only be about a 10 percent probability that  
 25 you would be above the peak demand forecast,

Page 2

1 or I guess below the peak demand forecast,  
 2 would that be correct?  
 3 MR. HUMPHRIES:  
 4 A. Yes, that's correct.  
 5 JOHNSON, Q.C.:  
 6 Q. And I understand from the evidence that Hydro  
 7 had been using P50 forever, is that  
 8 essentially right?  
 9 MR. HUMPHRIES:  
 10 A. Yes, essentially.  
 11 JOHNSON, Q.C.:  
 12 Q. And, I guess, you know, it seemed to take the  
 13 events of early January 2014 for that  
 14 methodology to be reviewed, and I'm just  
 15 wondering why Hydro would not have reviewed  
 16 that approach knowing, as I take it Hydro  
 17 knew, that P50 meant that you were above your  
 18 peak demand forecast half the time?  
 19 MR. HUMPHRIES:  
 20 A. I think a lot of it was the fact that  
 21 historically if we go back to the 2002 period,  
 22 we went through a generation reserve level at  
 23 that time that was comparable to what we were  
 24 going through in the 2013/2014 time period.  
 25 Our LOLHS were approaching or in excess of our

Page 3

1 criteria, our firm energy levels were close to  
 2 the firm load levels, and we went through  
 3 those periods, I guess, with no difficulty, so  
 4 that - again we were taking a level of comfort  
 5 in that probably, and the other conflicting  
 6 piece, I guess, when we look at - not everyone  
 7 uses a P90 load forecast. A lot of utilities  
 8 still use a P50 and they bank on the fact of  
 9 cutting into the reserve in the event that  
 10 we'd get to the lower probability load  
 11 situation, and that works fine as well as long  
 12 as you got confidence in your generation  
 13 availability. I think that's the other  
 14 compounding factor that we got into in the  
 15 January 2014 period, our actual generation  
 16 availability was lower than we had been  
 17 planning on, and so it was a double effect of  
 18 the higher forecast and the lower  
 19 unavailability - or higher unavailability,  
 20 sorry, that put us in the situation that we  
 21 actually got in in January 2014.  
 22 JOHNSON, Q.C.:  
 23 Q. In reference to the other jurisdictions that  
 24 might still use a P50 methodology, I take it  
 25 these would be not isolated systems?

Page 4

1 MR. HUMPHRIES:  
 2 A. No, they wouldn't be isolated, that's correct.  
 3 JOHNSON, Q.C.:  
 4 Q. Right, and that would have a bearing, I  
 5 suppose, on the reasonableness of them  
 6 settling on a P50, would it?  
 7 MR. HUMPHRIES:  
 8 A. It may, it may, yes.  
 9 JOHNSON, Q.C.:  
 10 Q. Because they could count on perhaps other  
 11 demand sources?  
 12 MR. HUMPHRIES:  
 13 A. Yeah, there's a likelihood they could, yes.  
 14 JOHNSON, Q.C.:  
 15 Q. And, I guess, you're going back - you  
 16 reference here this morning about historically  
 17 back in 2002, the levels of reserve that you  
 18 went through without difficulty, and I took  
 19 from your evidence yesterday, Mr. Humphries,  
 20 you mentioned that - you said, we know we can  
 21 operate the system reasonably with as little  
 22 as 20 megawatts of reserve. Is that around  
 23 the margin that you had to play with back in  
 24 2002?  
 25 MR. HUMPHRIES:

Page 5

1 A. I don't know exactly what we would have had in  
 2 those periods.  
 3 JOHNSON, Q.C.:  
 4 Q. But, you know, when you compare -  
 5 MR. HUMPHRIES:  
 6 A. We wouldn't have planned to be down there even  
 7 in 2002. We would have to be into some  
 8 contingency situations before you got down to  
 9 20 megawatts, but what I was referring to  
 10 yesterday based on our experience in January  
 11 2014, particularly January 2nd and 3rd before  
 12 we got into the storm event and we were having  
 13 the generation shortfall alone, you know, we  
 14 were down to a level of 20 megawatts reserve  
 15 and able to maintain the system integrity.  
 16 That's what I was referring to yesterday.  
 17 JOHNSON, Q.C.:  
 18 Q. Okay.  
 19 MR. HUMPHRIES:  
 20 A. I'm not sure we were ever down to a situation  
 21 where we tested that before.  
 22 JOHNSON, Q.C.:  
 23 Q. Right, so is that the practice at Hydro to  
 24 settle on a certain approach and not review it  
 25 for many, many years?

Page 6

1 MR. HUMPHRIES:  
 2 A. No, I don't think it's necessarily the  
 3 approach. I mean, you know, our whole process  
 4 was reviewed a number of times and quite  
 5 recently, I guess, through the Muskrat Falls  
 6 review process. Our overall generation  
 7 methodology, our forecasting methodology, was  
 8 reviewed and validated by both - Navigant  
 9 reviewed it and as well Manitoba Hydro through  
 10 the process, and signed off on it as being  
 11 reasonable, I think, based on the system that  
 12 we have.  
 13 JOHNSON, Q.C.:  
 14 Q. But you clearly would not be comfortable with  
 15 reverting to that standard in light of the  
 16 events of January 2014?  
 17 MR. HUMPHRIES:  
 18 A. Not between now and interconnection. At post-  
 19 interconnection, I think we'll reassess where  
 20 we are.  
 21 JOHNSON, Q.C.:  
 22 Q. There was also a discussion yesterday having  
 23 to do with the loss of load hours criterion,  
 24 and you indicated, Mr. Humphries, that you  
 25 could see with the interconnection the loss of

Page 7

1 load hours standard, as you put it, migrating  
 2 back to, I think the North American standard  
 3 of 2.5, and we're presently at 2.8?  
 4 MR. HUMPHRIES:  
 5 A. Well, I think the North American standard  
 6 right now is about 2.4 in general, but not  
 7 everyone uses this LOLH indicator, and the  
 8 more general is a loss of load of 1 day in 10  
 9 years, and that can correlate to 2.4 hours.  
 10 That's system dependent that we do an analysis  
 11 to determine.  
 12 JOHNSON, Q.C.:  
 13 Q. So we have - you indicated the term yesterday  
 14 "migrating back", but we were never on the  
 15 North American -  
 16 MR. HUMPHRIES:  
 17 A. Yeah, well, I - we would migrate to, not back  
 18 to.  
 19 JOHNSON, Q.C.:  
 20 Q. Okay, and you stated that you definitely would  
 21 think that the planning criteria for meeting  
 22 the energy requirements of the island will  
 23 change, and at what time do you think Hydro  
 24 will be in a position to settle on new  
 25 planning criteria for both capacity and

Page 8

1 energy?  
 2 MR. HUMPHRIES:  
 3 A. We hope to be there by the end of 2016.  
 4 JOHNSON, Q.C.:  
 5 Q. You're on track for that, are you?  
 6 MR. HUMPHRIES:  
 7 A. Yes, yeah, we have a - we're going through the  
 8 process now of - well, technically the  
 9 interconnections have been validated, we're in  
 10 an exercise now with the Atlantic provinces to  
 11 identify what reserve sharing arrangements are  
 12 out there and the ability to be able to direct  
 13 that to the island. So that would be a  
 14 significant factor that would play into our  
 15 new generation planning criterion.  
 16 JOHNSON, Q.C.:  
 17 Q. Mr. Goulding, if I could turn to you for a few  
 18 moments. You were yesterday describing a  
 19 situation whereby in August of this year Hydro  
 20 was exposed to an outage to one of the major  
 21 lines coming into the Avalon Peninsula, and  
 22 why was there an exposure to an outage to one  
 23 of the major lines, can you elaborate on that?  
 24 MR. GOULDING:  
 25 A. There wasn't any particular exposure to the

Page 9

1 line. I would say that there would have been  
 2 an exposure to the Avalon if we did lose the  
 3 line. It was at a time that we were  
 4 undergoing a total planned outage at Holyrood.  
 5 Ordinarily we would have required that a unit  
 6 be operating such that in the event that we  
 7 did lose one of the major lines into the  
 8 Avalon, the unit would be there and ready to  
 9 respond to offload the remaining transmission  
 10 line. So the point was, I guess, to mitigate  
 11 that exposure, we operated the CT during  
 12 periods of the day when the load was highest  
 13 and when we were exposed to an outage - where  
 14 we would have been exposed in the event of an  
 15 outage to one of the major lines.  
 16 JOHNSON, Q.C.:  
 17 Q. And you say "where you would have been exposed  
 18 to an outage", and why would the exposure  
 19 arise? I think I might be missing that.  
 20 MR. GOULDING:  
 21 A. Well, there's a number of reasons, I guess,  
 22 why a transmission line can trip or experience  
 23 an outage. The primary one, I guess, is  
 24 adverse weather, wind, a thunderstorm activity  
 25 that would impact on the line itself. There

Page 10

1 could also be issues with the terminal  
 2 equipment on either end of the line as well.  
 3 JOHNSON, Q.C.:  
 4 Q. I see, and so then the running of the CT, the  
 5 new CT, was meant to guard against something  
 6 untoward happening?  
 7 MR. GOULDING:  
 8 A. That's correct.  
 9 (9:15 a.m.)  
 10 JOHNSON, Q.C.:  
 11 Q. I see, and at the time all the Holyrood units  
 12 were off on planned maintenance?  
 13 MR. GOULDING:  
 14 A. That's correct.  
 15 JOHNSON, Q.C.:  
 16 Q. And so the CT was run for a considerable  
 17 period in August, I take it?  
 18 MR. GOULDING:  
 19 A. It would have been ran from the time of, say,  
 20 the start of the morning peak to the end of  
 21 the evening peak, so perhaps at minimum 12  
 22 hours a day.  
 23 JOHNSON, Q.C.:  
 24 Q. Okay, and so would it come on in the morning  
 25 and then go off, and then come back on, is

Page 11

1 that how it would work, or it would run  
 2 continuously during the -  
 3 MR. GOULDING:  
 4 A. It would run throughout the day. A  
 5 characteristic, I guess, with the loads during  
 6 the summertime is that they're flat. Once  
 7 they're up to our peak values, they tend to  
 8 stay there.  
 9 JOHNSON, Q.C.:  
 10 Q. I see.  
 11 MR. GOULDING:  
 12 A. So while we would have certainly sought  
 13 opportunities to take the CT off during the  
 14 day if our load got down below our - if the  
 15 load got down below a point that we could have  
 16 reliably taken the CT off. It actually turns  
 17 out that during the summertime once our load  
 18 is up there, it tends to stay up there, so  
 19 that's why we would have been operating, say,  
 20 at minimum 12 hours per day.  
 21 JOHNSON, Q.C.:  
 22 Q. So what happened then for Hydro no longer to  
 23 be in a position where it had to run the CT,  
 24 what changed in August?  
 25 MR. GOULDING:

Page 12

1 A. I guess, the actual change came about in  
 2 March. We had a -  
 3 JOHNSON, Q.C.:  
 4 Q. No, no, excuse me, so that we don't go down  
 5 the wrong tangent.  
 6 MR. GOULDING:  
 7 A. Okay, sorry.  
 8 JOHNSON, Q.C.:  
 9 Q. The CT was run in August to meet a perceived  
 10 need. What was it in August that got sorted  
 11 out so that you no longer needed to run the  
 12 CT?  
 13 MR. GOULDING:  
 14 A. Oh, I'm sorry. What happened is at the end of  
 15 the total plant outage at Holyrood, there  
 16 would have been a Holyrood unit available to  
 17 be run, so we would have started up the  
 18 Holyrood unit again.  
 19 JOHNSON, Q.C.:  
 20 Q. Okay, okay, and do you know - can you provide  
 21 an undertaking as to how many hours the CT did  
 22 run in August in order to meet the needs that  
 23 you're describing?  
 24 MR. GOULDING:  
 25 A. Yes.

Page 13

1 JOHNSON, Q.C.:

2 Q. And also the cost that was incurred for doing

3 that?

4 MR. GOULDING:

5 A. Sure.

6 MS. GLYNN:

7 Q. Noted on the record.

8 JOHNSON, Q.C.:

9 Q. I take it that ordinarily it would have been a

10 Holyrood unit that would be doing the work

11 that the CT was asked to do?

12 MR. GOULDING:

13 A. That's correct. Like I mentioned in my

14 testimony yesterday, we have certain levels of

15 Avalon load where it's more economic to

16 operate a Holyrood unit rather than the CT.

17 JOHNSON, Q.C.:

18 Q. Right.

19 MR. GOULDING:

20 A. Like, when we're in a place where we foresee

21 that we'd operate a CT more than 12 hours per

22 day, then we would operate a Holyrood unit.

23 JOHNSON, Q.C.:

24 Q. I see, but typically - let's say this coming

25 August, if the Holyrood units are running, you

Page 14

1 would use the Holyrood unit, not the CT,

2 right?

3 MR. GOULDING:

4 A. That's correct.

5 JOHNSON, Q.C.:

6 Q. And what Holyrood unit is typically employed

7 to deal with the summer load?

8 MR. GOULDING:

9 A. It would vary, I guess, depending on their

10 maintenance schedule. Typically, although

11 it's not firm and fast, ordinarily Unit 3

12 would be available during the summertime

13 operation.

14 JOHNSON, Q.C.:

15 Q. Would it be possible to provide an undertaking

16 indicating what it would have cost to have a

17 Holyrood unit running instead to do the work

18 that the CT did?

19 MR. GOULDING:

20 A. Yes.

21 MS. GLYNN:

22 Q. Noted on the record.

23 JOHNSON, Q.C.:

24 Q. Mr. Goulding, you mentioned yesterday that

25 Hydro has a trigger built around an economic

Page 15

1 break point of running the CT versus running

2 an extra Holyrood unit, and you said that

3 Hydro uses 12 hours of CT operation as the

4 break point, and I took from what you were

5 saying yesterday that if there's a period

6 where Hydro would be operating the CT for more

7 than 12 hours, then you would turn on the

8 Holyrood unit instead, and then you added "if

9 one was available, of course".

10 MR. GOULDING:

11 A. That's correct.

12 JOHNSON, Q.C.:

13 Q. And I'm just wondering - first of all, I take

14 it that if this unit had been available in

15 Holyrood this past summer in August, Hydro

16 would not have chosen to use the CT, right?

17 MR. GOULDING:

18 A. If the unit was available, then we would have

19 stayed the same course that we did for the

20 remainder of the summer and operate that unit,

21 but there is -

22 JOHNSON, Q.C.:

23 Q. And why would you have stayed the course then?

24 MR. GOULDING:

25 A. Because it would have been more economic to

Page 16

1 operate the unit versus the CT.

2 JOHNSON, Q.C.:

3 Q. Yes, right, and why couldn't the Holyrood unit

4 have been available in August?

5 MR. GOULDING:

6 A. Because there is a certain amount of

7 maintenance that's required at the Holyrood

8 plant every year that requires that all units

9 be shut. There's a lot of assets out there

10 that are common to all units that require that

11 all units be shut such that they can be

12 maintained and made ready for the upcoming

13 period where the operation at Holyrood is

14 starting to ramp up.

15 JOHNSON, Q.C.:

16 Q. So are you telling me that there's no way for

17 Hydro to avoid a planned shutdown of all three

18 units in the summertime in Holyrood?

19 MR. GOULDING:

20 A. There's no way to avoid a total plant outage

21 as there is maintenance that requires that all

22 units be turned off simultaneously.

23 JOHNSON, Q.C.:

24 Q. All the same time?

25 MR. GOULDING:

Page 17

1 A. Yes.

2 JOHNSON, Q.C.:

3 Q. But how did Hydro manage in other summers,

4 didn't they have a unit available for any

5 purpose?

6 MR. GOULDING:

7 A. We would have had a unit available for most -

8 there would have still been times during a

9 total plant outage that for a period a unit

10 would not have been available.

11 JOHNSON, Q.C.:

12 Q. Just to understand that, Hydro schedules the

13 maintenance, right?

14 MR. GOULDING:

15 A. That's correct.

16 JOHNSON, Q.C.:

17 Q. And this was planned maintenance that was

18 going on in August?

19 MR. GOULDING:

20 A. That's correct.

21 JOHNSON, Q.C.:

22 Q. When all three were down?

23 MR. GOULDING:

24 A. Uh-hm.

25 JOHNSON, Q.C.:

Page 18

1 Q. And are you saying that it would be impossible

2 to have one ready while there's planned

3 maintenance going on on the other two units?

4 MR. GOULDING:

5 A. I don't say it's impossible. I'm not - I'm

6 not overly familiar with what goes on inside

7 the Holyrood plant in terms of their

8 maintenance activities, but I can speak to the

9 fact that during previous summers, there were

10 periods that - although there were periods

11 during that summer that all three units would

12 not have been available because there are

13 activities that they undertake that requires

14 that all three units be made unavailable.

15 JOHNSON, Q.C.:

16 Q. Okay, so who's knowledgeable about what's

17 doable and not as regards Holyrood maintenance

18 of the units?

19 MR. GOULDING:

20 A. I would say the most knowledgeable would be

21 the folks inside the Holyrood plant

22 themselves.

23 JOHNSON, Q.C.:

24 Q. I see. Did you all or members of your panel,

25 any one of you, have input as to the decision

Page 19

1 to run the CT in August at Holyrood?

2 MR. GOULDING:

3 A. Yes, that decision would have certainly been

4 made through our area. The difference this

5 August, I guess, as opposed to previous

6 summers would have been again our learnings

7 from our March 4th event where we would have -

8 we wouldn't have ran our gas turbines during

9 the total plant outage of previous summers.

10 The gas turbine would have been available and

11 ready, but we wouldn't have started the unit

12 until we got into an outage that required it.

13 JOHNSON, Q.C.:

14 Q. So you're running it just in case?

15 MR. GOULDING:

16 A. That's correct.

17 JOHNSON, Q.C.:

18 Q. And is there a lack of confidence in the

19 ability to turn this CT on and off and get it

20 going in a reasonable period of time?

21 MR. GOULDING:

22 A. It's not a lack of confidence. I guess, like,

23 a part of this learning and where we are, is

24 we don't operate the systems such that a

25 single element outage, such as a transformer -

Page 20

1 I'm sorry, a transmission line or a generator

2 outage is going to result in a customer

3 impact, so we have the CT on in advance now to

4 respond to it.

5 JOHNSON, Q.C.:

6 Q. I see, and is that a utility practice followed

7 elsewhere to take that type of action?

8 MR. GOULDING:

9 A. I don't know what research was actually done

10 in our area, but certainly, you know, I would

11 expect that most jurisdictions would not

12 operate their power system such that they're

13 exposed to an N-1 outage. Now other

14 jurisdictions may have other ways to respond

15 to it. Like, where we're isolated, we don't

16 have the opportunity here to draw on our

17 neighbours, and, you know, other jurisdictions

18 may have a transmission system that's robust

19 enough to withstand a single element outage,

20 so I would expect that most jurisdictions

21 would operate in the same vein, but in terms

22 of how they respond, whether it's standby or

23 reserve sharing arrangements, that sort of

24 thing, I don't know.

25 (9:30 a.m.)

Page 21

1 JOHNSON, Q.C.:

2 Q. You indicated that Hydro has, I guess, made a

3 calculation of an assessment that there is a

4 12 hour break point, and when was this studied

5 and settled upon as being the break point?

6 MR. GOULDING:

7 A. That would have been following the March 4th

8 event that we undertook a review, and at that

9 point we realized that it was prudent to start

10 our standby units in advance of outages that

11 would result in a customer outage. So what we

12 did is we took a typical load shape during the

13 period of, say, three unit operation, two

14 unit, one unit, and what we did is we -

15 there's a certain threshold in this imposed on

16 that load shape that we determined, you know,

17 it would be more economic to operate a CT

18 during certain periods than it would be a

19 Holyrood unit, and that threshold is now our -

20 the point that we determine and we have daily

21 reliability meetings where we have a one week

22 outlook on our load and reserves, and part of

23 our reliability assessment is to assess the

24 Avalon reserves. So at that point, we advise

25 our gas turbine folks if we need to operate

Page 22

1 the CT during periods of that week.

2 JOHNSON, Q.C.:

3 Q. So in terms of the - there's been an actual

4 calculation done supporting the 12 hour rule,

5 if you will?

6 MR. GOULDING:

7 A. There has been load flows done, yes.

8 JOHNSON, Q.C.:

9 Q. Okay, and could Hydro file that analysis

10 showing how that break even was arrived - or

11 that break point was arrived at?

12 MR. GOULDING:

13 A. I think that can be filed.

14 JOHNSON, Q.C.:

15 Q. Thank you.

16 MS. GLYNN:

17 Q. Noted on the record.

18 JOHNSON, Q.C.:

19 Q. Okay, and has Hydro, like, actually

20 established a policy that's been reduced to

21 writing as regards when the CT is to be used?

22 MR. GOULDING:

23 A. We have - again I go back to our March 4th

24 event. Part of the learnings there were we

25 developed a protocol for Avalon reserves that

Page 23

1 basically mirrors the protocol that was

2 already in place for island reserves. So in

3 that there's a step by step sequence that our

4 ECC operators follow in the event that there's

5 reserve issues on the Avalon. So they would

6 follow that sequence and as part of that

7 sequence would be the start up of our standby

8 on the Avalon.

9 JOHNSON, Q.C.:

10 Q. So if there is something in writing on that,

11 can that be provided as well?

12 MR. GOULDING:

13 A. Yes, we can file certainly that instruction.

14 JOHNSON, Q.C.:

15 Q. All right.

16 MS. GLYNN:

17 Q. Noted on the record.

18 JOHNSON, Q.C.:

19 Q. Thank you very much. I think this was you as

20 well yesterday, Mr. Goulding, and that was a

21 discussion about recovering variances in costs

22 incurred in connection with the fuel cost

23 associated with operating the CT. Do you

24 recall a discussion of there being a

25 \$500,000.00 band, etc, and Newfoundland Power

Page 24

1 asked you for undertakings as to how long it

2 would take you to get up to \$500,000.00, etc,

3 and Mr. O'Brien questioned what incentive

4 would Hydro be left with other than the

5 \$500,000.00, what incentive it would be left

6 with to dispatch resources more efficiently,

7 you know, once you hit the \$500,000. 00

8 threshold, and I think in your reply you

9 mentioned that Hydro has a least cost mandate,

10 etc, etc, but I take it that would not be to

11 say that you would disagree that the actual

12 financial incentive is taken away by way of

13 this mechanism other than the \$500,000. 00

14 exposure?

15 MR. GOULDING:

16 A. I think the financial exposure is certainly

17 taken away.

18 JOHNSON, Q.C.:

19 Q. Yeah.

20 MR. GOULDING:

21 A. I speak for the operators of the power system,

22 like, we do have a mandate to operate our

23 power system as reliably and economic as is

24 possible, so certainly we would - even in

25 light of a deadband, a deferral account, we

Page 25

1 would still have our daily reliability  
 2 assessments and we would still have a keen eye  
 3 out towards what's the best way to reliably  
 4 meet our criteria, and what's the most  
 5 economic way, and this is why we went down the  
 6 road of developing these thresholds or levels  
 7 of load on the Avalon that guide us to  
 8 economically operate the system.  
 9 JOHNSON, Q.C.:  
 10 Q. And customers are paying you guys to actually  
 11 go through analysis like that, manage those  
 12 considerations presently, right?  
 13 MR. GOULDING:  
 14 A. That's correct. It's essentially a cost of  
 15 reliably operating the power system. I would  
 16 say that it's really - it's a different  
 17 generating unit, but it's not a lot different  
 18 than where we've been, say, in the last five  
 19 or six years or seven years since we've had  
 20 Holyrood reduced to minimum operation. You  
 21 know, for all intents and purposes, the driver  
 22 for operating Holyrood units, although there  
 23 may be portions of the energy that would have  
 24 been required to augment our hydro generation  
 25 and storages, you know, the primary driver for

Page 26

1 operating Holyrood units for the last six or  
 2 seven years has been from a reliability  
 3 standpoint as well. So that has added to  
 4 increased fuel costs that have flowed through  
 5 the RSP as well.  
 6 JOHNSON, Q.C.:  
 7 Q. Yeah, but I take it, and I just want to  
 8 clarify, that the financial incentive in the  
 9 financial sense is not there with the deferral  
 10 account beyond the \$500,000.00?  
 11 MR. GOULDING:  
 12 A. I speak from an operating perspective -  
 13 JOHNSON, Q.C.:  
 14 Q. I understand.  
 15 MR. GOULDING:  
 16 A. And we would certainly maintain our mandate to  
 17 make sure that the right units are on at the  
 18 right time, and that would ultimately make  
 19 sense from a financial perspective as well.  
 20 JOHNSON, Q.C.:  
 21 Q. Just turning for a second to black start, Mr.  
 22 Humphries, and I think this would be more for  
 23 you. You indicated yesterday that the intent  
 24 of the new 123 megawatt CT unit is to provide  
 25 black start, but you indicated that has not

Page 27

1 been tested and proven to this point.  
 MR. HUMPHRIES:  
 2 A. That's correct.  
 3 JOHNSON, Q.C.:  
 4 Q. And who's responsible for testing and proving  
 5 a black start capability?  
 6 MR. HUMPHRIES:  
 7 A. Well, it would be a part of the asset owner, a  
 8 combination of the asset owner and arranging  
 9 it with system operations to find a window  
 10 when it can adequately be tested.  
 11 JOHNSON, Q.C.:  
 12 Q. Okay, and the asset owner is Hydro?  
 13 MR. HUMPHRIES:  
 14 A. Yes.  
 15 JOHNSON, Q.C.:  
 16 Q. And is that a big process to get that testing  
 17 and proving done?  
 18 MR. HUMPHRIES:  
 19 A. Well, it's turned into a bit of a process this  
 20 summer because in order to test it, (a) we  
 21 needed a unit in Holyrood to be able to test,  
 22 to start, and with the maintenance windows  
 23 that we've had this year, the opportunities  
 24 were limited to have a unit available that we

Page 28

1 could test the turbine, and in addition to  
 2 that because to full test the unit, we need to  
 3 put isolations on the system to ensure that  
 4 there was no support coming from the system to  
 5 start the turbine, and so that involved  
 6 opening certain 230 kV transmission lines and  
 7 theoretically putting the system at a level of  
 8 exposure. We were in a situation through most  
 9 of the summer where we had one unit running at  
 10 Holyrood and the other two out on maintenance.  
 11 We went - there was an opportunity - the first  
 12 opportunity would have been with the restart  
 13 of Unit 2, I believe - sorry, number 3 when it  
 14 came back from maintenance, and that would  
 15 have been in August. Also at those times  
 16 there was a number of system elements on the  
 17 Avalon Peninsula out of service for  
 18 maintenance, and when we got to the point of  
 19 the window of scheduling that start up, it was  
 20 not safe to actually take the transmission out  
 21 of service, do the black start, we were  
 22 putting customer load at risk. The next  
 23 window of opportunity would have been in last  
 24 September, the 25th or 26th of September, when  
 25 Unit 2 was coming back, and that window was

Page 29

1 lined up, all our maintenance schedules or  
 2 outage schedules lined up for it to happen,  
 3 and then we ran into - the bottom line is we  
 4 got to September 25th and Unit 2 was not  
 5 available to come back. It was five or six  
 6 days late coming back, so then we had to make  
 7 a decision of - because the 25th window was  
 8 scheduled around certain transmission elements  
 9 coming back and taking others out to finish  
 10 the winter preparedness maintenance, so I had  
 11 to make the decision to defer that maintenance  
 12 or defer the black start test, because when  
 13 Unit 2 came back, actually got back ready to  
 14 start, which was just very recently, the  
 15 transmission system had equipment out there,  
 16 and we could no longer take the risk of doing  
 17 the test.  
 18 JOHNSON, Q.C.:  
 19 Q. So what's the current assessment as to when  
 20 this can be -  
 21 MR. HUMPHRIES:  
 22 A. Well, we're still looking for a window, but  
 23 the opportunity of getting a window between  
 24 now and the spring is limited.  
 25 JOHNSON, Q.C.:

Page 30

1 Q. Right, yes, okay.  
 2 MR. HUMPHRIES:  
 3 A. It's very high risk.  
 4 JOHNSON, Q.C.:  
 5 Q. Okay, so sometime probably late spring or  
 6 summer?  
 7 MR. HUMPHRIES:  
 8 A. Hopefully, it will be in the spring as units  
 9 start to come down at Holyrood again.  
 10 JOHNSON, Q.C.:  
 11 Q. And, I guess, is there any reason to think  
 12 that it won't be able to provide black start  
 13 capability?  
 14 MR. HUMPHRIES:  
 15 A. Not that we're aware of. It's just that we  
 16 haven't been able to test it.  
 17 JOHNSON, Q.C.:  
 18 Q. And, I guess, that would cancel out - once  
 19 that's been proven and tested, that would  
 20 cancel out the value of the eight 2 megawatt  
 21 diesel units as regards a black start  
 22 function?  
 23 MR. HUMPHRIES:  
 24 A. Yes.  
 25 JOHNSON, Q.C.:

Page 31

1 Q. Okay, and, I guess, the plan all along in  
 2 terms of - there was discussion yesterday  
 3 about planned additions of a 50 megawatt unit  
 4 over a number of - referenced in a number of  
 5 reports. Was that always assumed by Hydro to  
 6 also have black start capability and to be  
 7 situated -  
 8 MR. HUMPHRIES:  
 9 A. Yes, well, back in 2011/2012, I guess, when  
 10 the whole issue of black start became a  
 11 problem at Holyrood, the plan was that we knew  
 12 we were going to be buying this new combustion  
 13 turbine and whether it was 50 megawatts or 123  
 14 megawatts, it would ultimately serve as a  
 15 black start source as well.  
 16 (9:45 a.m.)  
 17 JOHNSON, Q.C.:  
 18 Q. Right, okay.  
 19 JOHNSON, Q.C.:  
 20 Q. Mr. Humphries, you referred yesterday to  
 21 changes in load requirements. You referenced  
 22 Newfoundland Power's latest GRA filing in that  
 23 regard in terms of their load?  
 24 MR. HUMPHRIES:  
 25 A. Yes.

Page 32

1 JOHNSON, Q.C.:  
 2 Q. And you also indicated that Vale's load was  
 3 changed, but you didn't elaborate on that.  
 4 Could you elaborate on what degree of change  
 5 and in what direction?  
 6 MR. HUMPHRIES:  
 7 A. Well, both Newfoundland Power and Vale loads  
 8 are in a downward direction. Newfoundland  
 9 Power's load is approximately 20 to 25  
 10 megawatts lower in the 2017/2018 time frame  
 11 that we have the concern about, I guess, for  
 12 reserve levels. With Vale, we're seeing -  
 13 they're just finishing up the first year of  
 14 the three year ramp up, and the indications  
 15 are that they're finding that they are  
 16 achieving higher production levels at lower  
 17 loads than they initially anticipated, so the  
 18 ramp up is still going to continue over the  
 19 next two years, but effectively at the end of  
 20 the day the full load of the plant will be in  
 21 the range of 25 megawatts, 20/25 megawatts  
 22 lower than we had previously anticipated, and  
 23 through the ramp up period, particularly  
 24 through '16 and the first quarter of '17,  
 25 we're close to 30 megawatts below where we had



Page 33

1 anticipated we would have been previously.  
 2 JOHNSON, Q.C.:  
 3 Q. Okay. In terms of Vale's situation, now  
 4 they're looking at achieving higher production  
 5 levels at the lower loads, to what degree is  
 6 Hydro involved with Vale in the early stages  
 7 of arriving at a forecast in these regards  
 8 that can be relied upon, so that you're not  
 9 seeing this change happen sort of  
 10 unexpectedly?  
 11 MR. HUMPHRIES:  
 12 A. No, no, we get regular forecast updates from  
 13 Vale, and through the ramp up period on a  
 14 monthly basis they notify us what their  
 15 anticipated power and order will be, and, you  
 16 know, we had been moving along on a path  
 17 consistent with - pretty well consistent for  
 18 the past twelve months, I guess, but just very  
 19 recently, last week, we got our latest update  
 20 and we got this indication that there's going  
 21 to be a change, right, but we do have a  
 22 forecast of anticipated ramp up out through  
 23 the 2018 period.  
 24 JOHNSON, Q.C.:  
 25 Q. I guess, what I was getting at more so along

Page 34

1 the lines of, you know, is Hydro much involved  
 2 in the front end in terms of evaluating the  
 3 reasonableness of the what they feel they're  
 4 going to be putting on the system, you know,  
 5 when they - because this is obviously a  
 6 significant or appears to be a significant  
 7 decrease from what had been expected  
 8 initially?  
 9 MR. HUMPHRIES:  
 10 A. Yeah, you know, we have open communications  
 11 with them and we can only base it on the  
 12 information they're providing us. We can't  
 13 get in and go an analysis on what's going on  
 14 inside the plant and what equipment is coming  
 15 on and those types of things.  
 16 JOHNSON, Q.C.:  
 17 Q. Yes, okay. Mr. Goulding, in relation to the  
 18 fuel conversion factor at Holyrood, Mr.  
 19 O'Brien asked whether you were aware of any  
 20 other jurisdictions with such a deferral  
 21 account, and you indicated that you were not,  
 22 and just to ask, I don't know if there's other  
 23 members of the panel who might be able to  
 24 indicate whether they would be aware of  
 25 jurisdictions with such a deferral account?

Page 35

1 MR. MOULTON:  
 2 A. No.  
 3 MR. STRATTON:  
 4 A. No.  
 5 MR. HUMPHRIES:  
 6 A. I'm personally not aware.  
 7 JOHNSON, Q.C.:  
 8 Q. Nobody is, okay. Just on this deferral  
 9 account for the fuel conversion factor, Hydro  
 10 has never had such a deferral account and we  
 11 know that Holyrood has a generating life span  
 12 ahead of it that's, you know, after 40 odd  
 13 years is coming to a close, and what's the  
 14 need now or the impetus after all these years  
 15 of not having deferral account, but now  
 16 suddenly Hydro requires one?  
 17 MR. GOULDING:  
 18 A. I guess, in the past five to six years since  
 19 our last GRA, we have seen a significant  
 20 decline in Holyrood fuel conversion rate  
 21 because of a number of factors that I  
 22 mentioned earlier. So, yes, the exposure has  
 23 certainly come to the forefront in the last  
 24 few years, and in particular, in the last two  
 25 years or so, where there's been a large impact

Page 36

1 to Hydro's bottom line because of the lower  
 2 fuel conversion rate relative to the test  
 3 year. So certainly if the last two years are  
 4 an indication, then we wouldn't want this  
 5 exposure even to the limited horizon that we  
 6 expect to have remaining at Holyrood.  
 7 JOHNSON, Q.C.:  
 8 Q. But to put that somewhat in perspective, I  
 9 mean, you talk about changes in the fuel  
 10 conversion factor relative to test year, but,  
 11 I mean, my goodness, you haven't been in in  
 12 years. I mean, you know, wouldn't that have  
 13 been a response that Hydro could have made as  
 14 well in terms of coming in on a more regular  
 15 basis so that the heat rate or fuel conversion  
 16 rate is not getting out of whack with the test  
 17 year?  
 18 MR. GOULDING:  
 19 A. Any time that we set a fixed conversion rate,  
 20 certainly that exposure is there. The reason  
 21 why, I guess, we haven't been in in years,  
 22 that's been discussed with past panels, so it  
 23 certainly is not in my area, I guess, to delve  
 24 into why we haven't been in in past years.  
 25 JOHNSON, Q.C.:

Page 37

1 Q. Yes.

2 MR. GOULDING:

3 A. But I can speak, you know, from an operations

4 perspective, and we keep track of the fuel

5 conversion rates for our monthly and annual

6 reports, and we track variances and certainly,

7 you know, we have seen a significant decline

8 in that rate over the last, say, since 2009.

9 JOHNSON, Q.C.:

10 Q. And you referenced a number of factors that

11 have come to the forefront that has increased

12 the exposure to Hydro, and, I guess, would

13 some of those factors have to do with over the

14 past recent years a less reliance on Holyrood,

15 so it's not operating as much, would that be

16 right?

17 MR. GOULDING:

18 A. It's not operating as much from an energy

19 perspective because, you know, like, with our

20 mix of our own generation plus the purchases,

21 and the introduction of new power purchases,

22 then we haven't had to rely on Holyrood as

23 much from an energy perspective, but certainly

24 from a reliability perspective, we have been

25 relying on Holyrood as much, if not more, with

Page 38

1 the growth of load on the Avalon, and from a

2 reliability perspective, although the units

3 are on, we are able to reduce the unit load to

4 its minimum, which makes sense from a fuel

5 expense standpoint, but because we are

6 operating it at minimum with all things being

7 equal, Holyrood unit is more efficient at

8 higher levels of loading, so all this is where

9 the issue is.

10 JOHNSON, Q.C.:

11 Q. But, I guess, would you agree that Holyrood is

12 now going to be entering into a phase of more

13 use, more increased use for energy

14 requirements, more representative of periods

15 prior to the last three or four years, would

16 that be correct?

17 MR. GOULDING:

18 A. Certainly in our test year, we have - I guess,

19 we have normalized the hydrology. We've

20 normalized our hydraulic generation, such that

21 it's based on, for all intents and purposes,

22 average in-flows. We've used average power

23 purchases and then the level of production

24 requirement from Holyrood then would fall out

25 of that to meet the balance of the load, but

Page 39

1 that's a forecast and things do change. You

2 know, like, we want to see our hydraulic

3 generation higher than our forecast because

4 that obviously then affects the rate payer, we

5 save on fuel.

6 JOHNSON, Q.C.:

7 Q. Yes, I understand that, but I thought it was

8 common ground that we are, in fact, expecting

9 Holyrood to be used for energy needs more so

10 in 2015, 2016, 2017, than we have been, say,

11 in 2010, 2011, 2012, isn't that true?

12 MR. GOULDING:

13 A. That's correct.

14 JOHNSON, Q.C.:

15 Q. Yes.

16 MR. GOULDING:

17 A. And because of the higher energy needs, we are

18 forecasting a fuel efficiency factor that's

19 higher than what we would have experienced in

20 the past five years.

21 JOHNSON, Q.C.:

22 Q. And, I guess, my point being that you're now

23 entering into a period with Holyrood usage

24 that is more representative of how Holyrood

25 used to be used, you know, prior to the last,

Page 40

1 say, four or five years ago?

2 MR. GOULDING:

3 A. That's correct.

4 JOHNSON, Q.C.:

5 Q. Yes.

6 MR. GOULDING:

7 A. That's correct.

8 JOHNSON, Q.C.:

9 Q. There was a reference as well yesterday, and I

10 think this is for Mr. Humphries, of money had

11 been allocated in the test year to engage a

12 consultant to advise Hydro on generation

13 adequacy requirements post-2018?

14 MR. HUMPHRIES:

15 A. Yes, that's correct.

16 JOHNSON, Q.C.:

17 Q. And, I guess, we touched on some of that

18 discussion earlier here this morning in terms

19 of when you're going to be pitching on new

20 standards, etc, but I take it the consultant

21 has not yet been engaged and, I guess, I would

22 observe that this amount of money was expected

23 to be spent at least as far back as November

24 of 2014 when Hydro made its amended filing,

25 and now we're in practically November 2015,

Page 41

1 and there's been no consultant engaged, and, I  
 2 guess, I'm not getting the sense that there's  
 3 a very good chance that Hydro will actually be  
 4 billed and expending money on this consultant  
 5 for this amount of money. Would that be a  
 6 fair gathering?  
 7 MR. HUMPHRIES:  
 8 A. Like I said yesterday, there's a hope we're  
 9 going to start to engage this customer this  
 10 year, and definitely the work will definitely  
 11 flow over into 2016. The work will be done  
 12 and the scope of the work, the intent is it  
 13 will be a consultant that provides the  
 14 software that we use and the intent is to get  
 15 direction from them on the proper way to model  
 16 the system in an interconnected environment  
 17 and the proper inputs for it, so we will be  
 18 generating the inputs obviously through 2016,  
 19 but there's some upfront work that we could  
 20 move forward this year in actually getting the  
 21 models to start to put those together.  
 22 JOHNSON, Q.C.:  
 23 Q. Those are -  
 24 MR. HUMPHRIES:  
 25 A. But it is late, yes, I agree, it is late.

Page 42

1 JOHNSON, Q.C.:  
 2 Q. How much money has been set aside or allocated  
 3 for that?  
 4 MR. MOULTON:  
 5 A. I think the sum is about \$70,000.00.  
 6 JOHNSON, Q.C.:  
 7 Q. Okay, all right. There was transmission  
 8 loses, there was some discussion of that  
 9 yesterday, and I understand the filing  
 10 reflects looking at an average of transmission  
 11 losses over a ten year period. I'd be correct  
 12 in that?  
 13 MR. STRATTON:  
 14 A. Yes, the losses that were used in the GRA test  
 15 year forecast would have been a ten year  
 16 average loss rate.  
 17 JOHNSON, Q.C.:  
 18 Q. Yes, and, I guess, there was a question  
 19 yesterday, and I think an undertaking to  
 20 determine whether Hydro had always been using,  
 21 you know, the ten year approach, and I know  
 22 it's under an undertaking, but I'm wondering  
 23 is there any further information on that this  
 24 morning?  
 25 MR. STRATTON:

Page 43

1 A. Not at this point, no.  
 2 (10:00 a.m.)  
 3 JOHNSON, Q.C.:  
 4 Q. All right, and I'm just interested in whether  
 5 or not, using five more recent years versus  
 6 years that go back further period, whether we  
 7 would - would it be reasonable to think that  
 8 the more recent period, five years, would be  
 9 more indicative of transmission losses, say,  
 10 in the test year?  
 11 MR. STRATTON:  
 12 A. I think Kevin might be help us out. I mean,  
 13 the data that I work from is historically  
 14 based. It's not forward looking in the sense  
 15 of what's going to change in our system and  
 16 where the energy is going to come from on a  
 17 production basis. What affects losses will be  
 18 the amount of energy that we - what affects it  
 19 greatly would be how much production is out of  
 20 Holyrood which is close to the load centre,  
 21 and how much hydraulic energy is produced, and  
 22 how much of that energy has to be transmitted  
 23 from the stations out in central and Bay  
 24 d'Espoir into the Avalon. I mean, that's why  
 25 ultimately it greatly affects the loss rates.

Page 44

1 JOHNSON, Q.C.:  
 2 Q. Yes. I guess, I wasn't - I think what I was  
 3 getting at whether the more recent experience  
 4 would be more indicative of what can be  
 5 expected by way of transmission losses?  
 6 MR. HUMPHRIES:  
 7 A. Can I just -  
 8 JOHNSON, Q.C.:  
 9 Q. Yeah.  
 10 MR. HUMPHRIES:  
 11 A. What do you mean by the more recent  
 12 experiences?  
 13 JOHNSON, Q.C.:  
 14 Q. Say, a five year average versus -  
 15 MR. HUMPHRIES:  
 16 A. Yeah, but, I mean, when we look at the five  
 17 years, I think, you know, on a - our actual  
 18 generation mix of Holyrood versus Bay d'Espoir  
 19 has not changed significantly in those periods  
 20 that we - and as Mr. Stratton has said, you  
 21 know, the losses, the transmission losses, are  
 22 greatly affected by use from Holyrood, and two  
 23 factors; (a) whether Holyrood - just having  
 24 Holyrood on providing voltage support reduces  
 25 losses, and obviously Holyrood is supplying -

Page 45

1 the more load it supplies, the lower the  
 2 losses as well. When we look through the past  
 3 five years, I wouldn't expect the difference  
 4 to be material. There may be some small  
 5 differences, but I wouldn't expect it to be  
 6 material.  
 7 JOHNSON, Q.C.:  
 8 Q. As between the five and the ten?  
 9 MR. HUMPHRIES:  
 10 A. Yes.  
 11 JOHNSON, Q.C.:  
 12 Q. Just maybe if Hydro wouldn't mind producing an  
 13 undertaking indicating what the differences  
 14 would be between the five and the ten. We  
 15 have the ten obviously in reply to NP-297.  
 16 MS. GLYNN:  
 17 Q. Noted on the record.  
 18 JOHNSON, Q.C.:  
 19 Q. As regards winter readiness, Mr. Humphries, I  
 20 know there's going to be some undertakings  
 21 filed in response to Mr. O'Brien's questions  
 22 arising out of the report that was discussed  
 23 with you yesterday, but I guess just to ask  
 24 you I guess the rather blunt question, do  
 25 customers in your judgment have anything to be

Page 46

1 concerned with in terms of winter readiness  
 2 come December 1st?  
 3 MR. HUMPHRIES:  
 4 A. To my knowledge now, no, I do not think so.  
 5 JOHNSON, Q.C.:  
 6 Q. No, and this -- how engaged are you in the  
 7 winter readiness file as it were?  
 8 MR. HUMPHRIES:  
 9 A. Well, I think -- I get regular updates, and as  
 10 we said yesterday, we have daily and weekly  
 11 meetings on progress, but when we get into the  
 12 actual detail of the milestones on the various  
 13 portions of work, like the schedule we looked  
 14 at yesterday, I don't have a direct line of  
 15 sight on that, other than the fact that  
 16 through the review, we're still advised that,  
 17 you know, the in-service or completion dates  
 18 are either on target or not. So I do not have  
 19 the level of exposure and knowledge, I guess,  
 20 that Mr. Henderson would have, get on a day-  
 21 to-day basis from his direct reports who are  
 22 actually executing the winter readiness work.  
 23 JOHNSON, Q.C.:  
 24 Q. Okay. Just get you to comment upon, you know,  
 25 we've now, since the events of early 2014, you

Page 47

1 know, there's been quite a focus on the winter  
 2 readiness piece and the reporting and bringing  
 3 some, as I would term it, some discipline to  
 4 it. Has this been -- has that been helpful to  
 5 the folks at Hydro in terms of, I guess,  
 6 bringing a discipline to the winter readiness  
 7 issue?  
 8 MR. HUMPHRIES:  
 9 A. I think so, yes. You know, it's -- I go back  
 10 to my planning background, I guess, and Mr.  
 11 Stratton from a forecasting perspective, we  
 12 always -- this issue of when winter really  
 13 starts and when you can expect winter to  
 14 happen, we probably went through a period  
 15 where December, January, you're into late  
 16 January, early February before winter really  
 17 started and load started to increase, but  
 18 there was always knowledge that it can happen  
 19 in December, and you know, I think the events  
 20 of 2014 obviously just settled that home and  
 21 so there is just -- there is a new discipline  
 22 of being prepared and ensure that December 1st  
 23 is December 1st.  
 24 JOHNSON, Q.C.:  
 25 Q. Yes, yeah. So there's -- as you sit there

Page 48

1 today, there's nothing that would make you  
 2 think that we're going to see the green lights  
 3 on those various assets turned yellow or red  
 4 before December?  
 5 MR. HUMPHRIES:  
 6 A. Not that I'm aware of right now.  
 7 JOHNSON, Q.C.:  
 8 Q. As regards contingency planning in relation to  
 9 a delay in the Muskrat Falls generation or the  
 10 links -- there was some discussion of that  
 11 yesterday, and does Hydro intend to file what  
 12 the contingency plan would be that can be  
 13 relied upon in the event of, you know, the  
 14 generation not happening on time or the links  
 15 not being on time and how power is going to be  
 16 sourced?  
 17 MR. HUMPHRIES:  
 18 A. Well, what we agreed on to this stage is that  
 19 we will provide these annual updates between  
 20 now and 2018 and obviously if these updates  
 21 reflect an area of concern, yes, we will  
 22 develop contingency plans or identify the  
 23 plans for mitigating those shortfalls.  
 24 JOHNSON, Q.C.:  
 25 Q. Okay.

Page 49

1 MR. HUMPHRIES:  
 2 A. But you know, the recent update that we filed  
 3 in September, again while it met the criteria  
 4 at the time that we'd set, it was pretty lean  
 5 out to the interconnection date and we did  
 6 express some concern around that and the  
 7 consideration of the black start diesels. The  
 8 new information that we've gotten just this  
 9 week, sort of we backed off a little bit on  
 10 that, you know, the pressure is off, but  
 11 things can change and we know that, and so we  
 12 will be monitoring and looking at what these  
 13 mitigations and contingency plans will be, but  
 14 as I said, we still anticipate the  
 15 interconnections happening in 2017 and if they  
 16 happen, we do have a firm ability of 100  
 17 megawatts there and that would bridge us  
 18 through a number of years, if it had to. But  
 19 yes, it's always on our minds and we're always  
 20 looking at it.  
 21 JOHNSON, Q.C.:  
 22 Q. Just I want to ask about the -- there was some  
 23 discussion that I had with Mr. Henderson and I  
 24 think at the time some of it was deferred to  
 25 you, Mr. Humphries. That had to do with the

Page 50

1 supply agreement with Corner Brook Pulp and  
 2 Paper and the energy -- the system energy  
 3 savings that are arising from that  
 4 arrangement.  
 5 MR. HUMPHRIES:  
 6 A. Yes.  
 7 JOHNSON, Q.C.:  
 8 Q. And I think the system energy savings that  
 9 were said to be arising were in the vicinity  
 10 of about \$520,000. Is that your understanding  
 11 as well?  
 12 MR. HUMPHRIES:  
 13 A. Yes. I'll refer to Mr. Goulding on that.  
 14 JOHNSON, Q.C.:  
 15 Q. Okay.  
 16 MR. HUMPHRIES:  
 17 A. He has the data and the information on that.  
 18 JOHNSON, Q.C.:  
 19 Q. Oh, he has the data, yeah.  
 20 MR. GOULDING:  
 21 A. There's a lot of information out there in RFIs  
 22 now on this agreement. I was wondering if I  
 23 could take the opportunity just to step down  
 24 through it, just the Coles notes version.  
 25 JOHNSON, Q.C.:

Page 51

1 Q. Certainly.  
 2 MR. GOULDING:  
 3 A. Okay. Jenny, are you able to call up Table 4  
 4 of exhibit -- no, I'm sorry, Table 8 of  
 5 Exhibit 4?  
 6 MS. GRAY:  
 7 Q. Yes.  
 8 JOHNSON, Q.C.:  
 9 Q. You obviously read the transcript from Mr.  
 10 Henderson.  
 11 MR. GOULDING:  
 12 A. So I guess we filed our -- our latest report  
 13 regarding the benefits of this agreement was  
 14 filed with our Amended GRA Application and  
 15 it's probably version two or three, I guess.  
 16 So, just some background. We -  
 17 JOHNSON, Q.C.:  
 18 Q. So what is this document, just for the record?  
 19 MR. GOULDING:  
 20 A. Oh, I'm sorry, this is the benefits table  
 21 that's in Exhibit 4 of the GRA application  
 22 that's related to the analysis of the piloted  
 23 agreement with Corner Brook Pulp and Paper.  
 24 So, this agreement started in 2009. The  
 25 premise of the agreement was to provide with -

Page 52

1 - to provide Corner Brook Pulp and Paper the  
 2 opportunity to more efficiently utilize their  
 3 generation and the idea being, I guess, prior  
 4 to the agreement, Corner Brook Pulp and Paper  
 5 used to operate its generation at Deer Lake  
 6 Power to essentially follow mill load because  
 7 any time that their power consumption from  
 8 Hydro went over their scheduled power on  
 9 order, it would be subject to non-firm rates  
 10 and the non-firm rate was basically determined  
 11 by the highest cost power source, which was,  
 12 for all intents and purposes, Holyrood. So  
 13 this agreement gave or gives Corner Brook Pulp  
 14 and Paper a credit for the generation and that  
 15 credit, added to their power on order, is  
 16 meant to match their total mill load.  
 17 So following the agreement, Corner Brook  
 18 Pulp and Paper is no longer incurring non-firm  
 19 power costs for levels of power from Hydro  
 20 that's above their power on order and then  
 21 because they don't have to chase or follow  
 22 mill load, then that gives them the  
 23 opportunity to operate their units at their  
 24 most efficient points. From a system  
 25 perspective, it makes sense to better utilize

Page 53

1 the resources that are out there in the end to  
 2 minimize what's required from Holyrood.  
 3 JOHNSON, Q.C.:  
 4 Q. And from a system perspective, I take it there  
 5 are system energy savings?  
 6 MR. GOULDING:  
 7 A. That's correct.  
 8 JOHNSON, Q.C.:  
 9 Q. And what are they on an annual basis?  
 10 MR. GOULDING:  
 11 A. In our last review, we got some data and it's  
 12 outlined in this report. We estimate the  
 13 system energy savings from the improved  
 14 utilization as about 3.6 gigawatt hours  
 15 annually.  
 16 JOHNSON, Q.C.:  
 17 Q. And what's that in money savings?  
 18 MR. GOULDING:  
 19 A. Well, this is where this table, I guess,  
 20 should help to explain things. So, we were  
 21 basically asked to provide an analysis of the  
 22 savings since the implementation of the  
 23 agreement. So, really the Holyrood fuel costs  
 24 reduction, that 3.875 million dollars, that is  
 25 the savings identified corresponding to that

Page 54

1 3.6 gigawatt hours annually.  
 2 (10:15 a.m.)  
 3 JOHNSON, Q.C.:  
 4 Q. Could I just refer you to CA-288 for a moment?  
 5 MR. GOULDING:  
 6 A. Yes.  
 7 JOHNSON, Q.C.:  
 8 Q. Just line 21. Actually, starting at line 18.  
 9 Indicates "the table below outlines the  
 10 potential for annual savings in fuel costs  
 11 based on 2014 actual fuel consumption prices  
 12 and most Hydro's most recent price forecast,  
 13 March 2015, for the years 2015 to '17. As  
 14 indicated, there has been a modest reduction  
 15 of potential savings to approximately \$520,000  
 16 annually.  
 17 MR. GOULDING:  
 18 A. That's correct.  
 19 JOHNSON, Q.C.:  
 20 Q. Okay. So just put that number into context  
 21 with the 3.7 million dollar number you just  
 22 referred to.  
 23 MR. GOULDING:  
 24 A. This here would be your one-year number.  
 25 JOHNSON, Q.C.:

Page 55

1 Q. One-year number, yes.  
 2 MR. GOULDING:  
 3 A. Whereas the 3.875 was the five-year to six-  
 4 year number.  
 5 JOHNSON, Q.C.:  
 6 Q. Right. And in terms of the savings that  
 7 Corner Brook Pulp and Paper will have annually  
 8 in 2016 and 2017, could we turn to CA-NLH-059?  
 9 MS. GRAY:  
 10 Q. Revision 1, Mr. Johnson?  
 11 JOHNSON, Q.C.:  
 12 Q. Yes, please. Okay, just come on down a little  
 13 bit more. Bit more, sorry.  
 14 MS. GRAY:  
 15 Q. Sorry, bit more?  
 16 JOHNSON, Q.C.:  
 17 Q. Yeah. Okay. So as I understand it, costs  
 18 with the pilot agreement are on the left and  
 19 then costs without the pilot agreement are on  
 20 the right, and in 2016, Corner Brook Pulp and  
 21 Paper's total cost with the pilot agreement  
 22 would be 3.2 million, but without the pilot  
 23 agreement, 3.8, and roughly the same in 2017?  
 24 MR. GOULDING:  
 25 A. That's correct.

Page 56

1 JOHNSON, Q.C.:  
 2 Q. So their savings are 590 odd thousand  
 3 annually?  
 4 MR. GOULDING:  
 5 A. That's correct.  
 6 JOHNSON, Q.C.:  
 7 Q. So more than the system energy savings?  
 8 MR. GOULDING:  
 9 A. That's correct. If we could go back to Table  
 10 8, I can probably explain how the to's and  
 11 fro's come there.  
 12 JOHNSON, Q.C.:  
 13 Q. Sure, yeah.  
 14 MR. GOULDING:  
 15 A. So under the same context, the base case  
 16 savings projected to 2016 and 2017 year would  
 17 represent those fuel savings that are there  
 18 and they would be passed on to all rate payers  
 19 through the RSP, but in the sensitivity case,  
 20 this is where the benefit would shift to  
 21 Corner Brook Pulp and Paper from the other  
 22 rate payers and this is where this number, I  
 23 guess, in that, how that number in that  
 24 previous RFI is derived. An aspect of this  
 25 agreement is it allows Corner Brook Pulp and

Page 57

1 Paper to avoid non-firm energy costs.  
 2 JOHNSON, Q.C.:  
 3 Q. Right.  
 4 MR. GOULDING:  
 5 A. So to determine what that sensitivity is, we  
 6 went back and looked at their non-firm power  
 7 use for the five years prior to the agreement  
 8 and it was in the order of 3.5 gigawatt hours.  
 9 So, if they were avoiding non-firm power costs  
 10 but they're able to purchase this energy at  
 11 firm rates, then that firm energy, the extra  
 12 firm energy that they're buying at firm rates  
 13 would now flow through the RSP. So that would  
 14 offset most of the benefit from the improved  
 15 water utilization. So that number that you've  
 16 quoted there of \$620,000 benefit to Corner  
 17 Brook Pulp and Paper, that's in light of being  
 18 able to buy energy at firm rates that they  
 19 would have ordinarily bought at non-firm  
 20 rates.  
 21 JOHNSON, Q.C.:  
 22 Q. The number I referred to is 590,000.  
 23 MR. GOULDING:  
 24 A. Yes, I'm sorry.  
 25 JOHNSON, Q.C.:

Page 58

1 Q. Yes, okay. And so the savings, just so I can  
 2 understand that, the savings that Corner Brook  
 3 Pulp and Paper enjoys of 590,000, will that be  
 4 made up by other customers on the system?  
 5 MR. GOULDING:  
 6 A. It's in part made up by the fuel savings that  
 7 have been -- that have arisen from their  
 8 improved water utilization and as long as this  
 9 energy that they're buying at firm rates  
 10 doesn't exceed the improved water utilization,  
 11 then there's still a net positive impact to  
 12 the RSP and the benefit would be shared by all  
 13 rate payers.  
 14 JOHNSON, Q.C.:  
 15 Q. Okay.  
 16 MR. GOULDING:  
 17 A. And that was the hard part, I guess, about  
 18 doing this analysis is trying to predict what  
 19 their non-firm power use would have been  
 20 because it depends on a number of factors,  
 21 such as outages to their units, whether  
 22 they're on a forced or a planned sense. If  
 23 they have issues at their intakes, such as  
 24 icing, if they have low water levels, there's  
 25 various reasons why they would have, say,

Page 59

1 incurred non-firm power purchases prior to  
 2 this agreement.  
 3 JOHNSON, Q.C.:  
 4 Q. So are you saying that the savings that Corner  
 5 Brook Pulp and Paper is enjoying through this  
 6 arrangement are not picked up by other  
 7 customers?  
 8 MR. GOULDING:  
 9 A. To the extent that their avoided non-firm  
 10 energy doesn't exceed their firm energy  
 11 savings. So in the analysis that we've done  
 12 here for the past five years, even under the  
 13 sensitivity case, there were still benefits to  
 14 all rate payers.  
 15 JOHNSON, Q.C.:  
 16 Q. As regards the -- there's two capacity  
 17 agreements as well that have been entered into  
 18 with Corner Brook Pulp and Paper and they were  
 19 discussed to some degree with Mr. Henderson,  
 20 as you're no doubt aware, and through these  
 21 agreements, Corner Brook Pulp and Paper will  
 22 be receiving annually about 1.4 million  
 23 dollars. I think that's the number. Is that  
 24 familiar to you?  
 25 MR. GOULDING:

Page 60

1 A. That is, I guess in terms of the fixed  
 2 payments, there's -- the schedule that's set  
 3 out is \$28 per kilowatt winter, so the fixed  
 4 payment works out to be about 1.68 million and  
 5 then there's a variable payment as well,  
 6 depending on how much we call upon them and  
 7 use them.  
 8 JOHNSON, Q.C.:  
 9 Q. Okay. And how will this arrangement work --  
 10 and I don't know if this is your question, Mr.  
 11 Goulding, or Mr. Humphries. How will this  
 12 arrangement work during a system emergency or  
 13 an event on the system that needs -  
 14 MR. GOULDING:  
 15 A. Yeah, I can certainly speak from an operations  
 16 perspective.  
 17 JOHNSON, Q.C.:  
 18 Q. Okay.  
 19 MR. GOULDING:  
 20 A. As I've indicated previously, we have daily  
 21 meetings, daily reliability assessment  
 22 meetings and we have a one-week window where  
 23 we have our load forecasts, we have our  
 24 generation availability laid out for the  
 25 entire week, and we assess things from an

Page 61

1 Avalon perspective and a total island  
 2 perspective. So, if we see -- and aligned  
 3 with this, we have a protocol or instruction  
 4 T001 that our operators use, I guess, to deal  
 5 with any reserve issues or generation issues  
 6 on the system. So, if during our daily  
 7 assessment we foresee a need that we're at a  
 8 point where our generation reserves are low  
 9 enough that we would need to call on Corner  
 10 Brook Pulp and Paper, then we would certainly  
 11 give them as much advance notice as we can,  
 12 but under the terms of the agreement, the only  
 13 requirement is a 15-minute notice, but we  
 14 would certainly endeavour, you know, to give  
 15 them as much of a heads up as we can.

16 JOHNSON, Q.C.:  
 17 Q. Okay. And then, I guess, you monitor Corner  
 18 Brook Pulp and Paper's performance then during  
 19 that emergency situation?

20 MR. GOULDING:  
 21 A. We would. Once we do our assessment, you  
 22 know, like we're basically a bunch of system  
 23 operation engineers that's outside our ECC  
 24 area. So once we do our assessment, we would  
 25 certainly give Corner Brook Pulp and Paper a

Page 62

1 heads up that we may need them and we would  
 2 give our operators a heads up as well and at  
 3 that point, they are to follow the  
 4 instructions in T001. So one of those  
 5 instructions, as we get far enough into our  
 6 reserve issue, is to call on Corner Brook Pulp  
 7 and Paper and the way it works is they drop  
 8 load at their mill and make generation from  
 9 Deer Lake Power available to the grid. So at  
 10 that point, we do have real time indications  
 11 on what the net transfer is, say from Deer  
 12 Lake Power to us. So then, we have an idea  
 13 then, you know, that they have dropped the  
 14 required amount of load.

15 JOHNSON, Q.C.:  
 16 Q. How do you folks assess how other customers  
 17 benefit from the arrangement, relative to the  
 18 cost that they're paying for it?

19 MR. GOULDING:  
 20 A. Yeah, I think that's probably more in Paul's  
 21 area, Mr. Humphries.

22 MR. HUMPHRIES:  
 23 A. Yeah. From the perspective, I guess, of what  
 24 we're paying, the \$28 per kilowatt for the  
 25 winter season, in comparison to what

Page 63

1 alternatives we would have to get additional  
 2 capacity if we had to add capacity, we're  
 3 talking something that's in the range of  
 4 \$1,000 a kilowatt and we don't have the  
 5 ability to be able to have that for only four  
 6 months. And the rates we have negotiated are  
 7 comparable with rates that we paid back in the  
 8 '90s for the interruptible feed with Abitibi.  
 9 So it is a good value to customers.

10 JOHNSON, Q.C.:  
 11 Q. When Mr. Henderson was on the stand on  
 12 September 24th, I asked him whether the  
 13 arrangement with respect to Corner Brook Pulp  
 14 and Paper providing capacity assistance was  
 15 consistent with Corner Brook Pulp and Paper's  
 16 water rights and he didn't -- he indicated  
 17 that he didn't know the details of those, of  
 18 their water rights and we were advised  
 19 subsequently in an undertaking, Undertaking  
 20 38, that Hydro has no role in monitoring the  
 21 activities of Corner Brook Pulp and Paper with  
 22 respect to water rights granted by the Crown.  
 23 And I don't know if you're familiar with that  
 24 undertaking?  
 25 (10:30 a.m.)

Page 64

1 MR. HUMPHRIES:  
 2 A. Yes, I am.

3 JOHNSON, Q.C.:  
 4 Q. Okay. And so does this mean, Mr. -- and the  
 5 undertaking is there on the screen there now.  
 6 It says "Hydro is not a party to the water  
 7 rights of mother nature granted rights from  
 8 the Crown in right of the Province. Hydro is  
 9 not party to this agreement or instrument and  
 10 has no role in monitoring the activities of  
 11 Corner Brook Pulp and Paper with respect to  
 12 water rights." And so does this mean, Mr.  
 13 Humphries, that Hydro is not in a position to  
 14 say whether the agreements it has reached with  
 15 Corner Brook Pulp and Paper as regards to  
 16 capacity assistance and, for that matter, the  
 17 pilot supply agreement are consistent with  
 18 their water rights?

19 MR. HUMPHRIES:  
 20 A. I'm not in a position to say about that.

21 JOHNSON, Q.C.:  
 22 Q. Okay. The arrangement with Corner Brook Pulp  
 23 and Paper as regards the CoGeneration, now I  
 24 take it that there is a Government directive  
 25 in relating to the CoGen arrangement with



Page 65

1 Corner Brook Pulp and Paper?  
 2 MR. GOULDING:  
 3 A. That's correct.  
 4 JOHNSON, Q.C.:  
 5 Q. It's not on the record in this proceeding. I  
 6 wonder if Hydro could undertake to file that?  
 7 MR. YOUNG:  
 8 Q. To file what? Could you repeat that question?  
 9 Sorry.  
 10 JOHNSON, Q.C.:  
 11 Q. The Government directive in relation to Corner  
 12 Brook CoGeneration.  
 13 MR. YOUNG:  
 14 Q. There's an exemption order on the EPCA web  
 15 page. Is that what you're referring to?  
 16 JOHNSON, Q.C.:  
 17 Q. Yes, yeah. Oh, it's on the EPCA web page?  
 18 MR. YOUNG:  
 19 Q. Yeah.  
 20 JOHNSON, Q.C.:  
 21 Q. Okay.  
 22 MR. YOUNG:  
 23 Q. If you wish, you can carry on your questions.  
 24 I might be able to answer that in a moment.  
 25 I'll look that up.

Page 66

1 JOHNSON, Q.C.:  
 2 Q. Yes, no problem. I take it there is obviously  
 3 an agreement between Hydro and Corner Brook  
 4 Pulp and Paper relating to power purchases  
 5 under that exemption?  
 6 MR. GOULDING:  
 7 A. That's correct.  
 8 JOHNSON, Q.C.:  
 9 Q. Okay. I wonder if that can be filed for the  
 10 record, Mr. Young?  
 11 MR. YOUNG:  
 12 Q. We're going to have to take that under  
 13 advisement. My first blush answer of that  
 14 would be that it would not be, for a couple of  
 15 reasons. One, I think Corner Brook Pulp and  
 16 Paper might take issue with that, and it is  
 17 outside the Board's jurisdiction to make a  
 18 decision about it. I think the costs that  
 19 flow from it are proper consideration for the  
 20 Board to know about and for the Consumer  
 21 Advocate to ask about, but the particular way  
 22 it works and the details of the calculations  
 23 may be outside -- I mean, the Board can't  
 24 change it. The Board has no opportunity to  
 25 direct that.

Page 67

1 JOHNSON, Q.C.:  
 2 Q. No, I appreciate that. Perhaps if Hydro could  
 3 take that under advisement, so we can get a  
 4 sense of how it works.  
 5 MR. YOUNG:  
 6 Q. Yeah. And just for the Board's value of this  
 7 discussion, there has been -- this has come up  
 8 before in discussions with Board staff and the  
 9 Board a number of years ago, and I believe  
 10 Corner Brook Pulp and Paper may take exemption  
 11 to it. They did before on one occasion I  
 12 spoke to their solicitor about it. So I think  
 13 it's only proper that I speak to them. If  
 14 they have a position, it needs to be  
 15 considered also. So we will have a chance to  
 16 discuss that.  
 17 JOHNSON, Q.C.:  
 18 Q. Okay. I understand through the reply to CA-  
 19 NLH-285 -- if we could get that up? Yeah, if  
 20 you could scroll down a bit. Keep on  
 21 scrolling there. If you look at the bottom  
 22 column there or the bottom box, purchases from  
 23 Corner Brook Pulp and Paper and CoGen  
 24 purchases, we see that there is assumed to be  
 25 purchased from Corner Brook Pulp and Paper, by

Page 68

1 way of this CoGen arrangement, 51 gigawatt  
 2 hours for each of 2015, 2016 and 2017.  
 3 MR. GOULDING:  
 4 A. That's correct.  
 5 JOHNSON, Q.C.:  
 6 Q. Okay. And why does Hydro assume that it'll be  
 7 purchasing the 51.1 gigawatt hours like a  
 8 constant figure through those years?  
 9 MR. GOULDING:  
 10 A. Well, I guess without getting into the details  
 11 of the agreement, our purchases with Corner  
 12 Brook Pulp and Paper are under take-or-pay  
 13 arrangements similar to wind, similar to  
 14 Algonquin Power unit, and to develop a  
 15 forecast going forward, there's been a --  
 16 we've taken the last, the average of the last  
 17 five years and the reason being, I guess,  
 18 through the development, so at Corner Brook  
 19 Pulp and Paper with the shutdown of two of  
 20 their four paper machines, there's been a  
 21 reduction in the internal steam requirements  
 22 at the mill and this has also led to a  
 23 reduction in the generation output as well.  
 24 So this number that we're seeing here, that's  
 25 essentially their past five-year average and

Page 69

1 what we've used for a forecast going forward.  
 2 JOHNSON, Q.C.:  
 3 Q. I see. And I understand that, I guess -- and  
 4 this is probably a segue into Undertaking 46,  
 5 if we could get that up for a moment? This is  
 6 the annual cost to customers of purchases  
 7 under the CoGen arrangement, and the second  
 8 paragraph that we see there, it says the  
 9 additional cost is computed under both the  
 10 2015 test year No. 6 fuel cost of 93 per  
 11 barrel and the 2016 fuel forecast of 69 et  
 12 cetera per barrel, and the reduced forecast  
 13 cost of Holyrood fuel for 2016 is not assumed  
 14 to reduce the cost of purchases from Corner  
 15 Brook Pulp and Paper CoGen as the purchase  
 16 price is linked to the cost of No. 6 fuel in  
 17 the inventory, in Corner Brook Pulp and  
 18 Paper's inventory. And I guess is there  
 19 somebody in charge of determining what the  
 20 costs of fuel are in Corner Brook Pulp and  
 21 Paper's inventory?  
 22 MR. GOULDING:  
 23 A. Well, this would be something that they  
 24 monitor and are in charge of. They would, I'm  
 25 sure, have an inventory cost each month and

Page 70

1 then that gets reflected in the rate that's  
 2 applied to the CoGen energy purchases.  
 3 JOHNSON, Q.C.:  
 4 Q. I see. So is there someone at Hydro who  
 5 verifies these figures?  
 6 MR. GOULDING:  
 7 A. I guess as a system operations group, we  
 8 oversee the billing metering function, so we  
 9 would certainly verify that the energy that's  
 10 on their invoice is the same as -- is what  
 11 they generated during the month and also  
 12 there's another item there relating to the  
 13 energy rate as well. It wouldn't be a whole  
 14 lot of detail there to verify, except that we  
 15 would check against previous months and from  
 16 time to time, there are adjustments made in  
 17 future months invoices that I assume reflect  
 18 the fact that they may have been late  
 19 developing their inventory cost.  
 20 JOHNSON, Q.C.:  
 21 Q. So who does this individually at Hydro? Who's  
 22 tasked with this?  
 23 MR. GOULDING:  
 24 A. There's -- it's in my area. There's a system  
 25 operations engineer planning that oversees the

Page 71

1 actual metering data and download of data  
 2 that's done by our industrial billing group,  
 3 but we provide an oversight role, I guess, to  
 4 verify this data and we also check the  
 5 invoices as well.  
 6 MR. YOUNG:  
 7 Q. Mr. Johnson, don't mean to interrupt. This  
 8 might be a useful time for me to interject. I  
 9 just looked at the web page and the  
 10 regulations, there's two exemption orders with  
 11 respect to this arrangement. The first is 95  
 12 -- and the way it's shown in numbers,  
 13 Newfoundland and Labrador Regulation 95/00.  
 14 That's for 2000. And the other one is 96,  
 15 subsequent, 2000. And that's easily found on  
 16 the web page.  
 17 JOHNSON, Q.C.:  
 18 Q. Okay. I thought that it was the subject of a  
 19 directive, but it's -  
 20 MR. YOUNG:  
 21 Q. No, it's just those exemption orders.  
 22 JOHNSON, Q.C.:  
 23 Q. Okay. Thank you very much, Mr. Young. Is  
 24 there any system benefit that comes from  
 25 buying this energy from Corner Brook Pulp and

Page 72

1 Paper?  
 2 MR. GOULDING:  
 3 A. I guess it's like all our power purchases.  
 4 When we issued requests for proposals for new  
 5 generation sources, there would have been a  
 6 need identified at that time. So we entered  
 7 into a number of longer term power purchase  
 8 agreements in the order of 20 to 25 years to  
 9 purchase energy from other sources with the  
 10 end goal to minimize Holyrood and also to meet  
 11 the system peaking demands as well. There are  
 12 times, and as we noted in an RFI response,  
 13 that we have high water levels and that, on  
 14 its own merit, would reduce Holyrood. So that  
 15 would certainly take away from some of the  
 16 benefit of power purchases, but in the long  
 17 haul, there would have been a benefit  
 18 identified from these extra power sources.  
 19 JOHNSON, Q.C.:  
 20 Q. At the time they were entered?  
 21 MR. GOULDING:  
 22 A. That's correct.  
 23 JOHNSON, Q.C.:  
 24 Q. But I take it that the arrangement with the  
 25 CoGen now is not something that in an existing

Page 73

1 sense is providing system benefit?  
 2 MR. GOULDING:  
 3 A. Really, it depends on the rate of the CoGen  
 4 energy. If it's offsetting Holyrood, then --  
 5 or the rate of any power source, if it's  
 6 offsetting Holyrood, the time that you're  
 7 using Holyrood for energy purposes, then it  
 8 would be a benefit.  
 9 JOHNSON, Q.C.:  
 10 Q. But right now, it's not even -- the  
 11 arrangement is not even sensitive to the drop  
 12 in prices for oil that's consumed at Holyrood,  
 13 is it?  
 14 MR. GOULDING:  
 15 A. No, it is reflective of the inventory that's  
 16 in Corner Brook Pulp and Paper's tanks. I  
 17 guess the one takeaway from this undertaking  
 18 here is that we're still using the 2015 price.  
 19 So we don't have what their expectation is for  
 20 2016. So that may go down accordingly.  
 21 JOHNSON, Q.C.:  
 22 Q. May the 2015 test year price go down as well,  
 23 or the 2015 test year cost go down as well if  
 24 better particulars are obtained from Corner  
 25 Brook Pulp and Paper as to the cost of their

Page 74

1 fuel inventory?  
 2 MR. GOULDING:  
 3 A. I can't say if it would go up or down. It  
 4 would depend on where they foresee their  
 5 inventory prices being in 2016. But we would  
 6 certainly have an idea of where those costs  
 7 are going, a better idea.  
 8 (10:45 a.m.)  
 9 JOHNSON, Q.C.:  
 10 Q. And how many more years is left in the  
 11 agreement? Do you know that?  
 12 MR. GOULDING:  
 13 A. We entered into it -- there is an RFI on that.  
 14 We entered into it in 2000. They came into  
 15 operation, I recall, in 2002. Jenny, are you  
 16 able to call up NP-002?  
 17 MS. GRAY:  
 18 Q. Yes.  
 19 MR. GOULDING:  
 20 A. Okay. So there is a 20-year term. It  
 21 actually starts in January of 2003.  
 22 JOHNSON, Q.C.:  
 23 Q. Okay. I just want to turn to another topic  
 24 for a moment, being specifically assigned O&M,  
 25 just to fill in some questions I was left with

Page 75

1 after discussing the matter with Mr. Henderson  
 2 and Mr. Fagan. Mr. Humphries, when Hydro  
 3 undertook construction of the Vale connection  
 4 facility, did you have anything to do with  
 5 that arrangement?  
 6 MR. HUMPHRIES:  
 7 A. Yes, at the time, upfront, the upfront  
 8 planning for determination of the requirements  
 9 to serve the load, discussions with the  
 10 customer on the level of redundancy they would  
 11 expect. I was involved in all of those.  
 12 JOHNSON, Q.C.:  
 13 Q. Okay. And I guess at the time, who was in  
 14 charge of this file, in terms of dealing with  
 15 Vale on them coming on?  
 16 MR. HUMPHRIES:  
 17 A. I think Mr. Henderson probably went through  
 18 the process of how new industrial customers  
 19 are dealt with and at the time, we -- through  
 20 the initial contact, I guess shortly after the  
 21 initial contact, I became involved and for a  
 22 period of time led the charge, I would think,  
 23 with the customer on determining the technical  
 24 requirements, landing on single line diagrams,  
 25 the scope of work that needed to be done for

Page 76

1 the interconnection and the cost estimates and  
 2 at that stage then, it moved to a function  
 3 where our operations and rates group would  
 4 have gotten into the details of contract  
 5 arrangements and those types of things.  
 6 JOHNSON, Q.C.:  
 7 Q. So you refer to cost estimates, and so cost  
 8 estimates would have been provided to Vale for  
 9 both capital and operation maintenance costs?  
 10 MR. HUMPHRIES:  
 11 A. I would have only been involved in the capital  
 12 costs.  
 13 JOHNSON, Q.C.:  
 14 Q. Okay. Who would have been involved on the O&M  
 15 side?  
 16 MR. HUMPHRIES:  
 17 A. Again anchoring back to what Mr. Henderson  
 18 said, at that time, there were discussions  
 19 with Vale on the methodology of our -- how O&M  
 20 was treated in our rates and as for whether  
 21 there were the actual costs were communicated  
 22 to them or who did it, I'm not aware and I  
 23 think there was an undertaking on that issue.  
 24 I'm not sure what the outcome of whether there  
 25 was actually a dollar value communicated to

Page 77

1 them or not. I'm not aware.  
 2 JOHNSON, Q.C.:  
 3 Q. Do you know whether Hydro's connections  
 4 procedure are generally consistent with that  
 5 used elsewhere, Mr. Humphries?  
 6 MR. HUMPHRIES:  
 7 A. I think they're generally consistent. I'm  
 8 sure there are differences, but I think  
 9 they're generally consistent.  
 10 JOHNSON, Q.C.:  
 11 Q. There's been minutes filed of Joint Utility  
 12 meeting. Are you familiar with Joint Utility  
 13 meetings?  
 14 MR. HUMPHRIES:  
 15 A. Mr. Goulding more so is than I. I just -  
 16 JOHNSON, Q.C.:  
 17 Q. I saw him grabbing the mic.  
 18 MR. HUMPHRIES:  
 19 A. That was my cue.  
 20 MR. GOULDING:  
 21 A. Oh, sorry.  
 22 JOHNSON, Q.C.:  
 23 Q. Mr. Goulding, go ahead.  
 24 MR. GOULDING:  
 25 A. Okay. Joint utility meetings, I guess they've

Page 78

1 been arranged and taking place for quite a  
 2 long time now and I can't say for how long. I  
 3 know I've experienced them -- well, no, I  
 4 should say I've only experienced them from the  
 5 other side when I was an employee of Deer Lake  
 6 Power, but they're normally arranged through  
 7 other folks in our group. They would  
 8 basically pick the meeting time or date and  
 9 time. Who attends is -- you know, in my  
 10 experience, it would have been the large  
 11 industrial customers. There's some power  
 12 purchasers, some people that represented in  
 13 the power purchase agreements that we had on  
 14 the system. There would have been Hydro and  
 15 Newfoundland Power as well. These meetings  
 16 would have taken place normally in May, May of  
 17 each year, and we followed a standard agenda.  
 18 JOHNSON, Q.C.:  
 19 Q. Okay. So you would attend them, would you,  
 20 when you were with Deer Lake Power?  
 21 MR. GOULDING:  
 22 A. I would have.  
 23 JOHNSON, Q.C.:  
 24 Q. You would have? When you were -- is that when  
 25 you were the manager of the Deer Lake Power

Page 79

1 generation facility?  
 2 MR. GOULDING:  
 3 A. Yes, certainly when I was manager and at  
 4 various lower levels as well.  
 5 JOHNSON, Q.C.:  
 6 Q. Okay. So basically right on up through your  
 7 career with them?  
 8 MR. GOULDING:  
 9 A. That's correct.  
 10 JOHNSON, Q.C.:  
 11 Q. Okay, all right. And do you have a role in  
 12 your -- now that you're with Hydro, of going  
 13 to these meetings or in relation to these  
 14 meetings?  
 15 MR. GOULDING:  
 16 A. No. I don't have a role now. I generally  
 17 know that they're taking place, but typically  
 18 now my manager would attend and there's an ECC  
 19 supervisor as well that's -- he'd be more  
 20 abreast, I guess, of day-to-day operations or  
 21 of the power system, so he would attend.  
 22 JOHNSON, Q.C.:  
 23 Q. So systems has a place at the table?  
 24 MR. GOULDING:  
 25 A. That's correct.

Page 80

1 JOHNSON, Q.C.:  
 2 Q. Yeah, okay. Can I refer you to May 2013 joint  
 3 utilities meeting? That's those minutes in  
 4 Undertaking 40, page -- I had page 11 of the  
 5 May 2013 minutes. Yeah. Under group actions,  
 6 the top line there, these come out of the  
 7 joint utilities meeting of May 15, 2013 and  
 8 there's no need to remove what you have there  
 9 on the screen, but I see, just for the record,  
 10 on page one it indicates there was two Vale  
 11 representatives, two Nalcor representatives, a  
 12 Newfoundland Power representative, two NARL  
 13 representatives, and regrets sent by one  
 14 person from Nalcor, one person from ENAL and  
 15 one from Star Lake Hydro, one from Corner  
 16 Brook Pulp and Paper, one from Fermeuse Wind.  
 17 In any event, this was hosted by Vale at the  
 18 Long Harbour Processing Plant on May 15th.  
 19 And one of the group actions there is to  
 20 obtain an forward to Vale the long-term  
 21 maintenance plan for the Long Harbour  
 22 transmission line and terminal station to  
 23 assist in long-term coordination of plant  
 24 outages with Vale. You see that, Mr.  
 25 Goulding?

Page 81

1 MR. GOULDING:  
 2 A. Yes, I do.  
 3 JOHNSON, Q.C.:  
 4 Q. Yes. And so, was this -- do you know if this  
 5 was borne out of a request from Vale and  
 6 whether or not this material or this  
 7 information was provided?  
 8 MR. GOULDING:  
 9 A. I'm not quite sure of the details, but I would  
 10 say that it was probably borne out of a  
 11 request from Hydro. We would want to schedule  
 12 our maintenance on the transmission line and  
 13 the terminal station at a time when they're  
 14 also down, such that there's only one line  
 15 serving their plant, so our maintenance  
 16 activities would occur at a time that they are  
 17 down as well.  
 18 JOHNSON, Q.C.:  
 19 Q. I see. And do you know whether that long-term  
 20 maintenance plan was ever provided?  
 21 MR. GOULDING:  
 22 A. I don't know.  
 23 JOHNSON, Q.C.:  
 24 Q. Okay. Could you undertake to check whether  
 25 that has been -- well, was provided to Vale

Page 82

1 and if so, to provide it to us as part of an  
 2 undertaking along with any updates that might  
 3 have been made to it?  
 4 MR. GOULDING:  
 5 A. Sure.  
 6 JOHNSON, Q.C.:  
 7 Q. Is that fine, Mr. Young?  
 8 MR. YOUNG:  
 9 Q. I think so. It's somewhat granular, but we'll  
 10 see if we can find it.  
 11 JOHNSON, Q.C.:  
 12 Q. Thank you.  
 13 MS. GLYNN:  
 14 Q. Noted on the record.  
 15 JOHNSON, Q.C.:  
 16 Q. Thank you. And can I refer you to the  
 17 September 2014 minutes at page six? And I  
 18 won't get you to interrupt what's on the  
 19 screen, Jennifer, but just for the record,  
 20 this was a meeting held September 18th, 2014  
 21 at Hydro Place, attended by Deer Lake Power,  
 22 two representatives of Newfoundland Power,  
 23 Vale and two other, two representatives of  
 24 Nalcor. I won't tell you about who regretted  
 25 not being there.

Page 83

1 At page six, it references Vale, and I  
 2 understand that this is in connection with a  
 3 discussion regarding action items, perhaps  
 4 under planned generation and transmission  
 5 outages. In any event, Vale indicating they  
 6 have no planned outages and Vale talked about  
 7 switching supply between T1 and T2 as there is  
 8 a problem with the distribution transformers,  
 9 need to complete a transient analysis of  
 10 distribution system. Feeder breakers have  
 11 under voltage trips. And then there's an  
 12 action item, someone has to follow up with  
 13 Vale to address any concerns with terminal  
 14 station operation, et cetera. And are you  
 15 familiar with the issues that were being  
 16 experienced as reported by Vale?  
 17 MR. GOULDING:  
 18 A. No, I don't recall what these issues were.  
 19 There are two transformers that provide the  
 20 supply to the Vale plant and, you know, it  
 21 appears that there would have been a need or  
 22 even an issue between switching back and forth  
 23 between these transformers. So I'm not if  
 24 that would have been an internal issue, but  
 25 that's all the detail that I would know on it.

Page 84

1 JOHNSON, Q.C.:  
 2 Q. Okay. And when there is an issue like this  
 3 that's being reported here, then it's Hydro's  
 4 job to try to look after the issue for Vale?  
 5 MR. GOULDING:  
 6 A. Sure. Anything that would, you know, occur  
 7 outside their plant certainly. In the  
 8 internal analysis studies, like the one that  
 9 they've referenced here, that would likely be  
 10 done by them, but I'm not certain where this  
 11 one here was going.  
 12 JOHNSON, Q.C.:  
 13 Q. I see. Mr. Chairman, it's around 11, so I'll  
 14 -  
 15 CHAIRMAN:  
 16 Q. All right.  
 17 (BREAK - 11:00 a.m.)  
 18 (RESUME - 11:38 a.m.)  
 19 CHAIRMAN:  
 20 Q. So, Mr. Johnson, sir, we're back to you.  
 21 MS. GLYNN:  
 22 Q. We have the two undertakings first, Mr. Chair.  
 23 CHAIRMAN:  
 24 Q. Oh, I'm sorry, yes. Beg your pardon.  
 25 MS. PENNELL:

Page 85

1 Q. We have Undertaking No. 57, which is Hydro's  
 2 12-month rolling report on generation, which  
 3 was filed with the Board last week. And  
 4 Undertaking 61, which provides the current  
 5 status of Hardwoods.  
 6 JOHNSON, Q.C.:  
 7 Q. Okay, gentlemen, just to follow up on this  
 8 discussion pertaining to the issues with  
 9 Vale's terminal station. Just at the bottom  
 10 of page six of those September 18, 2014  
 11 minutes indicates that there's a -- I presume  
 12 a Hydro official blacked out is to follow up  
 13 with Vale to address any concerns with the  
 14 terminal station operation. And what position  
 15 -- I mean, I don't know how sensitive the name  
 16 is. I'm not particularly interested in the  
 17 name, I suppose, but what position would be  
 18 tasked to follow up?  
 19 MR. GOULDING:  
 20 A. I would expect that whoever would have  
 21 represented Hydro at this meeting, so it would  
 22 be my manager, a manager of system operations.  
 23 JOHNSON, Q.C.:  
 24 Q. Okay, all right.  
 25 O'REILLY, Q.C.:

Page 86

1 Q. Probably in the witness protection program.  
 2 CHAIRMAN:  
 3 Q. Yeah, that's what I thought too, Mr. O'Reilly.  
 4 I was wondering what was going on.  
 5 JOHNSON, Q.C.:  
 6 Q. Yeah, so what's -- well, who is it?  
 7 MR. GOULDING:  
 8 A. It's Bob Butler, Robert Butler.  
 9 JOHNSON, Q.C.:  
 10 Q. Okay. Thank you.  
 11 CHAIRMAN:  
 12 Q. What do they call it, redacted, is it? That  
 13 the fancy word you guys use?  
 14 JOHNSON, Q.C.:  
 15 Q. Yeah.  
 16 CHAIRMAN:  
 17 Q. Redacted.  
 18 JOHNSON, Q.C.:  
 19 Q. Redacted. And do you have any knowledge about  
 20 these problems? Have they been ongoing for  
 21 Vale down there with that terminal station?  
 22 MR. GOULDING:  
 23 A. Yeah, I'm not aware right now what these  
 24 issues were.  
 25 JOHNSON, Q.C.:

Page 87

1 Q. Okay. I understand from a discussion during  
 2 the break that Hydro is looking at filing a  
 3 supplemental capital application pertaining to  
 4 this issue. Do you have any awareness of  
 5 that?  
 6 MR. GOULDING:  
 7 A. If it's the issue -- and it's not really  
 8 clear, but there is a transformer, one of the  
 9 two transformers is out of service. It has  
 10 been since last winter, last -- I recall it  
 11 occurred around February.  
 12 JOHNSON, Q.C.:  
 13 Q. Okay. So you're aware of the application that  
 14 will be soon filed?  
 15 MR. GOULDING:  
 16 A. I'm aware that there is a pending application,  
 17 yes.  
 18 JOHNSON, Q.C.:  
 19 Q. Yes, okay.  
 20 MR. GOULDING:  
 21 A. But I'm not -  
 22 MR. HUMPHRIES:  
 23 A. Not clear that that's related to this.  
 24 MR. GOULDING:  
 25 A. Yeah, I'm not clear that this issue here is

Page 88

1 related to that transformer.  
 2 JOHNSON, Q.C.:  
 3 Q. I see, okay. And I just want to go back a  
 4 little bit, just to get a better  
 5 understanding, and this pertains to the events  
 6 of August 2015 when that CT unit was run out  
 7 at the Holyrood facility, and there was  
 8 discussion yesterday regarding this exposure  
 9 to an outage on one of the major transmission  
 10 lines. Now, I just want to be clear, was  
 11 there any planned maintenance going on on a  
 12 transmission line coming into the Avalon at  
 13 the same time?  
 14 MR. GOULDING:  
 15 A. During that time, I guess our exposure was --  
 16 our weakest links, I would say, are the two  
 17 lines that go from Bay D'Espoir to Sunnyside,  
 18 so there wouldn't have been any planned  
 19 maintenance to either one of those lines  
 20 during that period that I'm aware of.  
 21 JOHNSON, Q.C.:  
 22 Q. Okay. And so the linkage of this exposure to  
 23 an outage on one of the major transmission  
 24 lines, just to be clear, what exactly are you  
 25 talking about there?

Page 89

1 MR. GOULDING:  
 2 A. In terms of an outage?  
 3 JOHNSON, Q.C.:  
 4 Q. That happened in August. You indicated  
 5 yesterday that there was an exposure?  
 6 MR. GOULDING:  
 7 A. There was no particular event, like an eminent  
 8 event that would have caused a trip, but any  
 9 time that we are exposed to the fact that if  
 10 we lose one element on our power system,  
 11 that's going to result in a customer outage,  
 12 then we are guarding against that. So, the  
 13 issue would have been during that period if we  
 14 didn't have the CT on and one of those lines  
 15 tripped for whatever reason, whether it be  
 16 adverse weather, terminal station equipment,  
 17 line contact even, you know, like -- then we  
 18 needed the CT on to be able to avoid an  
 19 overload on the other major line.  
 20 JOHNSON, Q.C.:  
 21 Q. Okay. And so in let's say the summer prior,  
 22 we still had the transmission lines obviously  
 23 coming into the Sunnyside terminal station.  
 24 We'll take that as given. So how would Hydro  
 25 have dealt with the exposure to outage in say

Page 90

1 the summer of 2014?  
 2 (11:45 a.m.)  
 3 MR. GOULDING:  
 4 A. The exposure in 2014?  
 5 JOHNSON, Q.C.:  
 6 Q. Or any summer prior to the CT, for that  
 7 matter.  
 8 MR. GOULDING:  
 9 A. Sure. We would have still had a standby unit  
 10 and in that case, it was Hardwoods. The  
 11 difference is we wouldn't have started  
 12 Hardwoods or operated Hardwoods during that  
 13 period. We would have held it in a standby  
 14 mode and then when there was a trip in a line  
 15 and customers were impacted, then we would  
 16 react and start Hardwoods.  
 17 JOHNSON, Q.C.:  
 18 Q. I see. I see, okay. So then Hardwoods, at  
 19 the time that you would have called upon  
 20 Hardwoods, I take it that neither of the three  
 21 units at Holyrood would be operable?  
 22 MR. GOULDING:  
 23 A. That's the exposure. When neither unit is  
 24 operable and if we lose one of the major  
 25 lines, then there is an exposure to an

Page 91

1 overload on the remaining line and then we  
 2 would have started Hardwoods.  
 3 JOHNSON, Q.C.:  
 4 Q. And just again, in my understanding, and I'm  
 5 sorry if I'm asking you to repeat this, but I  
 6 want to understand. Is there any way to avoid  
 7 all three units of Holyrood being down at the  
 8 one time in the summer period?  
 9 MR. GOULDING:  
 10 A. Again, this speaks to the detail of what goes  
 11 on in terms of maintenance inside the plant.  
 12 JOHNSON, Q.C.:  
 13 Q. Right.  
 14 MR. GOULDING:  
 15 A. But from my understanding, there is a period,  
 16 normally it's two weeks, and we do try to the  
 17 extent that we can, we try and minimize this  
 18 period, but there is a period that requires  
 19 that all units be off and in a code state, I  
 20 would say, in order that they can perform  
 21 maintenance on their common systems inside the  
 22 Holyrood plant. But again, I won't say that  
 23 I'm an expert on what goes on inside the plant  
 24 during that period. But certainly, during my  
 25 time here, there's always been a requirement

Page 92

1 for a total plant outage.  
 2 JOHNSON, Q.C.:  
 3 Q. Okay.  
 4 MR. HUMPHRIES:  
 5 A. Mr. Johnson, just to clarify a little, I  
 6 guess, because I know you're concerned.  
 7 You're going back. We went through a period  
 8 coming up through '13 and '14 and prior to  
 9 that where we went through periods where we  
 10 had no operation at Holyrood for the full  
 11 summer, and that was because of the loads on  
 12 the Avalon were lower and we were able to do  
 13 that, and while there still may have been  
 14 small exposures to a loss at certain hours in  
 15 that period, it wasn't as significant as it is  
 16 today, because the loads on the Avalon are  
 17 higher and we ultimately, we took the risk.  
 18 We would take a customer outage rather than  
 19 run the generation in advance to prevent the  
 20 outage. So since March 4th, we've made the  
 21 change to run the generation in advance to  
 22 prevent a customer outage in the event of  
 23 these first contingency failures.  
 24 JOHNSON, Q.C.:  
 25 Q. Okay. Just a final topic. They've got to be

Page 93

1 welcome words. Mr. Humphries, refer to  
 2 Hydro's regulated activities evidence at page  
 3 2.60, starting at line three. The material  
 4 indicates or states that "in 2008, electricity  
 5 requirements on the Island Interconnected  
 6 system declined by 2.3 percent relative to the  
 7 2007 test year, primarily because of reduced  
 8 consumption at CBPP. CBPP's number one paper  
 9 machine was shut down in November 2007." And  
 10 as I went through the joint utility minutes  
 11 that were provided in Undertaking 40, and  
 12 these are the June 8th, 2007 minutes were the  
 13 minutes that I reviewed, I didn't see any  
 14 mention from Deer Lake Power or any heads up  
 15 on the shut down of the number one paper  
 16 machine. And I think you could probably  
 17 confirm that as well in those minutes?  
 18 MR. HUMPHRIES:  
 19 A. So which minutes did you say?  
 20 JOHNSON, Q.C.:  
 21 Q. Oh, I'm sorry, the June 8th, 2007 minutes.  
 22 MR. HUMPHRIES:  
 23 A. Okay.  
 24 JOHNSON, Q.C.:  
 25 Q. And just I didn't see any reference there.

Page 94

1 MR. HUMPHRIES:  
 2 A. Yeah, and I haven't been through the minutes  
 3 in detail, but I accept.  
 4 JOHNSON, Q.C.:  
 5 Q. Yeah, okay, and I notice at page two, if we  
 6 just go to page two of those minutes for a  
 7 second, please, that at the bottom there  
 8 you'll see "NARL is planning a partial plant  
 9 shutdown for September/October that will  
 10 reduce consumption by seven to ten megawatts  
 11 for approximately 25 days. A similar shutdown  
 12 will take place in the spring of 2008." So  
 13 this would be a meeting where you'd be told  
 14 about shutdowns coming? Would that be the  
 15 expectation?  
 16 MR. HUMPHRIES:  
 17 A. Yes, and then there would be an effort then to  
 18 try to coordinate all the outage schedules  
 19 around the customers' planned outages as well,  
 20 so to minimize impact and be able to complete  
 21 as much work as we could on our equipment  
 22 while their equipment is down and not  
 23 requiring load.  
 24 JOHNSON, Q.C.:  
 25 Q. Right, okay. And so to your knowledge, when

Page 95

1 did you first know of Corner Brook Pulp and  
 2 Paper shutting down the paper machine in  
 3 November?  
 4 MR. HUMPHRIES:  
 5 A. I think as Mr. Henderson indicated in his  
 6 testimony, we knew about it at about the same  
 7 time that everyone else did.  
 8 JOHNSON, Q.C.:  
 9 Q. Yeah, okay. And could I refer you to the  
 10 March '09 minutes?  
 11 MS. GRAY:  
 12 Q. May of '09, Mr. Johnson?  
 13 JOHNSON, Q.C.:  
 14 Q. I'm sorry, May. My writing is -- leaves to be  
 15 desired. And actually, before going there, I  
 16 should have referred you first, pardon me, to  
 17 lines seven to eight of 2.60. Yeah. Or  
 18 actually, starting line five. In 2009, there  
 19 was a further decline in electrical  
 20 requirements of 2.9 percent relative to 2008  
 21 due to the closure of the Grand Falls  
 22 newsprint mill in February of '09 and the  
 23 shutdown of number four paper machine at CBPP  
 24 in March of 2009. And when did you first have  
 25 notice, Mr. Humphries, of the March '09

Page 96

1 shutdown of number four?  
 2 MR. HUMPHRIES:  
 3 A. Again, it would have been just a short period  
 4 before the actual shutdown.  
 5 JOHNSON, Q.C.:  
 6 Q. Okay. And now finally, if I could turn your  
 7 attention to those minutes of May 2009, May  
 8 12th, page eight. There's reference there  
 9 under Deer Lake/Corner Brook Pulp and Paper,  
 10 number four PM, and I take it that's paper  
 11 machine, back on May 17th, expect purchase  
 12 power to average back at 28 megawatts after  
 13 startup. Power on order at 36 megawatts  
 14 should be reduced to 32 megawatts for 2010.  
 15 And so that's what the advice that Hydro was  
 16 receiving as of May, and I guess that paper  
 17 machine, did that come back on subsequently,  
 18 number four?  
 19 MR. STRATTON:  
 20 A. I don't know if the specific machine would  
 21 have come back on.  
 22 MR. GOULDING:  
 23 A. I can probably comment. From what I recall,  
 24 the paper machine was shut in March with the  
 25 intention to idle the machine at that time.



Page 97

1 The longer term status was not known. I guess  
 2 they had to -- and why it was shut, it may  
 3 have been because of an inventory adjustment.  
 4 So at the time of this meeting, the intent was  
 5 probably to start that unit back up again on  
 6 May 17th, but the evidence would suggest that  
 7 once it was shut in March that it didn't  
 8 restart.  
 9 JOHNSON, Q.C.:  
 10 Q. Yes, okay. All right. Those are my questions  
 11 for the panel. Thank you very much.  
 12 CHAIRMAN:  
 13 Q. So Mr. Coxworthy, I think we're over to you.  
 14 CROSS-EXAMINATION BY MR. PAUL COXWORTHY  
 15 MR. COXWORTHY:  
 16 Q. Thank you. Thank you, Mr. Chair. And Mr.  
 17 Goulding, my impression was that you've been  
 18 answering the questions with respect to the  
 19 fuel conversion rate in Holyrood. I just want  
 20 to confirm that I should be directing my  
 21 questions in that regard to yourself?  
 22 MR. GOULDING:  
 23 A. That's correct.  
 24 MR. COXWORTHY:  
 25 Q. Are you familiar with the evidence that's been

Page 98

1 filed on behalf of the Island Industrial  
 2 Customers by Patrick Bowman in relation to the  
 3 Holyrood conversion factor?  
 4 MR. GOULDING:  
 5 A. Yes.  
 6 MR. COXWORTHY:  
 7 Q. So you've reviewed it?  
 8 MR. GOULDING:  
 9 A. Yeah, I was here at the time. I was in the  
 10 back of the room.  
 11 MR. COXWORTHY:  
 12 Q. Okay. So you heard his evidence?  
 13 MR. GOULDING:  
 14 A. Yeah, and hats off to Mr. Bowman. He  
 15 certainly appears to have a good understanding  
 16 of the issues there certainly.  
 17 MR. COXWORTHY:  
 18 Q. And I hope I don't let him down in terms of my  
 19 questioning based on his work. Do you take  
 20 exception then or disagree with any of his  
 21 conclusions? And I'll take you through some  
 22 of them.  
 23 MR. GOULDING:  
 24 A. Okay, sure.  
 25 MR. COXWORTHY:

Page 99

1 Q. But I mean, you know, in general, you know,  
 2 having heard his evidence and having said what  
 3 you just said, is there anything in particular  
 4 that you think "you know what, I don't agree  
 5 with that and here's why"?"  
 6 MR. GOULDING:  
 7 A. No, I won't take any strong objection. You  
 8 know, he's made recommendations, I guess,  
 9 towards what an appropriate station service  
 10 factor is with respect to two things, I guess,  
 11 the variable frequency drives that are in  
 12 service out there now which will have a net  
 13 effect on reducing station service, plus he  
 14 had some thoughts on what that base station  
 15 service rate should be as well.  
 16 MR. COXWORTHY:  
 17 Q. Sure. So as you are aware, in Hydro's  
 18 evidence, and I'm referring to page 275,  
 19 Volume 1, in Section 2, regulated activities,  
 20 line 16, and Hydro is proposing a station  
 21 service factor in this general rate  
 22 application of 6.6 percent applied to gross  
 23 energy production, and I just want to contrast  
 24 that, if I can, with Mr. Bowman's evidence.  
 25 And this would be at page 26 of Mr. Bowman's

Page 100

1 evidence, as filed on June 4th, 2015.  
 2 MS. GRAY:  
 3 Q. Sorry, Mr. Coxworthy, what was the page again?  
 4 MR. COXWORTHY:  
 5 Q. It's at page 26, Ms. Gray, thank you, of his  
 6 pre-filed testimony, at the bottom of page --  
 7 I'm sorry, at line three. So Mr. Bowman,  
 8 based on his analysis, indicates that the  
 9 station service should be on the order of --  
 10 factor should be on the order of 5.85 percent,  
 11 and that's even before taking into account the  
 12 variable fan drive project, just based on his  
 13 analysis of past trends. So do you agree or  
 14 not agree with that analysis?  
 15 MR. GOULDING:  
 16 A. He's presented an analysis, I guess, that  
 17 shows a correlation between station service  
 18 and plant load. So he's gone back through a  
 19 period. I think it may have been a ten-year  
 20 period or longer. And the analysis would  
 21 suggest that there is a correlation. We've  
 22 picked a five-year window to make sure that we  
 23 capture all of the most recent changes, but  
 24 you know, he has indicated that in that five-  
 25 year window, there is no year, I guess, that

Page 101

1 there would have been a load expectation that  
 2 we've forecast in our test year.  
 3 (12:00 p.m.)  
 4 MR. COXWORTHY:  
 5 Q. For 2015 or for that matter for after that?  
 6 MR. GOULDING:  
 7 A. That's correct. I guess a thing with the  
 8 approach is there is a straight line  
 9 correlation approach. The concern I would  
 10 have, I guess, is the points that define that  
 11 line that are close to what we're -- to our  
 12 forecast for 2015 would have happened at least  
 13 ten years ago. So, there are other factors  
 14 that may have to weigh in there. Changes,  
 15 say, since 2004 that may have increased or  
 16 decreased station service requirements.  
 17 MR. COXWORTHY:  
 18 Q. I'm going to ask you, first of all, what are  
 19 some of those other factors that cause you  
 20 that concern? You say that there might have  
 21 been other factors that aren't captured in the  
 22 ten-year, and I agree, that's what Mr. Bowman  
 23 has looked at, a ten-year picture.  
 24 MR. GOULDING:  
 25 A. Sure, sure. I don't know that they cause me

Page 102

1 concern, but they cause me concern to the  
 2 point that I don't know that they aren't known  
 3 to me. I know that there have been loads  
 4 added out there with respect to heat tracing,  
 5 for instance, on the fuel lines that would  
 6 introduce a new additional station service  
 7 load and I think that the black -- there's a  
 8 new diesel plant out there as well that would  
 9 have a certain amount of station service draw  
 10 as well.  
 11 MR. COXWORTHY:  
 12 Q. Can you give us any order of magnitude of the  
 13 impact of those factors? When we contrast  
 14 what Mr. Bowman is saying, which is that it  
 15 should be 5.85 percent as opposed to 6.6,  
 16 those two factors that you're talking about,  
 17 what's the order of magnitude when you think  
 18 about those?  
 19 MR. GOULDING:  
 20 A. I can't give you those numbers.  
 21 MR. COXWORTHY:  
 22 Q. So there's been no analysis?  
 23 MR. GOULDING:  
 24 A. No.  
 25 MR. COXWORTHY:

Page 103

1 Q. This is your gut feeling? I don't want to be  
 2 too glim, but I mean, you know, is there  
 3 anything more to it than that?  
 4 MR. GOULDING:  
 5 A. No, just that I don't know what these recent  
 6 changes would be doing to the station service  
 7 factor, so that's the reason why, I guess, we  
 8 chose to stick to as short a time period as we  
 9 did there to capture all the most recent  
 10 changes.  
 11 MR. COXWORTHY:  
 12 Q. Would it be fair to say though that the fact  
 13 that the recent history has reflected a load -  
 14 - a low load factor, lower than if you looked  
 15 over a ten-year period, isn't that a much  
 16 greater factor impacting on the station  
 17 service factor than either one of those two,  
 18 the heat tracing and the diesel?  
 19 MR. GOULDING:  
 20 A. Until we quantify the heat tracing and the  
 21 diesel -  
 22 MR. COXWORTHY:  
 23 Q. When is that going to happen, Mr. Goulding?  
 24 MR. GOULDING:  
 25 A. I don't have an expectation of the timeframe

Page 104

1 there now.  
 2 MR. COXWORTHY:  
 3 Q. Is it going to be quantified?  
 4 MR. GOULDING:  
 5 A. Well, we should, yes, quantify what that  
 6 impact is.  
 7 MR. COXWORTHY:  
 8 Q. Sure. Why wasn't it quantified for this  
 9 general rate application if these were factors  
 10 that weighed in Hydro's mind towards using  
 11 this five-year period where otherwise you had  
 12 these low load factors which would have  
 13 indicated -- if you went back up to higher  
 14 load factors, as was historically the case in  
 15 that period prior to the five-year period,  
 16 that you might expect improvements, based on  
 17 that historical record in the station service  
 18 factor?  
 19 MR. GOULDING:  
 20 A. Sure, they weren't, I guess -- because I would  
 21 have did the five-year average, but the  
 22 information, I guess -- and this was done in  
 23 November of 2014, so I wouldn't -- and to the  
 24 extent that the black start diesels were in  
 25 service at that time, I'm not aware, but I

Page 105

1 wouldn't have factored in any specific changes  
 2 only to take the last five-year average.  
 3 MR. COXWORTHY:  
 4 Q. Going back to the evidence, Hydro's evidence  
 5 at page 275, Section 2, regulated activities,  
 6 and the improvement in the conversion rate to  
 7 6.07 kilowatt hours per barrel. That  
 8 evidence, as I understand it, takes into  
 9 account not just the five-year regression  
 10 analysis on the five years of previous  
 11 experience, but also the anticipated future  
 12 experience in 2015 and onwards with respect to  
 13 higher production requirements, and I'm  
 14 paraphrasing the evidence here on this page.  
 15 MR. GOULDING:  
 16 A. That's correct.  
 17 MR. COXWORTHY:  
 18 Q. And also the expected efficiencies that would  
 19 be enabled by the new CT?  
 20 MR. GOULDING:  
 21 A. That's correct.  
 22 MR. COXWORTHY:  
 23 Q. So that 6.07, to the extent that the higher  
 24 production requirements have not changed?  
 25 MR. GOULDING:

Page 106

1 A. That's correct. That's still where we are on  
 2 the test year forecast basis.  
 3 MR. COXWORTHY:  
 4 Q. But in your evidence yesterday, I believe in  
 5 response to Mr. O'Brien, you suggested that  
 6 perhaps the usage of the new CT, while still  
 7 producing efficiencies, might not be producing  
 8 the same level of efficiencies as been  
 9 originally anticipated?  
 10 MR. GOULDING:  
 11 A. That's correct. That's correct.  
 12 MR. COXWORTHY:  
 13 Q. And has that been quantified in terms of the  
 14 impact on the 6.07?  
 15 MR. GOULDING:  
 16 A. No. No, we have not quantified it. We have  
 17 put forth a new forecast that I understand  
 18 that we will be filing in due course. There  
 19 would be a new -  
 20 MR. COXWORTHY:  
 21 Q. A new forecast of what, if you may?  
 22 MR. GOULDING:  
 23 A. Fuel, fuel forecast.  
 24 MR. COXWORTHY:  
 25 Q. So this is for fuel price?

Page 107

1 MR. GOULDING:  
 2 A. Fuel price, quantity.  
 3 MR. COXWORTHY:  
 4 Q. And quantity.  
 5 MR. GOULDING:  
 6 A. So that forecast would certainly have our most  
 7 recent outlook on the fuel conversion  
 8 performance for 2015. There's a number of  
 9 factors that would be built into that. One is  
 10 the -- I guess the Holyrood schedule that, you  
 11 know, as we've stated is not quite as  
 12 optimistic as what it would have been in the  
 13 fall of last year. There's a number of other  
 14 components as well that have affected fuel  
 15 conversion rate.  
 16 MR. COXWORTHY:  
 17 Q. And again, I'm going to ask you, what other  
 18 factors? Other than the heat tracing and the  
 19 diesel unit at Holyrood?  
 20 MR. GOULDING:  
 21 A. Well, station service load would be one factor  
 22 that impacts on our net fuel conversion rate.  
 23 The average loading on the units is another  
 24 factor.  
 25 MR. COXWORTHY:

Page 108

1 Q. And that's going up?  
 2 MR. GOULDING:  
 3 A. Up, up or down.  
 4 MR. COXWORTHY:  
 5 Q. Up compared to the last five years that are  
 6 used for the -  
 7 MR. GOULDING:  
 8 A. In our test year, it certainly would have been  
 9 up compared to the last five years. In  
 10 actuality, I don't know where it is compared  
 11 to the last five years, but it would certainly  
 12 be lower than our test year because of  
 13 favourable hydrology, plus in addition,  
 14 there's more minimum operating hours as well  
 15 which would lead to lower average loading.  
 16 MR. COXWORTHY:  
 17 Q. So are you referring to -- and this is in  
 18 response to the questions from Mr. O'Brien --  
 19 to in the summer months running one of the  
 20 Holyrood units because the load is flat?  
 21 MR. GOULDING:  
 22 A. That's correct.  
 23 MR. COXWORTHY:  
 24 Q. Is that what you're referring to and when you  
 25 say that the actual experience perhaps would

Page 109

1 be different than what was forecast for 2015?  
 2 MR. GOULDING:  
 3 A. That's correct. In our 2015 test year, we  
 4 hadn't envisioned running a Holyrood unit or,  
 5 you know, we would have envisioned shutting  
 6 down a unit in June and back on again in  
 7 probably September or so, but in actual,  
 8 because of our learnings from the March event  
 9 and our review of our reliability criteria, we  
 10 would have operated Holyrood unit right  
 11 throughout the summer months, with the  
 12 exception of the total planned outage.  
 13 MR. COXWORTHY:  
 14 Q. When you say right through the summer months,  
 15 you were planning on not having any units  
 16 running from June onwards?  
 17 MR. GOULDING:  
 18 A. In our test year forecast.  
 19 MR. COXWORTHY:  
 20 Q. In your test year, thank you. And you're  
 21 saying that the actual experience was that in  
 22 June you did run it?  
 23 MR. GOULDING:  
 24 A. That's correct.  
 25 MR. COXWORTHY:

Page 110

1 Q. In July you did run it?  
 2 MR. GOULDING:  
 3 A. In July, we ran it.  
 4 MR. COXWORTHY:  
 5 Q. And August, I think we know all three units  
 6 were down.  
 7 MR. GOULDING:  
 8 A. In August, all three units were down.  
 9 MR. COXWORTHY:  
 10 Q. So that didn't change?  
 11 MR. GOULDING:  
 12 A. No.  
 13 MR. COXWORTHY:  
 14 Q. So we're talking about two months where it  
 15 ran, where a unit ran?  
 16 MR. GOULDING:  
 17 A. That's correct.  
 18 MR. COXWORTHY:  
 19 Q. Where it wouldn't have otherwise. And how  
 20 much of an impact do you expect that to have  
 21 on the overall year average load?  
 22 MR. GOULDING:  
 23 A. I can't quantify that right now.  
 24 MR. COXWORTHY:  
 25 Q. But it will be in this forecast?

Page 111

1 MR. GOULDING:  
 2 A. Yeah, like when -  
 3 MR. COXWORTHY:  
 4 Q. I'm sorry, in this filing that's going to be  
 5 made?  
 6 MR. GOULDING:  
 7 A. When the unit is on, it is on at a minimum  
 8 load, load of 70 megawatts.  
 9 MR. COXWORTHY:  
 10 Q. Is that 40 percent of the -  
 11 MR. GOULDING:  
 12 A. That's 40 percent.  
 13 MR. COXWORTHY:  
 14 Q. - maximum capacity?  
 15 MR. GOULDING:  
 16 A. That's correct.  
 17 MR. COXWORTHY:  
 18 Q. So that's what it was running at during June  
 19 and July?  
 20 MR. GOULDING:  
 21 A. That's correct.  
 22 MR. COXWORTHY:  
 23 Q. If we could turn to page 169 of Mr. Goulding's  
 24 evidence from yesterday, from October 20th,  
 25 line 12? So Mr. O'Brien was asking you about

Page 112

1 the regression analysis that was done and I  
 2 think obviously that's more than just taking  
 3 an average five years fuel conversion factors  
 4 and averaging out. There's more to it than  
 5 that? Is that -  
 6 MR. GOULDING:  
 7 A. That's correct. The last time the fuel  
 8 conversion rate was set was back in 2004 and  
 9 at that time, it was a reverse approach in  
 10 that we averaged -- it was probably a weighted  
 11 average of the previous five years. In 2007,  
 12 the same fuel conversion rate carried over,  
 13 which at the time, the loads were still fairly  
 14 high.  
 15 MR. COXWORTHY:  
 16 Q. At sort of the level that we're expecting to  
 17 see for 2015 and 2016, is that fair?  
 18 MR. GOULDING:  
 19 A. Exactly. So for this test year, we went to  
 20 another approach and it's an approach that  
 21 we've been using internally for a forecast of  
 22 budgets is to use a regression analysis which  
 23 takes into account, I guess, previous  
 24 experience but it uses inputs such as the  
 25 expected load on the unit and in this case, we

Page 113

1 also used the expected heating content of the  
 2 fuel as well.  
 3 MR. COXWORTHY:  
 4 Q. Of the Holyrood fuel.  
 5 MR. GOULDING:  
 6 A. To give us a more forward view on where our  
 7 fuel conversion performance would fall out.  
 8 If we had just used a weighted average say of  
 9 our last five years in this case where our  
 10 fuel conversion performance was low, it  
 11 wouldn't have been reflective on our test  
 12 year.  
 13 MR. COXWORTHY:  
 14 Q. And in my understanding, the regression  
 15 analysis is turning out a better result than  
 16 would have been the case using the old?  
 17 MR. GOULDING:  
 18 A. Yes.  
 19 MR. COXWORTHY:  
 20 Q. When I say better result, a better result from  
 21 the point of view of, well, I guess, everyone,  
 22 but certainly from the customers.  
 23 MR. GOULDING:  
 24 A. Sure.  
 25 MR. COXWORTHY:

Page 114

1 Q. In terms of fuel conversion rate. So, it does  
 2 have this -- this regression analysis does  
 3 look forward in terms of looking at factors  
 4 other than just the last five years experience  
 5 or whatever time period you're looking at?  
 6 MR. GOULDING:  
 7 A. That's correct.  
 8 MR. COXWORTHY:  
 9 Q. Okay. Anything else other than that that the  
 10 regression analysis took into account? And  
 11 you're turning to Mr. Stratton. He's the  
 12 fellow with the statistics background and I  
 13 understand regression analysis is an area of  
 14 statistics or a tool of statistics. I don't  
 15 know if Mr. Stratton can add anything to that.  
 16 (12:15 p.m.)  
 17 MR. STRATTON:  
 18 A. The regression is forward looking and it's  
 19 taking -- it's applying explanatory factors in  
 20 the history to project what that would be in  
 21 the future. Can you repeat your question one  
 22 more time?  
 23 MR. COXWORTHY:  
 24 Q. Well, I just wanted to determine whether there  
 25 were any other factors, forward looking

Page 115

1 factors, or for that matter, any factors at  
 2 all that were taken into account that weren't  
 3 taken account in the earlier weighted average  
 4 approach. I think that Mr. Goulding has  
 5 indicated that the expected BTU content in the  
 6 Holyrood fuel has been taken into account and  
 7 that wouldn't necessarily have been taken into  
 8 account, at least not directly, in the  
 9 weighted average approach, and also, I think  
 10 you've indicated that the higher load  
 11 expectation, based on the previous five years,  
 12 has been taken into account. So what I was  
 13 wondering was whether any other factors other  
 14 than those would have been added, compared to  
 15 the weighted average approach that was used  
 16 before?  
 17 MR. GOULDING:  
 18 A. Those were the only two factors added. They  
 19 would have been -- these two would certainly  
 20 have the most bearing on where fuel efficiency  
 21 falls out.  
 22 MR. COXWORTHY:  
 23 Q. This is where I want to go to the variable fan  
 24 drive project and we filed yesterday some  
 25 material from the 2013 capital budget in

Page 116

1 relation to that project. If we need to turn  
 2 to it, you know, certainly we can, and  
 3 certainly if you feel you have a need to turn  
 4 to it. But as I understood what was filed in  
 5 relation to the 2013 capital budget, it was  
 6 expected that those variable fan drives, that  
 7 project would be completed in 2014. Would you  
 8 agree that that was the expectation at that  
 9 time?  
 10 MR. GOULDING:  
 11 A. That's correct.  
 12 MR. COXWORTHY:  
 13 Q. And that hasn't turned out that way? Is that  
 14 correct?  
 15 MR. GOULDING:  
 16 A. From my understanding, there was two units  
 17 that were put in service with the new variable  
 18 speed drives when their annual maintenance  
 19 ended in 2014. They would have started up  
 20 with these new variable frequency drives in  
 21 2014. The final unit, unit two, when it was  
 22 started this October, it also had the new  
 23 variable frequency drives.  
 24 MR. COXWORTHY:  
 25 Q. So they're all up and running now, in

Page 117

1 accordance to what was expected in the capital  
 2 budget filing?  
 3 MR. GOULDING:  
 4 A. They are.  
 5 MR. COXWORTHY:  
 6 Q. Late, but otherwise performing the function  
 7 that the capital budget application indicated  
 8 they would?  
 9 MR. GOULDING:  
 10 A. They're performing the functions. Some of the  
 11 data, I understand, may be preliminary at this  
 12 point in quantifying the benefits, but they  
 13 certainly are all in service.  
 14 MR. COXWORTHY:  
 15 Q. Well certainly in the capital budget  
 16 application, one of the selling points, if I  
 17 can put it that way, for approval was that  
 18 this was a project that would pay for itself  
 19 within a year.  
 20 MR. GOULDING:  
 21 A. That's correct.  
 22 MR. COXWORTHY:  
 23 Q. And so are you able to say, based on even the  
 24 preliminary experience, has that occurred?  
 25 MR. GOULDING:

Page 118

1 A. Based on preliminary experience, and I need to  
 2 take you back, I guess, to the application and  
 3 some -  
 4 MR. COXWORTHY:  
 5 Q. The capital budget application?  
 6 MR. GOULDING:  
 7 A. Yes, yeah.  
 8 MR. COXWORTHY:  
 9 Q. Okay.  
 10 MR. GOULDING:  
 11 A. And some understanding, I guess, of how these  
 12 benefits are derived. There's two big --  
 13 there's two large forced draft fan motors on  
 14 each of the Holyrood units and prior to the  
 15 variable frequency drive installation, they  
 16 would have always been at full speed, full  
 17 load regardless of what the unit loading was.  
 18 So, the benefit of the variable frequency  
 19 drives is they're able to step back the load  
 20 on the motors when the load on the unit is  
 21 reduced. So thereby, there are energy savings  
 22 which translate into a station service savings  
 23 as well and where we're measured on a net fuel  
 24 conversion rate, then any savings or any  
 25 reduction in station service energy would also

Page 119

1 reflect in a reduction of the Holyrood fuel  
 2 conversion factor.  
 3 MR. COXWORTHY:  
 4 Q. The net conversion rate?  
 5 MR. GOULDING:  
 6 A. Exactly. So there's a table -- Jenny, if you  
 7 could please call it up -- in the capital  
 8 budget application that was -  
 9 MS. GLYNN:  
 10 Q. Mr. Coxworthy, do you want these entered onto  
 11 the record?  
 12 MR. COXWORTHY:  
 13 Q. Yes, I'm sorry, thank you.  
 14 MS. GLYNN:  
 15 Q. Both documents?  
 16 MR. COXWORTHY:  
 17 Q. Yes.  
 18 MS. GLYNN:  
 19 Q. I think we can enter them all as one.  
 20 MR. COXWORTHY:  
 21 Q. I think so. They're all from the 2013 capital  
 22 budget, even though they were separated out.  
 23 MS. GLYNN:  
 24 Q. Perfect. So they'll go in as Information #17.  
 25 MR. COXWORTHY:

Page 120

1 Q. Thank you.  
 2 MR. GOULDING:  
 3 A. So when the capital budget application was  
 4 developed, I believe in August of 2012, this  
 5 was the operating regime that was envisioned  
 6 for the units.  
 7 MR. COXWORTHY:  
 8 Q. Yeah.  
 9 MR. GOULDING:  
 10 A. And I could take - and really if you go  
 11 through, this represents a gross average load  
 12 expectation of about 88 megawatts. So the  
 13 benefit that was in this application would  
 14 have been derived and stated based on this  
 15 operating regime because the lower the load  
 16 expectation on the unit, the larger the  
 17 benefit, so in terms of the impact in terms of  
 18 a test year perspective, we were forecasting  
 19 average loads of 117 megawatts.  
 20 MR. COXWORTHY:  
 21 Q. Instead of 88?  
 22 MR. GOULDING:  
 23 A. Yes, and although the preliminary data says  
 24 this load point does indicate savings of 7 to  
 25 8 kilowatt hours per barrel, from a test year

Page 121

1 perspective it would have to be lower because  
 2 we're going in with a higher average loading,  
 3 and the analysis that we've done, and again  
 4 it's very limited at this point, is that the  
 5 benefit is in the order of 4 to 5 kilowatt  
 6 hours per barrel.  
 7 MR. COXWORTHY:  
 8 Q. Instead of the 8, and there's been an RFI  
 9 response that quantifies it as 8, but you're  
 10 saying based on actual experience, you would  
 11 revise that to 4 or 5?  
 12 MR. GOULDING:  
 13 A. 4 to 5, and certainly we would have to reflect  
 14 the fact, you know, from a test year  
 15 perspective, all three variables we address  
 16 haven't been in service for the entire year as  
 17 well.  
 18 MR. COXWORTHY:  
 19 Q. Have or have not?  
 20 MR. GOULDING:  
 21 A. We would have had two in service to start the  
 22 year and the third one was -  
 23 MR. COXWORTHY:  
 24 Q. Nonetheless, you could project, couldn't you,  
 25 the impact of the third unit based on

Page 122

1 experience with the other two that have been  
 2 on?  
 3 MR. GOULDING:  
 4 A. We could have projected it for future years,  
 5 but -  
 6 MR. COXWORTHY:  
 7 Q. And would there have been anything wrong with  
 8 taking that into account in, for instance, the  
 9 regression analysis?  
 10 MR. GOULDING:  
 11 A. The regression -  
 12 MR. COXWORTHY:  
 13 Q. Even if it's 4 or 5 instead of 8 in terms of  
 14 the favourable impact, why wouldn't that be  
 15 taken into account in the regression analysis?  
 16 MR. GOULDING:  
 17 A. Well, in the regression analysis itself, it  
 18 forecasts - it's outside of the station  
 19 service impact. The regression analysis  
 20 forecasts gross unit efficiency.  
 21 MR. COXWORTHY:  
 22 Q. Yeah.  
 23 MR. GOULDING:  
 24 A. So the major factors that would have impacted  
 25 on the gross efficiency is the fuel heating

Page 123

1 rate and average loading.  
 2 MR. COXWORTHY:  
 3 Q. I take your point. How about in relation,  
 4 though, to those two months in 2015, June and  
 5 July when you've run at the 40 percent MCR,  
 6 wouldn't the variable fan drives have improved  
 7 the performance from a fuel efficiency point  
 8 of view of those two units, and would  
 9 otherwise have been the case?  
 10 MR. GOULDING:  
 11 A. That's correct.  
 12 MR. COXWORTHY:  
 13 Q. And has that been taken into account, or will  
 14 it be taken into account in terms of the  
 15 station service factor?  
 16 MR. GOULDING:  
 17 A. It wasn't taken into account in our test year  
 18 because the status of the project was still  
 19 somewhat unknown at the time. We didn't have  
 20 the data to quantify the benefits.  
 21 MR. COXWORTHY:  
 22 Q. Is it any more unknown than the expected heat  
 23 content, BTU content, in the Holyrood fuel?  
 24 MR. GOULDING:  
 25 A. At the time that we developed the forecast, it

Page 124

1 would have been unknown because we didn't have  
 2 any experience data in the fall of 2014, but  
 3 now that we have the data and we see the  
 4 benefits, you know, I certainly would caution  
 5 with going with the full 7 to 8 kilowatt hour  
 6 per barrel benefit based on the load that we  
 7 expect to be running on the unit, but we  
 8 certainly see an area for improvement there.  
 9 MR. COXWORTHY:  
 10 Q. So even allowing for that, that perhaps the 8  
 11 kilowatt per hour barrel is too high based on  
 12 actual experience, and perhaps the better  
 13 number is 4 or 5, is there any reason why now  
 14 at this stage the station service factor  
 15 couldn't be revised to take into account the  
 16 favourable impact from the variable fan drive  
 17 project?  
 18 MR. GOULDING:  
 19 A. No. To the extent that we need to have  
 20 another review of the data, it was all very  
 21 preliminary, but based on what we've seen,  
 22 certainly we do an area for improvement there.  
 23 MR. COXWORTHY:  
 24 Q. And when will that be - when could it be  
 25 recalculated?

Page 125

1 MR. GOULDING:  
 2 A. I expect that perhaps at the end, or if we do  
 3 revise our fuel forecast at some before the  
 4 end of this -  
 5 MR. COXWORTHY:  
 6 Q. General rate application?  
 7 MR. GOULDING:  
 8 A. Then we would certainly - yeah.  
 9 MR. COXWORTHY:  
 10 Q. So we may see a revised station service factor  
 11 based on that?  
 12 MR. GOULDING:  
 13 A. That's correct.  
 14 MR. COXWORTHY:  
 15 Q. Turning again to page 169 of Mr. Goulding's  
 16 evidence from yesterday, there was a reference  
 17 at line 23, this was in response to a question  
 18 from Mr. O'Brien in relation to the regression  
 19 analysis and how Hydro goes about gathering  
 20 the data or the information to assist with  
 21 that, there was a reference to a hydro thermal  
 22 split, something that as I understood it from  
 23 your evidence was done annually?  
 24 MR. GOULDING:  
 25 A. It's done - would do it probably spring and

Page 126

1 fall. Now we've sort of gotten off track from  
 2 that schedule now due to GRA filings, but  
 3 ordinarily when Mr. Stratton develops his load  
 4 forecast, that would feed into what we call  
 5 hydro thermal split.  
 6 MR. COXWORTHY:  
 7 Q. And is this a discreet document, this hydro  
 8 thermal split, is it reduced down to a paper  
 9 document?  
 10 MR. GOULDING:  
 11 A. Yeah, it's a spreadsheet document, basically a  
 12 table, with monthly line items of where we  
 13 expect our energy to come from in any given  
 14 month and at the end your energy and load have  
 15 to match.  
 16 MR. COXWORTHY:  
 17 Q. And you've indicated that the past practice is  
 18 to do it twice a year, spring and fall?  
 19 MR. GOULDING:  
 20 A. That's correct.  
 21 MR. COXWORTHY:  
 22 Q. And this year, though, you've indicated  
 23 perhaps that didn't happen?  
 24 MR. GOULDING:  
 25 A. For the last - say, since we embarked on the

Page 127

1 GRA. It's probably happened more frequently  
 2 through -  
 3 MR. COXWORTHY:  
 4 Q. Oh, more frequently?  
 5 MR. GOULDING:  
 6 A. Through revised -  
 7 MR. COXWORTHY:  
 8 Q. So when is the last - did you participate in  
 9 the production of this document?  
 10 MR. GOULDING:  
 11 A. Sure.  
 12 MR. COXWORTHY:  
 13 Q. When was the last one prepared?  
 14 MR. GOULDING:  
 15 A. The last one would have been in preparation  
 16 for our 2015 forecast update.  
 17 MR. COXWORTHY:  
 18 Q. So can you tell me when that was?  
 19 MR. GOULDING:  
 20 A. It was roughly around June, May or June, I  
 21 recall.  
 22 MR. COXWORTHY:  
 23 Q. And for what period would that cover?  
 24 MR. GOULDING:  
 25 A. That would have taken in actuals to the point

Page 128

1 in time that it was done, plus the remainder  
 2 of the year in forecast months.  
 3 MR. COXWORTHY:  
 4 Q. For 2015?  
 5 MR. GOULDING:  
 6 A. That's correct.  
 7 MR. COXWORTHY:  
 8 Q. I'd like to request an undertaking for that  
 9 particular document, the June hydro thermal  
 10 split schedule, a spreadsheet, as I understand  
 11 it.  
 12 MR. GOULDING:  
 13 A. Sure.  
 14 MS. GLYNN:  
 15 Q. Noted on the record.  
 16 MR. COXWORTHY:  
 17 Q. Mr. O'Brien entered into evidence as  
 18 Information 15 and 16 yesterday some monthly  
 19 power reports, and I don't recall now, Mr.  
 20 Goulding, whether the questions about it were  
 21 directed to you or directed to Mr. Humphries  
 22 or perhaps others, but you're familiar with  
 23 these monthly power reports?  
 24 MR. GOULDING:  
 25 A. Yes, I am.



Page 129

1 MR. COXWORTHY:  
 2 Q. Are they related - those are actuals, am I  
 3 correct?  
 4 MR. GOULDING:  
 5 A. Those are actuals.  
 6 MR. COXWORTHY:  
 7 Q. As opposed to forecasts?  
 8 MR. GOULDING:  
 9 A. That's correct.  
 10 MR. COXWORTHY:  
 11 Q. And is there any connection between those and  
 12 the hydro thermal split analysis we just  
 13 talked about?  
 14 (12:30 p.m.)  
 15 MR. GOULDING:  
 16 A. I guess, they're a measure in the end of how  
 17 good our forecasts were.  
 18 MR. COXWORTHY:  
 19 Q. Okay, so when we see the spreadsheet pursuant  
 20 to the undertaking up to June, will that give  
 21 us the same information as the monthly power  
 22 report in terms of actuals up to June, and,  
 23 yes, please turn to Information 15 to remind  
 24 us all of what the detail is there?  
 25 MR. GOULDING:

Page 130

1 A. It would generally give you the same type of  
 2 information. Like, we don't - in our hydro  
 3 thermal split, we don't break out the station  
 4 service load from our generating plants, so  
 5 our hydro thermal split only works on a net  
 6 load basis. If we could scroll down there,  
 7 Jenny.  
 8 MR. COXWORTHY:  
 9 Q. So it wouldn't have this granular sort of  
 10 detail?  
 11 MR. GOULDING:  
 12 A. No, but it would have the generation  
 13 production from each of our plants. It would  
 14 have the energy purchases from each of our  
 15 energy purchase arrangements. It would also  
 16 have our standby generation as well.  
 17 MR. COXWORTHY:  
 18 Q. And what's Hydro's purpose in generating this  
 19 document on a monthly basis, I would  
 20 understand?  
 21 MR. GOULDING:  
 22 A. That's correct. Well, essentially it's a  
 23 statistical report that we use to keep track  
 24 of our generation and loads. So this here is  
 25 reported both internally and externally.

Page 131

1 MR. COXWORTHY:  
 2 Q. It didn't appear to me that this was a filing  
 3 with the Board. I may be incorrect in that  
 4 regard, or at least not a filing in this  
 5 proceeding, these two monthly reports, or for  
 6 that matter any of these monthly reports?  
 7 MR. GOULDING:  
 8 A. No, that's correct.  
 9 MR. COXWORTHY:  
 10 Q. You said that there are some external filing  
 11 purposes behind this. Are you aware whether -  
 12 MR. GOULDING:  
 13 A. Yeah, these reports go external. There's a  
 14 number of stakeholders. I know when I was at  
 15 Deer Lake, I would have gotten it.  
 16 MR. COXWORTHY:  
 17 Q. Okay.  
 18 MR. GOULDING:  
 19 A. So the industrial customers - I assume that  
 20 Newfoundland Power gets this as well.  
 21 MR. COXWORTHY:  
 22 Q. With respect to the - you were asked some  
 23 questions by Mr. O'Brien regarding the  
 24 deferral account for energy supply prices?  
 25 MR. GOULDING:

Page 132

1 A. That's correct.  
 2 MR. COXWORTHY:  
 3 Q. And one of the things that's intended to be  
 4 captured there, correct me if I'm mistaken, is  
 5 the impact of the fuel conversion factor?  
 6 MR. GOULDING:  
 7 A. That's correct.  
 8 MR. COXWORTHY:  
 9 Q. So in other words, if it's set at a level that  
 10 results - that is not correct, and should have  
 11 been set a level that would have been more  
 12 favourable to customers, that will be captured  
 13 in that deferral account?  
 14 MR. GOULDING:  
 15 A. That's correct. It is a two way account.  
 16 MR. COXWORTHY:  
 17 Q. That's right, and vice versa.  
 18 MR. GOULDING:  
 19 A. That's correct.  
 20 MR. COXWORTHY:  
 21 Q. Absolutely, and one of the factors that you've  
 22 spoken about is the heat content or the BTU  
 23 content in Holyrood fuel as being an  
 24 uncertainty that would be captured by that  
 25 deferral account?

Page 133

1 MR. GOULDING:  
 2 A. That's correct.  
 3 MR. COXWORTHY:  
 4 Q. And in the evidence of Hydro that I referred  
 5 to earlier, and this is at page 275, Section 2  
 6 of the regulated activity section of the  
 7 application at line - actually, it's the next  
 8 page, page 276, and there it was noted that,  
 9 "Improvements in the fuel heating content are  
 10 not anticipated". So this was - you'll recall  
 11 from our earlier discussion, this was a  
 12 discussion of the factors that were taken into  
 13 account in the regression analysis, so the  
 14 possibility of fuel heating content, BTUs  
 15 improving content, that was not taken into  
 16 account in the regression analysis?  
 17 MR. GOULDING:  
 18 A. What we used at that time in the regression  
 19 analysis for forward perspective was the last  
 20 five year average because the indications at  
 21 that time that there were not many areas for  
 22 improvements in this area.  
 23 MR. COXWORTHY:  
 24 Q. In the BTU content of the fuel?  
 25 MR. GOULDING:

Page 134

1 A. That's correct. Now Mr. Henderson did quote  
 2 or did indicate during this testimony that in  
 3 our fuel spec, we did specify a higher -  
 4 MR. COXWORTHY:  
 5 Q. This is at page 90 and 91 of the September  
 6 23rd evidence, yes, and I was going to go to  
 7 that.  
 8 MR. GOULDING:  
 9 A. Sure, okay.  
 10 MR. COXWORTHY:  
 11 Q. Thank you.  
 12 MR. GOULDING:  
 13 A. There was - the improvement was not large. I  
 14 recall we went from our spec of 6.3 million  
 15 BTUs per barrel up to 6.4 million, so on a  
 16 percentage basis it's not large because the  
 17 opportunity wasn't there for it.  
 18 MR. COXWORTHY:  
 19 Q. When you say the opportunity wasn't there for  
 20 it - it's in the spec, the improved BTU  
 21 content is in the spec and to say the  
 22 opportunity is not there for it, I'll ask you  
 23 to explain what you mean by that?  
 24 MR. GOULDING:  
 25 A. The opportunity to specify a higher value.

Page 135

1 MR. COXWORTHY:  
 2 Q. Even higher than that?  
 3 MR. GOULDING:  
 4 A. That's correct.  
 5 MR. COXWORTHY:  
 6 Q. But the fuel heating content that is being  
 7 factored in for the purposes of arriving at  
 8 the 607, that isn't even the spec heat  
 9 content?  
 10 MR. GOULDING:  
 11 A. It turns out that what we spec is five year  
 12 average.  
 13 MR. COXWORTHY:  
 14 Q. Okay, is that just by coincidence?  
 15 MR. GOULDING:  
 16 A. It is, but at the time, like - I don't know  
 17 where we were with this fuel spec, but I did  
 18 check and this specification is basically  
 19 bringing us up to our five year average.  
 20 MR. COXWORTHY:  
 21 Q. Mr. O'Brien asked if there had been any  
 22 studies by Hydro to identify whether there's a  
 23 direct correlation between the BTU content of  
 24 the fuel and the fuel efficiency factor, and I  
 25 believe your answer was no?

Page 136

1 MR. GOULDING:  
 2 A. There's none that I'm aware of. There would  
 3 be some internal monitoring. There's a system  
 4 inside the plant that the operators use to  
 5 track the performance of the units.  
 6 MR. COXWORTHY:  
 7 Q. Has there been any effort within Hydro to  
 8 correlate that information?  
 9 MR. GOULDING:  
 10 A. I'm not aware of any.  
 11 MR. COXWORTHY:  
 12 Q. So is it just anecdotal? Again I don't want  
 13 to be glib, but is it just anecdotal that  
 14 there is a relationship within Hydro between  
 15 the BTU content and the fuel efficiency  
 16 factor?  
 17 MR. GOULDING:  
 18 A. Again I don't know that I'm the one to speak  
 19 with. That's more or less the internal -  
 20 MR. COXWORTHY:  
 21 Q. Is anyone else on this panel able to speak to  
 22 that issue?  
 23 MR. HUMPHRIES:  
 24 A. No.  
 25 MR. STRATTON:

Page 137

1 A. No.  
 2 MR. MOULTON:  
 3 A. No.  
 4 MR. COXWORTHY:  
 5 Q. Who would be the person who might be better  
 6 qualified?  
 7 MR. GOULDING:  
 8 A. I think it would have probably been the  
 9 operations panel. I guess, in terms -  
 10 MR. COXWORTHY:  
 11 Q. So Mr. Henderson?  
 12 MR. GOULDING:  
 13 A. That's correct. In terms of the correlation,  
 14 I guess, between fuel heating content and the  
 15 energy output, the fuel heating content is  
 16 also a measure of the energy in the fuel and  
 17 the kilowatt hours out is also energy, so it  
 18 would only stand to reason that the more  
 19 energy that you put into a process, the more  
 20 energy that you get out of a process.  
 21 MR. COXWORTHY:  
 22 Q. And as a general principle of, I'm going to  
 23 say a word like "heat dynamics", but maybe  
 24 that's not the right term, sure, but in terms  
 25 of that actually being a measured impact,

Page 138

1 measured in any sort of systematic way, that  
 2 hasn't been done internally at Hydro?  
 3 MR. GOULDING:  
 4 A. I don't know of it.  
 5 MR. COXWORTHY:  
 6 Q. And you're indicating there might be someone  
 7 who could say more?  
 8 MR. GOULDING:  
 9 A. That's correct.  
 10 MR. COXWORTHY:  
 11 Q. With respect to your evidence yesterday, and  
 12 again I believe in response to some questions  
 13 from Mr. O'Brien, you were asked about how the  
 14 deferral account would work in relation to and  
 15 specifically in relation to this Holyrood -  
 16 I'm sorry, not in relation to the Holyrood  
 17 fuel conversion rate, but actually in relation  
 18 to another issue. Pardon me for just a second  
 19 here. At page 139 of Mr. Goulding's evidence  
 20 of yesterday, and Mr. O'Brien starting at line  
 21 4 was asking you about the deferral account,  
 22 in particular the \$500,000.00 band or  
 23 threshold that would apply, and Mr. O'Brien  
 24 was asking you in practice, you know, if  
 25 amounts do accrue in this deferral account,

Page 139

1 how did you see those being disposed of in  
 2 terms of what factors would be taken into  
 3 account in deciding how that deferral account  
 4 balance should be disposed of, and that  
 5 questioning starts at line 24, page 139, and  
 6 this was in relation to in this case - as I  
 7 said, it wasn't in relation to the fuel  
 8 conversion, at least not directly, it was in  
 9 relation to the issue of the running of the  
 10 gas turbines and how that might impact on that  
 11 deferral account, and at line 14 on page 140  
 12 you say that one of the factors that you'd  
 13 expect the Board to take into account is a  
 14 summary report of when the gas turbines were  
 15 ran and maybe even what the circumstances  
 16 were, so that would be a factor that the Board  
 17 could take into account in deciding how a  
 18 deferral account balance should be disposed  
 19 of?  
 20 MR. GOULDING:  
 21 A. Yes, I really can't assume what the Board will  
 22 ask for, but -  
 23 MR. COXWORTHY:  
 24 Q. Hydro is not proposing - I guess, what I'm  
 25 doing here is I'm contrasting this to the RSP,

Page 140

1 which has defined mechanisms which, you know,  
 2 if it's allowed to run the way it's intended  
 3 to run, pretty much dictates how funds will be  
 4 disposed of.  
 5 MR. GOULDING:  
 6 A. That's correct.  
 7 MR. COXWORTHY:  
 8 Q. Without having to look outside the RSP rules  
 9 as to what factors might need to be taken into  
 10 account, and as I understand these deferral  
 11 accounts, they certainly don't have that level  
 12 of internal rules that we know in advance will  
 13 apply to how these balances will be disposed.  
 14 Certainly that's what I took as the thrust of  
 15 Mr. O'Brien's question as he was trying to  
 16 determine in relation to the running of the  
 17 gas turbines, seeing as we're not going to  
 18 have those internal rules in the deferral  
 19 account, what are the factors - you know, when  
 20 Hydro comes to you, as I expect they will at  
 21 the time of an application to dispose of these  
 22 balances, what are the factors, or if Hydro  
 23 internally doesn't come to you, it'll be RFIs  
 24 perhaps directed to Hydro that you'll be asked  
 25 to respond to, and you've identified one of

Page 141

1 the issues in relation to the gas turbines, I  
 2 wanted to ask the same question in relation to  
 3 the fuel conversion factor in terms of to the  
 4 extent balances accrue in that deferral  
 5 account in relation to the fuel conversion  
 6 factor, and that factor differing from test  
 7 year, what factors do you think the Board  
 8 should be taking into account in deciding how  
 9 that aspect of the balances in the deferral  
 10 account should be disposed of?  
 11 MR. GOULDING:  
 12 A. I really can't presume what the Board would  
 13 ask for. There are - it may follow the same  
 14 format as our current RSP, I really can't  
 15 assume what the Board will ask for.  
 16 MR. COXWORTHY:  
 17 Q. So, for instance, if you were asked should the  
 18 actual experience in terms of fuel content,  
 19 BTU content, I'm sorry, in the Holyrood fuel  
 20 as opposed to what's projected or forecast in  
 21 the test year, is that a factor that ought to  
 22 be taken into account?  
 23 MR. GOULDING:  
 24 A. That's a factor that will influence on the  
 25 actual fuel performance. Whether or not it

Page 142

1 should be taken into account into how this  
 2 account is actually disposed of, I can't  
 3 comment on that.  
 4 MR. COXWORTHY:  
 5 Q. One of the things I want to contrast here, and  
 6 it was done by Mr. Henderson at page 90 and 91  
 7 of his September 23rd evidence, is he made the  
 8 point that, sure, we have a contract for  
 9 Holyrood fuel that allows for the opportunity  
 10 for higher heat content, and if that happens,  
 11 there's the expectation that that should have  
 12 a favourable impact on fuel efficiency, but he  
 13 made the point, oh, but if that happens, that  
 14 fuel is going to cost us more too. We can  
 15 turn to his evidence. You know, a higher heat  
 16 content fuel is going to cost more, as opposed  
 17 to - and I think the relationship is under  
 18 that contract if it's below spec, Hydro pays  
 19 less.  
 20 MR. GOULDING:  
 21 A. If it's below spec, Hydro -  
 22 MR. COXWORTHY:  
 23 Q. In terms of BTU content?  
 24 MR. GOULDING:  
 25 A. Hydro pays less, but that lower price is

Page 143

1 reflected through the RSP.  
 2 (12:45 p.m.)  
 3 MR. COXWORTHY:  
 4 Q. Sure, sure. The point I want to make is if  
 5 there's that price impact, depending on the  
 6 BTU content, that's captured immediately in  
 7 the RSP?  
 8 MR. GOULDING:  
 9 A. That's correct.  
 10 MR. COXWORTHY:  
 11 Q. And the customers know how that's going to  
 12 work?  
 13 MR. GOULDING:  
 14 A. That's correct.  
 15 MR. COXWORTHY:  
 16 Q. Because the RSP rules define that.  
 17 MR. GOULDING:  
 18 A. Uh-hm.  
 19 MR. COXWORTHY:  
 20 Q. I want to contrast that, though, with the  
 21 impact of a different BTU content in terms of  
 22 the effect on the fuel efficiency factor.  
 23 That's not going - well, it's going to be  
 24 captured in the deferral account, but in terms  
 25 of what happens then, none of that is defined

Page 144

1 in terms of what happens next in terms of  
 2 that, whether it's a favourable or  
 3 unfavourable impact on the customers?  
 4 MR. GOULDING:  
 5 A. Yeah, I don't know that level of detail in the  
 6 deferral account.  
 7 MR. COXWORTHY:  
 8 Q. Sorry, I missed the last part of your answer.  
 9 MR. GOULDING:  
 10 A. I don't know of that level of detail will be  
 11 included in the deferral account.  
 12 MR. COXWORTHY:  
 13 Q. Thank you, Mr. Goulding. I'd like to move on  
 14 to a different area and perhaps start with Mr.  
 15 Humphries in relation to your role as part of  
 16 the Nalcor leadership team, and Mr. O'Brien  
 17 asked you some questions about this yesterday.  
 18 Mr. O'Brien asked you whether you ever charge  
 19 out any of your time to other Nalcor lines of  
 20 business, or it may have been, in fairness, a  
 21 question that he posed to one of the other  
 22 panel members, and if that's the case - but  
 23 I'll ask it of you. Do you charge out any of  
 24 your time, Mr. Humphries, as part of the  
 25 Nalcor leadership team to other Nalcor lines

Page 145

1 of business?  
 2 MR. HUMPHRIES:  
 3 A. A very small amount.  
 4 MR. COXWORTHY:  
 5 Q. And that, I think, was the sort of answer we  
 6 heard from other panel members, but it does  
 7 happen?  
 8 MR. HUMPHRIES:  
 9 A. It does happen, yes.  
 10 MR. COXWORTHY:  
 11 Q. We've heard there's time sheets that are  
 12 completed, and is that done - when you do it,  
 13 is that how it's recorded?  
 14 MR. HUMPHRIES:  
 15 A. Yes, it is.  
 16 MR. COXWORTHY:  
 17 Q. And can you give us - if it's a small, if it's  
 18 not something that doesn't happen very often,  
 19 can you give me an example of where that's  
 20 happened?  
 21 MR. HUMPHRIES:  
 22 A. Well, through the Nalcor leadership team there  
 23 may be portions of a meeting that I determine  
 24 of my own assessment that's not Hydro related.  
 25 There may be - occasionally there might be an

Page 146

1 issue that I would get involved with with  
 2 Churchill Falls, for argument sake, and I  
 3 would charge that, and for the most part, I  
 4 think those would be -  
 5 MR. COXWORTHY:  
 6 Q. So these are the monthly meetings that you're  
 7 referring to?  
 8 MR. HUMPHRIES:  
 9 A. Yes.  
 10 MR. COXWORTHY:  
 11 Q. So there might be a discreet part of that  
 12 meeting that's relating to issues other than  
 13 Hydro?  
 14 MR. HUMPHRIES:  
 15 A. Sure.  
 16 MR. COXWORTHY:  
 17 Q. Or at least directly to Hydro, and you would  
 18 charge that time out to Nalcor?  
 19 MR. HUMPHRIES:  
 20 A. Yes, it goes to Nalcor.  
 21 MR. COXWORTHY:  
 22 Q. And then there are other sometimes discreet  
 23 projects like Churchill Falls - you're  
 24 referring to Lower Churchill?  
 25 MR. HUMPHRIES:

Page 147

1 A. Both, Lower and Upper.  
 2 MR. COXWORTHY:  
 3 Q. Sure, okay, where you might be called upon and  
 4 what are you being called upon to do in those  
 5 circumstances when you're - this is outside  
 6 the monthly leadership meeting, I understand,  
 7 or there maybe I'm misunderstanding that?  
 8 MR. HUMPHRIES:  
 9 A. Yeah, it would be outside. Some of the things  
 10 that are going on particularly possibly in the  
 11 ready for commercial integration dealings with  
 12 the Emera side of things, those are things  
 13 that we charged out to Nalcor.  
 14 MR. COXWORTHY:  
 15 Q. So you don't charge them out to the Lower  
 16 Churchill Management Corporation?  
 17 MR. HUMPHRIES:  
 18 A. No.  
 19 MR. COXWORTHY:  
 20 Q. Or any of the other - you charge it out  
 21 directly to Nalcor?  
 22 MR. HUMPHRIES:  
 23 A. Now I do. In my previous role, it would go  
 24 directly to Lower Churchill, but as the  
 25 executive, they go to Nalcor.

Page 148

1 MR. COXWORTHY:  
 2 Q. Okay, so once you are in your position as Vice  
 3 President Systems Operations and Planning,  
 4 you're saying that just gets charged - that  
 5 sort of stuff gets charged to Nalcor?  
 6 MR. HUMPHRIES:  
 7 A. That's correct.  
 8 MR. COXWORTHY:  
 9 Q. If it's another Nalcor line of business?  
 10 MR. HUMPHRIES:  
 11 A. That's right.  
 12 MR. COXWORTHY:  
 13 Q. But before that, you were indicating in your  
 14 previous roles you might have charged out time  
 15 directly to the specific line of business?  
 16 MR. HUMPHRIES:  
 17 A. Yes, I would have.  
 18 MR. COXWORTHY:  
 19 Q. If we could turn to page 5 of Mr. Rolph's  
 20 Report, the Grant Thornton Report, and if we  
 21 could go to the footnote at the bottom, and  
 22 Mr. Humphries, if you have that there before  
 23 you, there's a footnote there with respect to  
 24 entities that were added to Nalcor's legal  
 25 entity structure in 2014, and I'm not going to

Page 149

1 recite them all, but I think some of them,  
 2 maybe all of them are in relation to the  
 3 Muskrat Falls project and the Maritime link,  
 4 and the associated projects. First of all,  
 5 I'll ask you have you done any work, provided  
 6 any advice, services in relation to any of  
 7 these?  
 8 MR. HUMPHRIES:  
 9 A. Yes, I have.  
 10 MR. COXWORTHY:  
 11 Q. And if you do, does that get charged to Nalcor  
 12 or is that -  
 13 MR. HUMPHRIES:  
 14 A. The majority of that would be Nalcor. There  
 15 may be exceptions that's Hydro related.  
 16 MR. COXWORTHY:  
 17 Q. How do you decide when to make an exception to  
 18 charge to Nalcor and not to charge to Nalcor?  
 19 MR. HUMPHRIES:  
 20 A. Well, after - I guess, I keep a daily  
 21 schedule, meeting schedules, and after I do an  
 22 assessment myself, I make a note whether  
 23 that's 100 percent Nalcor, or if there were  
 24 some Hydro involvement. It's my own judgment  
 25 used in that.

Page 150

1 MR. COXWORTHY:  
 2 Q. And I don't know that we need to go to it,  
 3 perhaps we do, PUB-NLH-409, sets out sort of  
 4 the tree for your group?  
 5 MR. HUMPHRIES:  
 6 A. Yes.  
 7 MR. COXWORTHY:  
 8 Q. And would other persons within that group also  
 9 be charging in time to Nalcor in relation to  
 10 work being done by those entities on page 5 of  
 11 Mr. Rolph's Report?  
 12 MR. HUMPHRIES:  
 13 A. There is - yes, there would be a small amount,  
 14 yes.  
 15 MR. COXWORTHY:  
 16 Q. When you say "small amount", are you able -  
 17 I'll give you some context. When we were  
 18 speaking to, for instance, the HROE panel,  
 19 they were able to sort of give a percentage in  
 20 terms of 50 percent of time spent on  
 21 integration as opposed to perhaps on smoothing  
 22 else, so in very broad terms, when you say "a  
 23 small amount of time", in terms of your time,  
 24 can you give us any order of magnitude in  
 25 terms of percentage of time?

Page 151

1 MR. HUMPHRIES:  
 2 A. Well, right now when you look at the ready for  
 3 integration role that's here, and that's now a  
 4 Hydro role, the bulk of that, is Hydro, this  
 5 is a separate business unit there that the  
 6 people in this business unit, they're over  
 7 embedded in the Lower Churchill Project, they  
 8 may end up charging out portions of their time  
 9 to the project, and that would be based on if  
 10 there were a request from the project team to  
 11 provide information or support that's directly  
 12 related to the project development, there  
 13 would be a charge out. The actual integration  
 14 work, that's all being captured now in that  
 15 business unit. That wasn't always the case.  
 16 In the earlier stage, we would have  
 17 significantly charged out time towards the  
 18 project.  
 19 MR. COXWORTHY:  
 20 Q. So why did that change, why did it change from  
 21 charging the time out to Nalcor to not?  
 22 MR. HUMPHRIES:  
 23 A. Well, it's - I think it's the evolution of the  
 24 project and the development. The earlier  
 25 involvement were all, for the most part,

Page 152

1 activities that these Hydro employees were  
 2 providing to allow the project people to do  
 3 what they had to do to build and construct the  
 4 project. Now we're getting more into the  
 5 interconnection type issues that are outside  
 6 of the scope of the actual project.  
 7 MR. COXWORTHY:  
 8 Q. And can you help me in understanding what the  
 9 difference is between those two aspects of the  
 10 work beyond what you've just said, perhaps as  
 11 an example?  
 12 MR. HUMPHRIES:  
 13 A. Well, other than one, there's a scope of work  
 14 that's defined for the Lower Churchill  
 15 Project, and then there are integration items  
 16 above and beyond that that are not in the  
 17 project scope.  
 18 MR. COXWORTHY:  
 19 Q. And the scope of work for the Lower Churchill  
 20 Project you're referring to, where would we  
 21 find that scope, the scope that you would  
 22 refer to to decide whether something was Hydro  
 23 interface work as opposed to Lower Churchill  
 24 scope of work?  
 25 MR. HUMPHRIES:

Page 153

1 A. There is a basis of design document for the  
 2 Lower Churchill Project, and that would cover  
 3 the work items that are included in the  
 4 overall project estimate, and so we would rely  
 5 back - fall back on that.

6 MR. COXWORTHY:  
 7 Q. And how would that distinction between the  
 8 Lower Churchill scope of work and what I'll  
 9 call Hydro interface work as distinguished  
 10 from it, how would that have been communicated  
 11 to other people within the systems operations  
 12 and planning tree on PUB-NLH-409?

13 MR. HUMPHRIES:  
 14 A. Well, these people that if they are completing  
 15 activities that are related to the Lower  
 16 Churchill scope of work, they do have work  
 17 orders that they can charge it back to.

18 MR. COXWORTHY:  
 19 Q. So they would go by whatever work order number  
 20 they're working on?

21 MR. HUMPHRIES:  
 22 A. Yes, that's right.

23 MR. COXWORTHY:  
 24 Q. And they're completing time sheets as well?

25 MR. HUMPHRIES:

Page 154

1 A. Yes.

2 MR. COXWORTHY:  
 3 Q. Again referring to PUB-NLH-409, and looking at  
 4 the ling of management just below your  
 5 yourself, Mr. Humphries, the four managers,  
 6 can you explain to me - and I see with two of  
 7 them, in addition to manager system  
 8 operations, there are also integration  
 9 support. Is that integration support this  
 10 Hydro interface with the project or is it  
 11 something different?

12 MR. HUMPHRIES:  
 13 A. Yes, and there's a bit of an evolution there.  
 14 If you go back in early 2012/2103 time frame,  
 15 the Manager for Ready for Integration didn't  
 16 exist, and the Manager of System Operations  
 17 and the Manager of Transmission Planning had  
 18 an integration support in their titles as  
 19 well, and they were providing - and at that  
 20 time they were probably doing - their level of  
 21 involvement was higher, they were providing  
 22 more of this project type support. As we've  
 23 moved through the project development and we  
 24 get into the real integration, we formed this  
 25 separate group with the Manager of Ready for

Page 155

1 Integration, who was formerly our Manager of  
 2 Transmission Planning, and so the bulk of the  
 3 integration issues are around the transmission  
 4 planning function and the system operation  
 5 function. So the two managers remaining in  
 6 system operations and transmission planning  
 7 still continue to support Mr. Thomas in his  
 8 activities.

9 MR. COXWORTHY:  
 10 Q. And correct me if I'm mischaracterizing this,  
 11 but obviously the Manager of Ready for  
 12 Integration is a relatively new position?

13 MR. HUMPHRIES:  
 14 A. It's a new position.

15 MR. COXWORTHY:  
 16 Q. So has some of the integration work that was  
 17 being done by the other two managers sort of  
 18 migrated to that group?

19 MR. HUMPHRIES:  
 20 A. Yes, it has.

21 MR. COXWORTHY:  
 22 Q. But that doesn't mean that those other two  
 23 managers don't do any integration support any  
 24 more?

25 MR. HUMPHRIES:

Page 156

1 A. That's correct.

2 MR. COXWORTHY:  
 3 Q. Mr. Chair, we are going to move on to another  
 4 area of questioning, but it's another area of  
 5 questioning in respect to an entirely  
 6 different area, discreet area, and I'm going  
 7 to ask my colleague, Mr. Porter, to spell me  
 8 and pursue that particular line of  
 9 questioning.

10 CHAIRMAN:  
 11 Q. Certainly.

12 CROSS-EXAMINATION BY MR. PORTER:  
 13 MR. COXWORTHY:  
 14 Q. Thank you, Mr. Chair. You'll be glad to know  
 15 this should be relatively short. My interest,  
 16 I guess, is quickly reviewing how the Corner  
 17 Brook Pulp and Paper, the O & M charge related  
 18 to the Corner Brook Pulp and Paper frequency  
 19 converter is calculated, I guess, and further  
 20 how the anticipated O & M charge is  
 21 communicated to the industrial customers, such  
 22 as Corner Brook Pulp and Paper. I understand  
 23 from the issues list that this panel is tasked  
 24 with addressing the frequency converter, and  
 25 when Mr. Coxworthy, I guess, back on September

Page 157

1 24th asked Mr. Darren Moore if anyone was  
 2 specifically assigned to liaise with,  
 3 communicate with, and deal with Corner Brook  
 4 Pulp and Paper issues, Mr. Moore advised that  
 5 the systems operations group had direct  
 6 accountability to liaise with the industrial  
 7 customers. Is there anybody within your group  
 8 that's specifically assigned to deal with  
 9 Corner Brook Pulp and Paper?  
 10 MR. HUMPHRIES:  
 11 A. Well I guess there are two levels of interface  
 12 with, from this group with the industrial  
 13 customers. One would be through system  
 14 operations, Mr. Goulding's group, they would  
 15 interface on almost a day-to-day type basis,  
 16 operationally. And as well, Mr. Stratton also  
 17 interfaces and communicates with the  
 18 industrial customers on a regular basis to get  
 19 updates on load forecasting information,  
 20 changes in loads and those types of questions.  
 21 MR. PORTER:  
 22 Q. Okay, I'm interested in Mr. Goulding's  
 23 perspective because I think he brings a--he  
 24 has a unique perspective on this issue, given  
 25 his, I guess, work history. So I understand,

Page 158

1 Mr. Goulding, from yesterday that you joined  
 2 Deer Lake Power in '95.  
 3 MR. GOULDING:  
 4 A. That's correct.  
 5 MR. PORTER:  
 6 Q. And then in 2001, you became the plant  
 7 manager?  
 8 MR. GOULDING:  
 9 A. That's correct, I may have said 2001, but in  
 10 reading my notes after, I should have said  
 11 2003, so that should be corrected.  
 12 MR. PORTER:  
 13 Q. That's fine. And then I understand you held  
 14 that position until 2009 when you rejoined  
 15 Hydro?  
 16 MR. GOULDING:  
 17 A. That's correct.  
 18 MR. PORTER:  
 19 Q. Okay. So 2009, that would have been after the  
 20 last GRA, so for 14 years, you worked with  
 21 Deer Lake Power and so that would be six of  
 22 them as plant manager?  
 23 MR. GOULDING:  
 24 A. That would be from 2003 to 2009 as plant  
 25 manager.

Page 159

1 MR. PORTER:  
 2 Q. Okay, so six years as plant manager, okay.  
 3 And I think you said at page 8 that all  
 4 aspects of operations, including safety and  
 5 environment to operations and maintenance  
 6 would have been within your purview.  
 7 A. That's correct.  
 8 MR. PORTER:  
 9 Q. Okay, and that's essentially the role now  
 10 filed by Mr. Larry Marks, is that correct?  
 11 MR. GOULDING:  
 12 A. That's correct. Now Mr. Marks, he has a dual  
 13 role, I guess, he's overseeing--again I don't  
 14 know if I should be speaking for Mr. Marks,  
 15 but he's overseeing the operation, the energy  
 16 operations in Deer Lake, as well as the energy  
 17 operations down at the mill as well.  
 18 MR. PORTER:  
 19 Q. Okay, so when you were in your role, I guess,  
 20 at Deer Lake Power as plant manager, would you  
 21 have dealt with the issues related to the  
 22 frequency converter?  
 23 MR. GOULDING:  
 24 A. Yes, that's correct.  
 25 MR. PORTER:

Page 160

1 Q. Okay. So can you tell me now from your  
 2 experience, what goes into the O&M charge, in  
 3 broad strokes, for the frequency converter at  
 4 Corner Brook Pulp & Paper?  
 5 MR. GOULDING:  
 6 A. Again, I can't speak to the specifics of the  
 7 calculation.  
 8 MR. PORTER:  
 9 Q. Okay.  
 10 MR. GOULDING:  
 11 A. But I understand that there is an O&M  
 12 component and there's probably a depreciation  
 13 component as well.  
 14 MR. PORTER:  
 15 Q. Okay.  
 16 MR. GOULDING:  
 17 A. But I know when I first got to Deer Lake, I  
 18 can't really comment on what our level of  
 19 specifically assigned charges were at that  
 20 time, but they were certainly fairly low and  
 21 that was basically a reflection that there  
 22 hadn't been a lot of expenditure that was  
 23 associated with the Corner Brook Pulp & Paper  
 24 specifically assigned assets, and then it was  
 25 for a time after, I guess, again I'm getting



Page 161

1 lost in the timelines, but there would have  
 2 been, say, I'm going to say from 2001 to 2009,  
 3 there would have been a fair amount of  
 4 expenditure required at that unit. It was in  
 5 service for almost 40 years at the time as a  
 6 rotating unit. Now it certainly would have  
 7 required that amount of expenditure at that  
 8 period.  
 9 MR. PORTER:  
 10 Q. Sure. So let me take you back to, you know,  
 11 back to your career, I guess, as the plant  
 12 manager. Did anyone at Hydro approach you to  
 13 explain, look, this is what your O&M is going  
 14 to be, this is how it's going to be  
 15 calculated, this is, you know, this is what  
 16 you can expect? Do you recall any  
 17 conversations with Hydro in that regard?  
 18 MR. GOULDING:  
 19 A. I do recall that, you know, the O&M was a  
 20 reflection on the age of the asset--on the  
 21 level of expenditure to the asset, so I knew  
 22 that, you know, that it was low up until the  
 23 time that the refurbishment program began and  
 24 I knew that Hydro was about to embark upon a  
 25 refurbishment plan and I knew that that would

Page 162

1 impact on specifically assigned charges in the  
 2 end.  
 3 MR. PORTER:  
 4 Q. Right, but I guess specifically my question  
 5 is: did anyone from Hydro drop into the plant  
 6 or pick up the phone and call you and say,  
 7 look, this is what your O&M is likely to be,  
 8 this is how it's calculated, this will get  
 9 thrown into the pot?  
 10 MR. GOULDING:  
 11 A. Hydro met with us, I guess, and I recall in  
 12 2005 and that meeting was to basically roll  
 13 out the refurbishment plan. There were a  
 14 number of parties involved and going by memory  
 15 here now, but we would have been aware of what  
 16 the expenditure was.  
 17 MR. PORTER:  
 18 Q. What the expenditure would be?  
 19 MR. GOULDING:  
 20 A. Uh-hm.  
 21 MR. PORTER:  
 22 Q. But I guess now I'm walking through to the O&M  
 23 expense and I'm trying to get to--I'm trying  
 24 to get your, you know, your experience and now  
 25 what Mr. Marks is going through.

Page 163

1 MR. GOULDING:  
 2 A. That's correct.  
 3 MR. PORTER:  
 4 Q. In trying to calculate and even trying to  
 5 envision what the O&M -  
 6 MR. GOULDING:  
 7 A. And in anticipation, I guess, of this  
 8 question, I tried to find some correspondence,  
 9 like I did request from Hydro and I can't find  
 10 the correspondence, an estimate of what the  
 11 specifically assigned charge would be and I do  
 12 recall an estimate in the order of one million  
 13 dollars at that time. Now I wouldn't have  
 14 been primarily dealing with this, in 2006  
 15 there was a power and energy manager appointed  
 16 at the mill.  
 17 MR. PORTER:  
 18 Q. Is that Dave MacDonald?  
 19 MR. GOULDING:  
 20 A. Yes, that is correct, now he would have been  
 21 the one that was frontline, per se, on the  
 22 higher level talks with Hydro around that  
 23 unit.  
 24 MR. PORTER:  
 25 Q. Okay.

Page 164

1 MR. GOULDING:  
 2 A. So I'm assuming that a lot of this detail and  
 3 a lot of this correspondence and discussion is  
 4 probably gone with him now, so he's no longer  
 5 with Corner Brook Pulp & Paper.  
 6 MR. PORTER:  
 7 Q. So on an ongoing basis is your group, like who  
 8 liaises with the industrial customer group on  
 9 the O&M issue, on an ongoing basis, is that  
 10 you or is that -  
 11 MR. GOULDING:  
 12 A. We are and I think it was in the previous  
 13 testimony, there is a move afoot now I guess  
 14 to establish and when the customer service  
 15 panel appears, they will be able to give you  
 16 more detail on this, but there is a move to  
 17 establish like key managers or key account  
 18 managers or key representatives and the  
 19 industrial customers will fall in this area,  
 20 so I would expect that that person would be in  
 21 charge of relaying, you know, any information  
 22 related to specifically assigned charges  
 23 certainly.  
 24 MR. PORTER:  
 25 Q. Okay. That would be great. I want to turn to

Page 165

1 IC-144 and I won't belabour this point too  
 2 long, Mr. Goulding, because I understand that  
 3 the actual calculation is outside your purview  
 4 probably, but--in this RFI, I guess we had,  
 5 the ICs had requested how many staff positions  
 6 has Hydro budgeted for operating and  
 7 maintenance activities at the Corner Brook  
 8 frequency converter, the budgets for salaries  
 9 and supplies and I guess the response was that  
 10 Hydro does not specifically budget staff  
 11 positions or supplies to Corner Brook  
 12 frequency converter, the maintenance positions  
 13 for Corner Brook frequency converter are  
 14 included within the business unit for terminal  
 15 stations and the supplies are included within  
 16 the generation interconnected business unit,  
 17 that also includes Stephenville and Hardwood's  
 18 gas turbines. I guess that led to IC-145.

19 MS. GRAY:  
 20 Q. Revision 1, Mr. Porter?

21 MR. PORTER:  
 22 Q. Revision 1. And basically what we wanted to  
 23 know is how had the cost for staffing,  
 24 maintenance or supplies changed since the last  
 25 GRA and you'll note in the reply that there

Page 166

1 had been no change in the maintenance staff  
 2 FTEs in the terminal station business group,  
 3 so that hasn't changed and with respect to  
 4 maintenance materials and supplies, there's a  
 5 table that shows that since 2007, in the 2015  
 6 test year it's only up, you know, a fairly  
 7 modest amount, is the entire maintenance  
 8 materials and supplies for the generation  
 9 interconnected business unit. So we see a  
 10 very slight increase in the material and  
 11 supplies and none to the maintenance staff  
 12 FTEs, but Corner Brook Pulp & Paper's O&M  
 13 charge is increasing by 134 percent. Can you  
 14 explain how an industrial customer will be  
 15 able to square that circle? I mean, that is a  
 16 -

17 MR. GOULDING:  
 18 A. Only to the extent that I understand from  
 19 reading the past testimony that the O&M is not  
 20 a reflection of actual maintenance charges.

21 MR. PORTER:  
 22 Q. Okay, so that leads me to the final, I guess,  
 23 piece of the puzzle. If we go to IC-NLH-87 -

24 MS. GRAY:  
 25 Q. Revision 1, Mr. Porter?

Page 167

1 MR. PORTER:  
 2 Q. Yes. And if we turn to attachment 2 and if we  
 3 actually go to page 3 of attachment 2, so this  
 4 is actually entitled "Calculation of  
 5 Specifically Assigned Charges for Corner Brook  
 6 Pulp & Paper" and the top box is the operating  
 7 and maintenance cost, the O&M costs and I  
 8 guess this is what the industrial customers  
 9 are left with in trying to figure out what the  
 10 O&M cost is and what it's comprised of, and if  
 11 you look across from the second line, there is  
 12 \$164,400 which solely with the assistance of  
 13 Mr. Patrick Bowman, I was able to ascertain  
 14 the FTEs and the supplies and maintenance  
 15 cost, that's the 164,400. Below that, the  
 16 administrative and general overheads, if I  
 17 total those up with other, it adds up to  
 18 almost precisely 100 percent. I think it's 99  
 19 percent. Do you have any understanding of  
 20 whether simply Hydro allots 100 percent on top  
 21 of the actual salaries and the maintenance  
 22 material and supplies? Do you have any idea  
 23 how that's calculated or is it just simply a  
 24 factor of 100 percent gets thrown on top?

25 MR. GOULDING:

Page 168

1 A. The calculations that are built in here are  
 2 outside my area.

3 MR. PORTER:  
 4 Q. Are outside your scope. Okay, is there any  
 5 explanation given to the industrial customers  
 6 to your knowledge, because your group has the  
 7 direct accountability to liaise with the  
 8 industrial customers, that would explain this  
 9 in any form that they might understand? Is  
 10 that done at present to your knowledge?

11 MR. GOULDING:  
 12 A. Well I can't--I don't recall any specific  
 13 correspondence, like I know in the service  
 14 agreements there is a clause there that says  
 15 that the specifically assigned charges are  
 16 calculated according to approved Board -

17 MR. PORTER:  
 18 Q. Methodology.

19 MR. GOULDING:  
 20 A. - methodology.

21 MR. PORTER:  
 22 Q. Right, but in terms of what that Board  
 23 methodology is, certainly when you were at  
 24 Deer Lake Power, would you have understood  
 25 that there is, you know, some calculation such

1 as this that -  
 2 MR. GOULDING:  
 3 A. I would have understood, you know, that the  
 4 maintenance component of it wasn't necessarily  
 5 tied to actual experience.  
 6 MR. PORTER:  
 7 Q. Okay.  
 8 MR. GOULDING:  
 9 A. And the fact that there was a new plant being  
 10 installed, that that was going to correlate  
 11 into a lower O&M component.  
 12 MR. PORTER:  
 13 Q. Okay. Does this issue ever come up at any of  
 14 the joint utility meetings that you've ever  
 15 attended, does this issue -  
 16 MR. GOULDING:  
 17 A. Specifically assigned charges, I don't recall  
 18 specifically assigned charges, but we  
 19 certainly would have talked about, you know,  
 20 any capital expenditures that are planned.  
 21 MR. PORTER:  
 22 Q. Capital expenditures, okay.  
 23 MR. GOULDING:  
 24 A. That's correct.  
 25 MR. PORTER:

1 CERTIFICATE  
 2 I, Judy Moss, hereby certify that the foregoing is a true  
 3 and correct transcript of a hearing in the matter of  
 4 Newfoundland and Labrador Hydro's General Rate  
 5 Application heard on the 21st of October, A.D., 2015  
 6 before the Commissioners of the Public Utilities Board,  
 7 St. John's, Newfoundland and Labrador and was transcribed  
 8 by me to the best of my ability by means of a sound  
 9 apparatus.  
 10 Dated at St. John's, Newfoundland and Labrador  
 11 this 21st day of October, A.D., 2015  
 12 Judy Moss

1 Q. Okay, that's fine, I have no further  
 2 questions.  
 3 MR. COXWORTHY:  
 4 Q. No further questions.  
 5 O'REILLY, Q.C.:  
 6 Q. Mr. Chairman, I have some questions, I'm not  
 7 going to be lengthy, but I don't think I'm  
 8 going to get finished in 15 minutes and I  
 9 understand that there are others here that are  
 10 going to have questions, so we're not going to  
 11 finish -  
 12 CHAIRMAN:  
 13 Q. So are you saying we'll adjourn now, sir?  
 14 O'REILLY, Q.C.:  
 15 Q. If that's the wish of the panel, yes.  
 16 CHAIRMAN:  
 17 Q. We are adjourned.  
 18 Upon concluding at 1:15 p.m.

<p><b>-#-</b></p> <p>#17 [1] 119:24</p>	<p><b>15-minute</b> [1] 61:13</p> <p><b>15th</b> [1] 80:18</p> <p><b>16</b> [2] 99:20 128:18</p> <p><b>164,400</b> [1] 167:15</p> <p><b>169</b> [2] 111:23 125:15</p> <p><b>17th</b> [2] 96:11 97:6</p> <p><b>18</b> [2] 54:8 85:10</p> <p><b>18th</b> [1] 82:20</p> <p><b>1:15</b> [1] 170:18</p> <p><b>1st</b> [3] 46:2 47:22,23</p>	<p>112:17</p> <p><b>2017</b> [6] 39:10 49:15 55:8 55:23 56:16 68:2</p> <p><b>2017/2018</b> [1] 32:10</p> <p><b>2018</b> [2] 33:23 48:20</p> <p><b>20th</b> [1] 111:24</p> <p><b>21</b> [2] 1:1 54:8</p> <p><b>21st</b> [2] 171:5,11</p> <p><b>23</b> [1] 125:17</p> <p><b>230</b> [1] 28:6</p> <p><b>23rd</b> [2] 134:6 142:7</p> <p><b>24</b> [1] 139:5</p> <p><b>24th</b> [2] 63:12 157:1</p> <p><b>25</b> [4] 32:9,21 72:8 94:11</p> <p><b>25th</b> [3] 28:24 29:4,7</p> <p><b>26</b> [2] 99:25 100:5</p> <p><b>26th</b> [1] 28:24</p> <p><b>275</b> [3] 99:18 105:5 133:5</p> <p><b>276</b> [1] 133:8</p> <p><b>28</b> [1] 96:12</p> <p><b>2nd</b> [1] 5:11</p>	<p><b>6</b> [2] 69:10,16</p> <p><b>6.07</b> [3] 105:7,23 106:14</p> <p><b>6.3</b> [1] 134:14</p> <p><b>6.4</b> [1] 134:15</p> <p><b>6.6</b> [2] 99:22 102:15</p> <p><b>607</b> [1] 135:8</p> <p><b>61</b> [1] 85:4</p> <p><b>69</b> [1] 69:11</p>	<p>124:15 131:24 132:13,15 132:25 133:13,16 138:14 138:21,25 139:3,3,11,13 139:17,18 140:10,19 141:5,8,10,22 142:1,2 143:24 144:6,11 164:17</p> <p><b>accountability</b> [2] 157:6 168:7</p> <p><b>accounts</b> [1] 140:11</p> <p><b>accrue</b> [2] 138:25 141:4</p> <p><b>achieving</b> [2] 32:16 33:4</p> <p><b>action</b> [3] 20:7 83:3,12</p> <p><b>actions</b> [2] 80:5,19</p> <p><b>activities</b> [12] 18:8,13 63:21 64:10 81:16 93:2 99:19 105:5 152:1 153:15 155:8 165:7</p> <p><b>activity</b> [2] 9:24 133:6</p> <p><b>actual</b> [23] 3:15 12:1 22:3 24:11 44:17 46:12 54:11 71:1 76:21 96:4 108:25 109:7,21 121:10 124:12 141:18,25 151:13 152:6 165:3 166:20 167:21 169:5</p> <p><b>actuality</b> [1] 108:10</p> <p><b>actuals</b> [4] 127:25 129:2 129:5,22</p> <p><b>add</b> [2] 63:2 114:15</p> <p><b>added</b> [7] 15:8 26:3 52:15 102:4 115:14,18 148:24</p> <p><b>addition</b> [3] 28:1 108:13 154:7</p> <p><b>additional</b> [3] 63:1 69:9 102:6</p> <p><b>additions</b> [1] 31:3</p> <p><b>address</b> [3] 83:13 85:13 121:15</p> <p><b>addressing</b> [1] 156:24</p> <p><b>adds</b> [1] 167:17</p> <p><b>adequacy</b> [1] 40:13</p> <p><b>adequately</b> [1] 27:10</p> <p><b>adjourn</b> [1] 170:13</p> <p><b>adjourned</b> [1] 170:17</p> <p><b>adjustment</b> [1] 97:3</p> <p><b>adjustments</b> [1] 70:16</p> <p><b>administrative</b> [1] 167:16</p> <p><b>advance</b> [6] 20:3 21:10 61:11 92:19,21 140:12</p> <p><b>adverse</b> [2] 9:24 89:16</p> <p><b>advice</b> [2] 96:15 149:6</p> <p><b>advise</b> [2] 21:24 40:12</p> <p><b>advised</b> [3] 46:16 63:18 157:4</p> <p><b>advisement</b> [2] 66:13 67:3</p> <p><b>Advocate</b> [2] 1:15 66:21</p> <p><b>affected</b> [2] 44:22 107:14</p> <p><b>affects</b> [4] 39:4 43:17,18 43:25</p> <p><b>afoot</b> [1] 164:13</p> <p><b>again</b> [24] 3:4 12:18 19:6</p>
<p><b>-\$-</b></p> <p><b>\$1,000</b> [1] 63:4</p> <p><b>\$164,400</b> [1] 167:12</p> <p><b>\$28</b> [2] 60:3 62:24</p> <p><b>\$500,000.00</b> [7] 23:25 24:2,5,7,13 26:10 138:22</p> <p><b>\$520,000</b> [2] 50:10 54:15</p> <p><b>\$620,000</b> [1] 57:16</p> <p><b>\$70,000.00</b> [1] 42:5</p>	<p><b>-2-</b></p> <p><b>2</b> [10] 28:13,25 29:4,13 30:20 99:19 105:5 133:5 167:2,3</p> <p><b>2.3</b> [1] 93:6</p> <p><b>2.4</b> [2] 7:6,9</p> <p><b>2.5</b> [1] 7:3</p> <p><b>2.60</b> [2] 93:3 95:17</p> <p><b>2.8</b> [1] 7:3</p> <p><b>2.9</b> [1] 95:20</p> <p><b>20</b> [5] 4:22 5:9,14 32:9 72:8</p> <p><b>20-year</b> [1] 74:20</p> <p><b>20/25</b> [1] 32:21</p> <p><b>2000</b> [3] 71:14,15 74:14</p> <p><b>2001</b> [3] 158:6,9 161:2</p> <p><b>2002</b> [5] 2:21 4:17,24 5:7 74:15</p> <p><b>2003</b> [3] 74:21 158:11,24</p> <p><b>2004</b> [2] 101:15 112:8</p> <p><b>2005</b> [1] 162:12</p> <p><b>2006</b> [1] 163:14</p> <p><b>2007</b> [6] 93:7,9,12,21 112:11 166:5</p> <p><b>2008</b> [3] 93:4 94:12 95:20</p> <p><b>2009</b> [9] 37:8 51:24 95:18 95:24 96:7 158:14,19,24 161:2</p> <p><b>2010</b> [2] 39:11 96:14</p> <p><b>2011</b> [1] 39:11</p> <p><b>2011/2012</b> [1] 31:9</p> <p><b>2012</b> [2] 39:11 120:4</p> <p><b>2012/2103</b> [1] 154:14</p> <p><b>2013</b> [6] 80:2,5,7 115:25 116:5 119:21</p> <p><b>2013/2014</b> [1] 2:24</p> <p><b>2014</b> [20] 2:13 3:15,21 5:11 6:16 40:24 46:25 47:20 54:11 82:17,20 85:10 90:1,4 104:23 116:7,19,21 124:2 148:25</p> <p><b>2015</b> [25] 1:1 39:10 40:25 54:13,13 68:2 69:10 73:18,22,23 88:6 100:1 101:5,12 105:12 107:8 109:1,3 112:17 123:4 127:16 128:4 166:5 171:5 171:11</p> <p><b>2016</b> [13] 8:3 39:10 41:11 41:18 55:8,20 56:16 68:2 69:11,13 73:20 74:5</p>	<p><b>-3-</b></p> <p><b>3</b> [3] 14:11 28:13 167:3</p> <p><b>3.2</b> [1] 55:22</p> <p><b>3.5</b> [1] 57:8</p> <p><b>3.6</b> [2] 53:14 54:1</p> <p><b>3.7</b> [1] 54:21</p> <p><b>3.8</b> [1] 55:23</p> <p><b>3.875</b> [2] 53:24 55:3</p> <p><b>30</b> [1] 32:25</p> <p><b>32</b> [1] 96:14</p> <p><b>36</b> [1] 96:13</p> <p><b>38</b> [1] 63:20</p> <p><b>3rd</b> [1] 5:11</p>	<p><b>-7-</b></p> <p><b>7</b> [2] 120:24 124:5</p> <p><b>70</b> [1] 111:8</p>	<p><b>-8-</b></p> <p><b>8</b> [9] 51:4 56:10 120:25 121:8,9 122:13 124:5,10 159:3</p> <p><b>88</b> [2] 120:12,21</p> <p><b>8th</b> [2] 93:12,21</p>
<p><b>-&amp;-</b></p> <p><b>&amp;</b> [7] 156:17,20 160:4,23 164:5 166:12 167:6</p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-'-</b></p> <p><b>'09</b> [4] 95:10,12,22,25</p> <p><b>'13</b> [1] 92:8</p> <p><b>'14</b> [1] 92:8</p> <p><b>'16</b> [1] 32:24</p> <p><b>'17</b> [2] 32:24 54:13</p> <p><b>'90s</b> [1] 63:8</p> <p><b>'95</b> [1] 158:2</p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p> <p><b>1</b> [6] 7:8 55:10 99:19 165:20,22 166:25</p> <p><b>1.4</b> [1] 59:22</p> <p><b>1.68</b> [1] 60:4</p> <p><b>10</b> [2] 1:24 7:8</p> <p><b>100</b> [5] 49:16 149:23 167:18,20,24</p> <p><b>10:00</b> [1] 43:2</p> <p><b>10:15</b> [1] 54:2</p> <p><b>10:30</b> [1] 63:25</p> <p><b>10:45</b> [1] 74:8</p> <p><b>11</b> [2] 80:4 84:13</p> <p><b>117</b> [1] 120:19</p> <p><b>11:00</b> [1] 84:17</p> <p><b>11:38</b> [1] 84:18</p> <p><b>11:45</b> [1] 90:2</p> <p><b>12</b> [8] 10:21 11:20 13:21 15:3,7 21:4 22:4 111:25</p> <p><b>12-month</b> [1] 85:2</p> <p><b>123</b> [2] 26:24 31:13</p> <p><b>12:00</b> [1] 101:3</p> <p><b>12:15</b> [1] 114:16</p> <p><b>12:30</b> [1] 129:14</p> <p><b>12:45</b> [1] 143:2</p> <p><b>12th</b> [1] 96:8</p> <p><b>134</b> [1] 166:13</p> <p><b>139</b> [2] 138:19 139:5</p> <p><b>14</b> [2] 139:11 158:20</p> <p><b>140</b> [1] 139:11</p> <p><b>15</b> [4] 80:7 128:18 129:23 170:8</p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>
<p><b>-1-</b></p>	<p><b>-2-</b></p>	<p><b>-3-</b></p>	<p><b>-8-</b></p>	<p><b>-8-</b></p>

<p>22:23 30:9 49:3 76:17 91:4,10,22 96:3 97:5 100:3 107:17 109:6 121:3 125:15 136:12,18 138:12 154:3 159:13 160:6,25 <b>against</b> [3] 10:5 70:15 89:12 <b>age</b> [1] 161:20 <b>agenda</b> [1] 78:17 <b>ago</b> [3] 40:1 67:9 101:13 <b>agree</b> [7] 38:11 41:25 99:4 100:13,14 101:22 116:8 <b>agreed</b> [1] 48:18 <b>agreement</b> [23] 50:1,22 51:13,23,24,25 52:4,13 52:17 53:23 55:18,19,21 55:23 56:25 57:7 59:2 61:12 64:9,17 66:3 68:11 74:11 <b>agreements</b> [6] 59:17 59:21 64:14 72:8 78:13 168:14 <b>ahead</b> [2] 35:12 77:23 <b>Algonquin</b> [1] 68:14 <b>aligned</b> [1] 61:2 <b>allocated</b> [2] 40:11 42:2 <b>allots</b> [1] 167:20 <b>allow</b> [1] 152:2 <b>allowed</b> [1] 140:2 <b>allowing</b> [1] 124:10 <b>allows</b> [2] 56:25 142:9 <b>almost</b> [3] 157:15 161:5 167:18 <b>alone</b> [1] 5:13 <b>along</b> [4] 31:1 33:16,25 82:2 <b>alternatives</b> [1] 63:1 <b>always</b> [9] 31:5 42:20 47:12,18 49:19,19 91:25 118:16 151:15 <b>amended</b> [2] 40:24 51:14 <b>American</b> [3] 7:2,5,15 <b>amount</b> [13] 16:6 40:22 41:5 43:18 62:14 102:9 145:3 150:13,16,23 161:3 161:7 166:7 <b>amounts</b> [1] 138:25 <b>analysis</b> [33] 7:10 22:9 25:11 34:13 51:22 53:21 58:18 59:11 83:9 84:8 100:8,13,14,16,20 102:22 105:10 112:1,22 113:15 114:2,10,13 121:3 122:9 122:15,17,19 125:19 129:12 133:13,16,19 <b>anchoring</b> [1] 76:17 <b>anecdotal</b> [2] 136:12,13 <b>annual</b> [6] 37:5 48:19 53:9 54:10 69:6 116:18 <b>annually</b> [7] 53:15 54:1 54:16 55:7 56:3 59:22 125:23 <b>answer</b> [5] 65:24 66:13 135:25 144:8 145:5</p>	<p><b>answering</b> [1] 97:18 <b>anticipate</b> [1] 49:14 <b>anticipated</b> [9] 32:17 32:22 33:1,15,22 105:11 106:9 133:10 156:20 <b>anticipation</b> [1] 163:7 <b>apparatus</b> [1] 171:9 <b>appear</b> [1] 131:2 <b>application</b> [18] 51:14 51:21 87:3,13,16 99:22 104:9 117:7,16 118:2,5 119:8 120:3,13 125:6 133:7 140:21 171:5 <b>applied</b> [2] 70:2 99:22 <b>apply</b> [2] 138:23 140:13 <b>applying</b> [1] 114:19 <b>appointed</b> [1] 163:15 <b>appreciate</b> [1] 67:2 <b>approach</b> [13] 2:16 5:24 6:3 42:21 101:8,9 112:9 112:20,20 115:4,9,15 161:12 <b>approaching</b> [1] 2:25 <b>appropriate</b> [1] 99:9 <b>approval</b> [1] 117:17 <b>approved</b> [1] 168:16 <b>area</b> [18] 19:4 20:10 36:23 48:21 61:24 62:21 70:24 114:13 124:8,22 133:22 144:14 156:4,4,6 156:6 164:19 168:2 <b>areas</b> [1] 133:21 <b>argument</b> [1] 146:2 <b>arise</b> [1] 9:19 <b>arisen</b> [1] 58:7 <b>arising</b> [3] 45:22 50:3,9 <b>arranged</b> [2] 78:1,6 <b>arrangement</b> [14] 50:4 59:6 60:9,12 62:17 63:13 64:22,25 68:1 69:7 71:11 72:24 73:11 75:5 <b>arrangements</b> [5] 8:11 20:23 68:13 76:5 130:15 <b>arranging</b> [1] 27:8 <b>arrived</b> [2] 22:10,11 <b>arriving</b> [2] 33:7 135:7 <b>ascertain</b> [1] 167:13 <b>aside</b> [1] 42:2 <b>aspect</b> [2] 56:24 141:9 <b>aspects</b> [2] 152:9 159:4 <b>assess</b> [3] 21:23 60:25 62:16 <b>assessment</b> [9] 21:3,23 29:19 60:21 61:7,21,24 145:24 149:22 <b>assessments</b> [1] 25:2 <b>asset</b> [5] 27:7,8,12 161:20 161:21 <b>assets</b> [3] 16:9 48:3 160:24 <b>assigned</b> [12] 74:24 157:2,8 160:19,24 162:1 163:11 164:22 167:5</p>	<p>168:15 169:17,18 <b>assist</b> [2] 80:23 125:20 <b>assistance</b> [3] 63:14 64:16 167:12 <b>associated</b> [3] 23:23 149:4 160:23 <b>assume</b> [5] 68:6 70:17 131:19 139:21 141:15 <b>assumed</b> [3] 31:5 67:24 69:13 <b>assuming</b> [1] 164:2 <b>Atlantic</b> [1] 8:10 <b>attachment</b> [2] 167:2,3 <b>attend</b> [3] 78:19 79:18 79:21 <b>attended</b> [2] 82:21 169:15 <b>attends</b> [1] 78:9 <b>attention</b> [1] 96:7 <b>augment</b> [1] 25:24 <b>August</b> [18] 8:19 10:17 11:24 12:9,10,22 13:25 15:15 16:4 17:18 19:1,5 28:15 88:6 89:4 110:5,8 120:4 <b>availability</b> [3] 3:13,16 60:24 <b>available</b> [14] 12:16 14:12 15:9,14,18 16:4 17:4,7,10 18:12 19:10 27:24 29:5 62:9 <b>Avalon</b> [16] 8:21 9:2,8 13:15 21:24 22:25 23:5 23:8 25:7 28:17 38:1 43:24 61:1 88:12 92:12 92:16 <b>average</b> [26] 38:22,22 42:10,16 44:14 68:16,25 96:12 104:21 105:2 107:23 108:15 110:21 112:3,11 113:8 115:3,9 115:15 120:11,19 121:2 123:1 133:20 135:12,19 <b>averaged</b> [1] 112:10 <b>averaging</b> [1] 112:4 <b>avoid</b> [5] 16:17,20 57:1 89:18 91:6 <b>avoided</b> [1] 59:9 <b>avoiding</b> [1] 57:9 <b>aware</b> [18] 30:15 34:19 34:24 35:6 48:6 59:20 76:22 77:1 86:23 87:13 87:16 88:20 99:17 104:25 131:11 136:2,10 162:15 <b>awareness</b> [1] 87:4 <b>away</b> [3] 24:12,17 72:15</p> <hr/> <p style="text-align: center;"><b>-B-</b></p> <hr/> <p><b>backed</b> [1] 49:9 <b>background</b> [3] 47:10 51:16 114:12 <b>balance</b> [3] 38:25 139:4 139:18 <b>balances</b> [4] 140:13,22 141:4,9</p>	<p><b>band</b> [2] 23:25 138:22 <b>bank</b> [1] 3:8 <b>barrel</b> [8] 69:11,12 105:7 120:25 121:6 124:6,11 134:15 <b>base</b> [3] 34:11 56:15 99:14 <b>based</b> [20] 5:10 6:11 38:21 43:14 54:11 98:19 100:8,12 104:16 115:11 117:23 118:1 120:14 121:10,25 124:6,11,21 125:11 151:9 <b>basis</b> [14] 33:14 36:15 43:17 46:21 53:9 106:2 130:6,19 134:16 153:1 157:15,18 164:7,9 <b>Bay</b> [3] 43:23 44:18 88:17 <b>bearing</b> [2] 4:4 115:20 <b>became</b> [3] 31:10 75:21 158:6 <b>Beg</b> [1] 84:24 <b>began</b> [1] 161:23 <b>behalf</b> [1] 98:1 <b>behind</b> [1] 131:11 <b>belabour</b> [1] 165:1 <b>below</b> [10] 1:22 2:1 11:14 11:15 32:25 54:9 142:18 142:21 154:4 167:15 <b>benefit</b> [15] 56:20 57:14 57:16 58:12 62:17 71:24 72:16,17 73:1,8 118:18 120:13,17 121:5 124:6 <b>benefits</b> [7] 51:13,20 59:13 117:12 118:12 123:20 124:4 <b>best</b> [2] 25:3 171:8 <b>better</b> [9] 52:25 73:24 74:7 88:4 113:15,20,20 124:12 137:5 <b>between</b> [16] 6:18 29:23 45:8,14 48:19 66:3 83:7 83:22,23 100:17 129:11 135:23 136:14 137:14 152:9 153:7 <b>beyond</b> [3] 26:10 152:10 152:16 <b>big</b> [2] 27:16 118:12 <b>billed</b> [1] 41:4 <b>billing</b> [2] 70:8 71:2 <b>bit</b> [8] 27:19 49:9 55:13 55:13,15 67:20 88:4 154:13 <b>black</b> [13] 26:21,25 27:5 28:21 29:12 30:12,21 31:6,10,15 49:7 102:7 104:24 <b>blacked</b> [1] 85:12 <b>blunt</b> [1] 45:24 <b>blush</b> [1] 66:13 <b>Board</b> [16] 66:20,23,24 67:8,9 85:3 131:3 139:13 139:16,21 141:7,12,15 168:16,22 171:6 <b>Board's</b> [2] 66:17 67:6</p>	<p><b>Bob</b> [1] 86:8 <b>borne</b> [2] 81:5,10 <b>bottom</b> [8] 29:3 36:1 67:21,22 85:9 94:7 100:6 148:21 <b>bought</b> [1] 57:19 <b>Bowman</b> [6] 98:2,14 100:7 101:22 102:14 167:13 <b>Bowman's</b> [2] 99:24,25 <b>box</b> [2] 67:22 167:6 <b>break</b> [9] 15:1,4 21:4,5 22:10,11 84:17 87:2 130:3 <b>breakers</b> [1] 83:10 <b>bridge</b> [1] 49:17 <b>bringing</b> [3] 47:2,6 135:19 <b>brings</b> [1] 157:23 <b>brood</b> [2] 150:22 160:3 <b>Brook</b> [56] 50:1 51:23 52:1,4,13,17 55:7,20 56:21,25 57:17 58:2 59:5 59:18,21 61:10,18,25 62:6 63:13,15,21 64:11 64:15,22 65:1,12 66:3 66:15 67:10,23,25 68:12 68:18 69:15,17,20 71:25 73:16,25 80:16 95:1 96:9 156:17,18,22 157:3,9 160:4,23 164:5 165:7,11 165:13 166:12 167:5 <b>BTU</b> [11] 115:5 123:23 132:22 133:24 134:20 135:23 136:15 141:19 142:23 143:6,21 <b>BTUs</b> [2] 133:14 134:15 <b>budget</b> [10] 115:25 116:5 117:2,7,15 118:5 119:8 119:22 120:3 165:10 <b>budgeted</b> [1] 165:6 <b>budgets</b> [2] 112:22 165:8 <b>build</b> [1] 152:3 <b>built</b> [3] 14:25 107:9 168:1 <b>bulk</b> [2] 151:4 155:2 <b>bunch</b> [1] 61:22 <b>business</b> [11] 144:20 145:1 148:9,15 151:5,6 151:15 165:14,16 166:2 166:9 <b>Butler</b> [2] 86:8,8 <b>buy</b> [1] 57:18 <b>buying</b> [4] 31:12 57:12 58:9 71:25</p> <hr/> <p style="text-align: center;"><b>-C-</b></p> <hr/> <p><b>CA</b> [1] 67:18 <b>CA-288</b> [1] 54:4 <b>CA-NLH-059</b> [1] 55:8 <b>calculate</b> [1] 163:4 <b>calculated</b> [5] 156:19 161:15 162:8 167:23 168:16</p>
---	---	---	---	---

<p><b>calculation</b> [6] 21:3 22:4 160:7 165:3 167:4 168:25</p> <p><b>calculations</b> [2] 66:22 168:1</p> <p><b>cancel</b> [2] 30:18,20</p> <p><b>capability</b> [3] 27:5 30:13 31:6</p> <p><b>capacity</b> [7] 7:25 59:16 63:2,2,14 64:16 111:14</p> <p><b>capital</b> [14] 76:9,11 87:3 115:25 116:5 117:1,7,15 118:5 119:7,21 120:3 169:20,22</p> <p><b>capture</b> [2] 100:23 103:9</p> <p><b>captured</b> [7] 101:21 132:4,12,24 143:6,24 151:14</p> <p><b>career</b> [2] 79:7 161:11</p> <p><b>carried</b> [1] 112:12</p> <p><b>carry</b> [1] 65:23</p> <p><b>case</b> [13] 19:14 56:15,19 59:13 90:10 104:14 112:25 113:9,16 123:9 139:6 144:22 151:15</p> <p><b>caused</b> [1] 89:8</p> <p><b>caution</b> [1] 124:4</p> <p><b>CBPP</b> [2] 93:8 95:23</p> <p><b>CBPP's</b> [1] 93:8</p> <p><b>central</b> [1] 43:23</p> <p><b>centre</b> [1] 43:20</p> <p><b>certain</b> [11] 5:24 13:14 16:6 21:15,18 28:6 29:8 61:14 84:10 92:14 102:9</p> <p><b>certainly</b> [48] 11:12 19:3 20:10 23:13 24:16,24 26:16 35:23 36:3,20,23 37:6,23 38:18 51:1 60:15 61:10,25 70:9 72:15 74:6 79:3 84:7 91:24 98:15 98:16 107:6 108:8,11 113:22 115:19 116:2,3 117:13,15 121:13 124:4 124:8,22 125:8 140:11 140:14 156:11 160:20 161:6 164:23 168:23 169:19</p> <p><b>CERTIFICATE</b> [1] 171:1</p> <p><b>certify</b> [1] 171:2</p> <p><b>cetera</b> [2] 69:12 83:14</p> <p><b>Chair</b> [5] 1:3 84:22 97:16 156:3,14</p> <p><b>Chairman</b> [12] 84:13 84:15,19,23 86:2,11,16 97:12 156:10 170:6,12 170:16</p> <p><b>chance</b> [2] 41:3 67:15</p> <p><b>change</b> [14] 7:23 12:1 32:4 33:9,21 39:1 43:15 49:11 66:24 92:21 110:10 151:20,20 166:1</p> <p><b>changed</b> [6] 11:24 32:3 44:19 105:24 165:24 166:3</p> <p><b>changes</b> [8] 31:21 36:9 100:23 101:14 103:6,10</p>	<p>105:1 157:20</p> <p><b>characteristic</b> [1] 11:5</p> <p><b>charge</b> [20] 69:19,24 75:14,22 144:18,23 146:3 146:18 147:15,20 149:18 149:18 151:13 153:17 156:17,20 160:2 163:11 164:21 166:13</p> <p><b>charged</b> [6] 147:13 148:4 148:5,14 149:11 151:17</p> <p><b>charges</b> [8] 160:19 162:1 164:22 166:20 167:5 168:15 169:17,18</p> <p><b>charging</b> [3] 150:9 151:8 151:21</p> <p><b>chase</b> [1] 52:21</p> <p><b>check</b> [4] 70:15 71:4 81:24 135:18</p> <p><b>chose</b> [1] 103:8</p> <p><b>chosen</b> [1] 15:16</p> <p><b>Churchill</b> [12] 146:2,23 146:24 147:16,24 151:7 152:14,19,23 153:2,8,16</p> <p><b>circle</b> [1] 166:15</p> <p><b>circumstances</b> [2] 139:15 147:5</p> <p><b>clarify</b> [2] 26:8 92:5</p> <p><b>clause</b> [1] 168:14</p> <p><b>clear</b> [5] 87:8,23,25 88:10,24</p> <p><b>clearly</b> [1] 6:14</p> <p><b>close</b> [5] 3:1 32:25 35:13 43:20 101:11</p> <p><b>closure</b> [1] 95:21</p> <p><b>code</b> [1] 91:19</p> <p><b>CoGen</b> [8] 64:25 67:23 68:1 69:7,15 70:2 72:25 73:3</p> <p><b>CoGeneration</b> [2] 64:23 65:12</p> <p><b>coincidence</b> [1] 135:14</p> <p><b>Coles</b> [1] 50:24</p> <p><b>colleague</b> [1] 156:7</p> <p><b>column</b> [1] 67:22</p> <p><b>combination</b> [1] 27:8</p> <p><b>combustion</b> [1] 31:12</p> <p><b>comfort</b> [1] 3:4</p> <p><b>comfortable</b> [1] 6:14</p> <p><b>coming</b> [14] 8:21 13:24 28:4,25 29:6,9 34:14 35:13 36:14 75:15 88:12 89:23 92:8 94:14</p> <p><b>comment</b> [4] 46:24 96:23 142:3 160:18</p> <p><b>commercial</b> [1] 147:11</p> <p><b>Commissioners</b> [2] 1:13 171:6</p> <p><b>common</b> [3] 16:10 39:8 91:21</p> <p><b>communicate</b> [1] 157:3</p> <p><b>communicated</b> [4] 76:21,25 153:10 156:21</p> <p><b>communicates</b> [1] 157:17</p>	<p><b>communications</b> [1] 34:10</p> <p><b>comparable</b> [2] 2:23 63:7</p> <p><b>compare</b> [1] 5:4</p> <p><b>compared</b> [4] 108:5,9 108:10 115:14</p> <p><b>comparison</b> [1] 62:25</p> <p><b>complete</b> [2] 83:9 94:20</p> <p><b>completed</b> [2] 116:7 145:12</p> <p><b>completing</b> [2] 153:14 153:24</p> <p><b>completion</b> [1] 46:17</p> <p><b>component</b> [4] 160:12 160:13 169:4,11</p> <p><b>components</b> [1] 107:14</p> <p><b>compounding</b> [1] 3:14</p> <p><b>comprised</b> [1] 167:10</p> <p><b>computed</b> [1] 69:9</p> <p><b>concern</b> [7] 32:11 48:21 49:6 101:9,20 102:1,1</p> <p><b>concerned</b> [2] 46:1 92:6</p> <p><b>concerns</b> [2] 83:13 85:13</p> <p><b>concluding</b> [1] 170:18</p> <p><b>conclusions</b> [1] 98:21</p> <p><b>confidence</b> [3] 3:12 19:18,22</p> <p><b>confirm</b> [2] 93:17 97:20</p> <p><b>conflicting</b> [1] 3:5</p> <p><b>connection</b> [4] 23:22 75:3 83:2 129:11</p> <p><b>connections</b> [1] 77:3</p> <p><b>considerable</b> [1] 10:16</p> <p><b>consideration</b> [2] 49:7 66:19</p> <p><b>considerations</b> [1] 25:12</p> <p><b>considered</b> [1] 67:15</p> <p><b>consistent</b> [7] 33:17,17 63:15 64:17 77:4,7,9</p> <p><b>constant</b> [1] 68:8</p> <p><b>construct</b> [1] 152:3</p> <p><b>construction</b> [1] 75:3</p> <p><b>consultant</b> [5] 40:12,20 41:1,4,13</p> <p><b>consumed</b> [1] 73:12</p> <p><b>Consumer</b> [2] 1:14 66:20</p> <p><b>consumption</b> [4] 52:7 54:11 93:8 94:10</p> <p><b>contact</b> [3] 75:20,21 89:17</p> <p><b>content</b> [24] 113:1 115:5 123:23,23 132:22,23 133:9,14,15,24 134:21 135:6,9,23 136:15 137:14 137:15 141:18,19 142:10 142:16,23 143:6,21</p> <p><b>context</b> [3] 54:20 56:15 150:17</p> <p><b>contingency</b> [6] 5:8 48:8 48:12,22 49:13 92:23</p>	<p><b>continue</b> [2] 32:18 155:7</p> <p><b>continuously</b> [1] 11:2</p> <p><b>contract</b> [3] 76:4 142:8 142:18</p> <p><b>contrast</b> [4] 99:23 102:13 142:5 143:20</p> <p><b>contrasting</b> [1] 139:25</p> <p><b>conversations</b> [1] 161:17</p> <p><b>conversion</b> [28] 34:18 35:9,20 36:2,10,15,19 37:5 97:19 98:3 105:6 107:7,15,22 112:3,8,12 113:7,10 114:1 118:24 119:2,4 132:5 138:17 139:8 141:3,5</p> <p><b>converter</b> [7] 156:19,24 159:22 160:3 165:8,12 165:13</p> <p><b>coordinate</b> [1] 94:18</p> <p><b>coordination</b> [1] 80:23</p> <p><b>Corner</b> [55] 50:1 51:23 52:1,4,13,17 55:7,20 56:21,25 57:16 58:2 59:4 59:18,21 61:9,17,25 62:6 63:13,15,21 64:11,15,22 65:1,11 66:3,15 67:10 67:23,25 68:11,18 69:14 69:17,20 71:25 73:16,24 80:15 95:1 156:16,18,22 157:3,9 160:4,23 164:5 165:7,11,13 166:12 167:5</p> <p><b>Corporation</b> [1] 147:16</p> <p><b>correct</b> [84] 2:2,4 4:2 10:8,14 13:13 14:4 15:11 17:15,20 19:16 25:14 27:2 38:16 39:13 40:3,7 40:15 42:11 53:7 54:18 55:25 56:5,9 65:3 66:7 68:4 72:22 79:9,25 97:23 101:7 105:16,21 106:1 106:11,11 108:22 109:3 109:24 110:17 111:16,21 112:7 114:7 116:11,14 117:21 123:11 125:13 126:20 128:6 129:3,9 130:22 131:8 132:1,4,7 132:10,15,19 133:2 134:1 135:4 137:13 138:9 140:6 143:9,14 148:7 155:10 156:1 158:4,9,17 159:7 159:10,12,24 163:2,20 169:24 171:3</p> <p><b>corrected</b> [1] 158:11</p> <p><b>correlate</b> [3] 7:9 136:8 169:10</p> <p><b>correlation</b> [5] 100:17 100:21 101:9 135:23 137:13</p> <p><b>correspondence</b> [4] 163:8,10 164:3 168:13</p> <p><b>corresponding</b> [1] 53:25</p> <p><b>cost</b> [27] 13:2 14:16 23:22 24:9 25:14 52:11 55:21 62:18 69:6,9,10,13,14 69:16,25 70:19 73:23,25 76:1,7,7 142:14,16</p>	<p>165:23 167:7,10,15</p> <p><b>costs</b> [16] 23:21 26:4 52:19 53:23 54:10 55:17 55:19 57:1,9 66:18 69:20 74:6 76:9,12,21 167:7</p> <p><b>count</b> [1] 4:10</p> <p><b>couple</b> [1] 66:14</p> <p><b>course</b> [4] 15:9,19,23 106:18</p> <p><b>cover</b> [2] 127:23 153:2</p> <p><b>Coxworthy</b> [169] 97:13 97:14,15,24 98:6,11,17 98:25 99:16 100:3,4 101:4,17 102:11,21,25 103:11,22 104:2,7 105:3 105:17,22 106:3,12,20 106:24 107:3,16,25 108:4 108:16,23 109:13,19,25 110:4,9,13,18,24 111:3 111:9,13,17,22 112:15 113:3,13,19,25 114:8,23 115:22 116:12,24 117:5 117:14,22 118:4,8 119:3 119:10,12,16,20,25 120:7 120:20 121:7,18,23 122:6 122:12,21 123:2,12,21 124:9,23 125:5,9,14 126:6,16,21 127:3,7,12 127:17,22 128:3,7,16 129:1,6,10,18 130:8,17 131:1,9,16,21 132:2,8 132:16,20 133:3,23 134:4 134:10,18 135:1,5,13,20 136:6,11,20 137:4,10,21 138:5,10 139:23 140:7 141:16 142:4,22 143:3 143:10,15,19 144:7,12 145:4,10,16 146:5,10,16 146:21 147:2,14,19 148:1 148:8,12,18 149:10,16 150:1,7,15 151:19 152:7 152:18 153:6,18,23 154:2 155:9,15,21 156:2,13,25 170:3</p> <p><b>credit</b> [2] 52:14,15</p> <p><b>criteria</b> [6] 3:1 7:21,25 25:4 49:3 109:9</p> <p><b>criterion</b> [2] 6:23 8:15</p> <p><b>cross-examination</b> [4] 1:6,11 97:14 156:12</p> <p><b>Crown</b> [2] 63:22 64:8</p> <p><b>CT</b> [34] 9:11 10:4,5,16 11:13,16,23 12:9,12,21 13:11,16,21 14:1,18 15:1 15:3,6,16 16:1 19:1,19 20:3 21:17 22:1,21 23:23 26:24 88:6 89:14,18 90:6 105:19 106:6</p> <p><b>cue</b> [1] 77:19</p> <p><b>current</b> [3] 29:19 85:4 141:14</p> <p><b>customer</b> [12] 20:2 21:11 28:22 41:9 75:10,23 89:11 92:18,22 164:8,14 166:14</p> <p><b>customers</b> [24] 25:10 45:25 58:4 59:7 62:16 63:9 69:6 75:18 78:11 90:15 98:2 113:22 131:19</p>
--	---	---	--	--

<p>132:12 143:11 144:3 156:21 157:7,13,18 164:19 167:8 168:5,8 <b>customers'</b> [1] 94:19 <b>cutting</b> [1] 3:9</p>	<p><b>delve</b> [1] 36:23 <b>demand</b> [7] 1:17,19,21 1:25 2:1,18 4:11 <b>demands</b> [1] 72:11 <b>depend</b> [1] 74:4 <b>dependent</b> [1] 7:10 <b>depending</b> [3] 14:9 60:6 143:5 <b>depreciation</b> [1] 160:12 <b>derived</b> [3] 56:24 118:12 120:14 <b>describing</b> [2] 8:18 12:23 <b>design</b> [1] 153:1 <b>desired</b> [1] 95:15 <b>detail</b> [11] 46:12 70:14 83:25 91:10 94:3 129:24 130:10 144:5,10 164:2 164:16 <b>details</b> [5] 63:17 66:22 68:10 76:4 81:9 <b>determination</b> [1] 75:8 <b>determine</b> [7] 7:11 21:20 42:20 57:5 114:24 140:16 145:23 <b>determined</b> [2] 21:16 52:10 <b>determining</b> [2] 69:19 75:23 <b>develop</b> [2] 48:22 68:14 <b>developed</b> [3] 22:25 120:4 123:25 <b>developing</b> [2] 25:6 70:19 <b>development</b> [4] 68:18 151:12,24 154:23 <b>develops</b> [1] 126:3 <b>diagrams</b> [1] 75:24 <b>dictates</b> [1] 140:3 <b>diesel</b> [5] 30:21 102:8 103:18,21 107:19 <b>diesels</b> [2] 49:7 104:24 <b>difference</b> [4] 19:4 45:3 90:11 152:9 <b>differences</b> [3] 45:5,13 77:8 <b>different</b> [7] 25:16,17 109:1 143:21 144:14 154:11 156:6 <b>differing</b> [1] 141:6 <b>difficulty</b> [2] 3:3 4:18 <b>direct</b> [7] 8:12 46:14,21 66:25 135:23 157:5 168:7 <b>directed</b> [3] 128:21,21 140:24 <b>direction</b> [1] 97:20 <b>direction</b> [3] 32:5,8 41:15 <b>directive</b> [3] 64:24 65:11 71:19 <b>directly</b> [7] 115:8 139:8 146:17 147:21,24 148:15 151:11 <b>disagree</b> [2] 24:11 98:20</p>	<p><b>discipline</b> [3] 47:3,6,21 <b>discreet</b> [4] 126:7 146:11 146:22 156:6 <b>discuss</b> [1] 67:16 <b>discussed</b> [3] 36:22 45:22 59:19 <b>discussing</b> [2] 1:16 75:1 <b>discussion</b> [16] 6:22 23:21,24 31:2 40:18 42:8 48:10 49:23 67:7 83:3 85:8 87:1 88:8 133:11 133:12 164:3 <b>discussions</b> [3] 67:8 75:9 76:18 <b>dispatch</b> [1] 24:6 <b>dispose</b> [1] 140:21 <b>disposed</b> [7] 139:1,4,18 140:4,13 141:10 142:2 <b>distinction</b> [1] 153:7 <b>distinguished</b> [1] 153:9 <b>distribution</b> [2] 83:8,10 <b>doable</b> [1] 18:17 <b>document</b> [8] 51:18 126:7,9,11 127:9 128:9 130:19 153:1 <b>documents</b> [1] 119:15 <b>doesn't</b> [5] 58:10 59:10 140:23 145:18 155:22 <b>dollar</b> [2] 54:21 76:25 <b>dollars</b> [3] 53:24 59:23 163:13 <b>done</b> [22] 20:9 22:4,7 27:17 41:11 59:11 71:2 75:25 84:10 104:22 112:1 121:3 125:23,25 128:1 138:2 142:6 145:12 149:5 150:10 155:17 168:10 <b>double</b> [1] 3:17 <b>doubt</b> [1] 59:20 <b>down</b> [33] 5:6,8,14,20 11:14,15 12:4 17:22 25:5 30:9 50:23 55:12 67:20 73:20,22,23 74:3 81:14 81:17 86:21 91:7 93:9 93:15 94:22 95:2 98:18 108:3 109:6 110:6,8 126:8 130:6 159:17 <b>download</b> [1] 71:1 <b>downward</b> [1] 32:8 <b>draft</b> [1] 118:13 <b>draw</b> [2] 20:16 102:9 <b>drive</b> [4] 100:12 115:24 118:15 124:16 <b>driver</b> [2] 25:21,25 <b>drives</b> [7] 99:11 116:6 116:18,20,23 118:19 123:6 <b>drop</b> [3] 62:7 73:11 162:5 <b>dropped</b> [1] 62:13 <b>due</b> [3] 95:21 106:18 126:2 <b>duel</b> [1] 159:12 <b>during</b> [26] 9:11 11:2,5 11:13,17 14:12 17:8 18:9</p>	<p>18:11 19:8 21:12,18 22:1 60:12 61:6,18 70:11 87:1 88:15,20 89:13 90:12 91:24,24 111:18 134:2 <b>dynamics</b> [1] 137:23</p>	<p>118:25 126:13,14 130:14 130:15 131:24 137:15,16 137:17,19,20 159:15,16 163:15 <b>engage</b> [2] 40:11 41:9 <b>engaged</b> [3] 40:21 41:1 46:6 <b>engineer</b> [1] 70:25 <b>engineers</b> [1] 61:23 <b>enjoying</b> [1] 59:5 <b>enjoys</b> [1] 58:3 <b>ensure</b> [2] 28:3 47:22 <b>enter</b> [1] 119:19 <b>entered</b> [7] 59:17 72:6 72:20 74:13,14 119:10 128:17 <b>entering</b> [2] 38:12 39:23 <b>entire</b> [3] 60:25 121:16 166:7 <b>entirely</b> [1] 156:5 <b>entities</b> [2] 148:24 150:10 <b>entitled</b> [1] 167:4 <b>entity</b> [1] 148:25 <b>environment</b> [2] 41:16 159:5 <b>envision</b> [1] 163:5 <b>envisioned</b> [3] 109:4,5 120:5 <b>EPCA</b> [2] 65:14,17 <b>equal</b> [1] 38:7 <b>equipment</b> [6] 10:2 29:15 34:14 89:16 94:21 94:22 <b>essentially</b> [8] 1:20 2:8 2:10 25:14 52:6 68:25 130:22 159:9 <b>establish</b> [2] 164:14,17 <b>established</b> [1] 22:20 <b>estimate</b> [4] 53:12 153:4 163:10,12 <b>estimates</b> [3] 76:1,7,8 <b>et</b> [2] 69:11 83:14 <b>etc</b> [5] 23:25 24:2,10,10 40:20 <b>evaluating</b> [1] 34:2 <b>evening</b> [1] 10:21 <b>event</b> [16] 3:9 5:12 9:6 9:14 19:7 21:8 22:24 23:4 48:13 60:13 80:17 83:5 89:7,8 92:22 109:8 <b>events</b> [5] 2:13 6:16 46:25 47:19 88:5 <b>evidence</b> [25] 2:6 4:19 93:2 97:6,25 98:12 99:2 99:18,24 100:1 105:4,4 105:8,14 106:4 111:24 125:16,23 128:17 133:4 134:6 138:11,19 142:7 142:15 <b>evolution</b> [2] 151:23 154:13 <b>exactly</b> [4] 5:1 88:24 112:19 119:6</p>
<b>-D-</b>		<b>-E-</b>		
<p><b>d'Espoir</b> [3] 43:24 44:18 88:17 <b>daily</b> [7] 21:20 25:1 46:10 60:20,21 61:6 149:20 <b>Darren</b> [1] 157:1 <b>data</b> [14] 43:13 50:17,19 53:11 71:1,1,4 117:11 120:23 123:20 124:2,3 124:20 125:20 <b>date</b> [2] 49:5 78:8 <b>Dated</b> [1] 171:10 <b>dates</b> [1] 46:17 <b>Dave</b> [1] 163:18 <b>day-to-day</b> [2] 79:20 157:15 <b>days</b> [2] 29:6 94:11 <b>deadband</b> [1] 24:25 <b>deal</b> [4] 14:7 61:4 157:3 157:8 <b>dealing</b> [2] 75:14 163:14 <b>dealings</b> [1] 147:11 <b>dealt</b> [3] 75:19 89:25 159:21 <b>December</b> [6] 46:2 47:15,19,22,23 48:4 <b>decide</b> [2] 149:17 152:22 <b>deciding</b> [3] 139:3,17 141:8 <b>decision</b> [5] 18:25 19:3 29:7,11 66:18 <b>decline</b> [3] 35:20 37:7 95:19 <b>declined</b> [1] 93:6 <b>decrease</b> [1] 34:7 <b>decreased</b> [1] 101:16 <b>Deer</b> [16] 52:5 62:9,11 78:5,20,25 82:21 93:14 96:9 131:15 158:2,21 159:16,20 160:17 168:24 <b>defer</b> [2] 29:11,12 <b>deferral</b> [23] 24:25 26:9 34:20,25 35:8,10,15 131:24 132:13,25 138:14 138:21,25 139:3,11,18 140:10,18 141:4,9 143:24 144:6,11 <b>deferred</b> [1] 49:24 <b>define</b> [2] 101:10 143:16 <b>defined</b> [3] 140:1 143:25 152:14 <b>definitely</b> [3] 7:20 41:10 41:10 <b>degree</b> [3] 32:4 33:5 59:19 <b>delay</b> [1] 48:9</p>	<p><b>discipline</b> [3] 47:3,6,21 <b>discreet</b> [4] 126:7 146:11 146:22 156:6 <b>discuss</b> [1] 67:16 <b>discussed</b> [3] 36:22 45:22 59:19 <b>discussing</b> [2] 1:16 75:1 <b>discussion</b> [16] 6:22 23:21,24 31:2 40:18 42:8 48:10 49:23 67:7 83:3 85:8 87:1 88:8 133:11 133:12 164:3 <b>discussions</b> [3] 67:8 75:9 76:18 <b>dispatch</b> [1] 24:6 <b>dispose</b> [1] 140:21 <b>disposed</b> [7] 139:1,4,18 140:4,13 141:10 142:2 <b>distinction</b> [1] 153:7 <b>distinguished</b> [1] 153:9 <b>distribution</b> [2] 83:8,10 <b>doable</b> [1] 18:17 <b>document</b> [8] 51:18 126:7,9,11 127:9 128:9 130:19 153:1 <b>documents</b> [1] 119:15 <b>doesn't</b> [5] 58:10 59:10 140:23 145:18 155:22 <b>dollar</b> [2] 54:21 76:25 <b>dollars</b> [3] 53:24 59:23 163:13 <b>done</b> [22] 20:9 22:4,7 27:17 41:11 59:11 71:2 75:25 84:10 104:22 112:1 121:3 125:23,25 128:1 138:2 142:6 145:12 149:5 150:10 155:17 168:10 <b>double</b> [1] 3:17 <b>doubt</b> [1] 59:20 <b>down</b> [33] 5:6,8,14,20 11:14,15 12:4 17:22 25:5 30:9 50:23 55:12 67:20 73:20,22,23 74:3 81:14 81:17 86:21 91:7 93:9 93:15 94:22 95:2 98:18 108:3 109:6 110:6,8 126:8 130:6 159:17 <b>download</b> [1] 71:1 <b>downward</b> [1] 32:8 <b>draft</b> [1] 118:13 <b>draw</b> [2] 20:16 102:9 <b>drive</b> [4] 100:12 115:24 118:15 124:16 <b>driver</b> [2] 25:21,25 <b>drives</b> [7] 99:11 116:6 116:18,20,23 118:19 123:6 <b>drop</b> [3] 62:7 73:11 162:5 <b>dropped</b> [1] 62:13 <b>due</b> [3] 95:21 106:18 126:2 <b>duel</b> [1] 159:12 <b>during</b> [26] 9:11 11:2,5 11:13,17 14:12 17:8 18:9</p>	<p><b>early</b> [5] 2:13 33:6 46:25 47:16 154:14 <b>easily</b> [1] 71:15 <b>ECC</b> [3] 23:4 61:23 79:18 <b>economic</b> [6] 13:15 14:25 15:25 21:17 24:23 25:5 <b>economically</b> [1] 25:8 <b>effect</b> [3] 3:17 99:13 143:22 <b>effectively</b> [1] 32:19 <b>efficiencies</b> [3] 105:18 106:7,8 <b>efficiency</b> [9] 39:18 115:20 122:20,25 123:7 135:24 136:15 142:12 143:22 <b>efficient</b> [2] 38:7 52:24 <b>efficiently</b> [2] 24:6 52:2 <b>effort</b> [2] 94:17 136:7 <b>eight</b> [3] 30:20 95:17 96:8 <b>either</b> [4] 10:2 46:18 88:19 103:17 <b>elaborate</b> [3] 8:23 32:3 32:4 <b>electrical</b> [1] 95:19 <b>electricity</b> [1] 93:4 <b>element</b> [3] 19:25 20:19 89:10 <b>elements</b> [2] 28:16 29:8 <b>elsewhere</b> [2] 20:7 77:5 <b>embark</b> [1] 161:24 <b>embarked</b> [1] 126:25 <b>embedded</b> [1] 151:7 <b>Emera</b> [1] 147:12 <b>emergency</b> [2] 60:12 61:19 <b>eminent</b> [1] 89:7 <b>employed</b> [1] 14:6 <b>employee</b> [1] 78:5 <b>employees</b> [1] 152:1 <b>enabled</b> [1] 105:19 <b>ENAL</b> [1] 80:14 <b>end</b> [14] 8:3 10:2,20 12:14 32:19 34:2 53:1 72:10 125:2,4 126:14 129:16 151:8 162:2 <b>endeavour</b> [1] 61:14 <b>ended</b> [1] 116:19 <b>energy</b> [50] 3:1 7:22 8:1 25:23 37:18,23 38:13 39:9,17 43:16,18,21,22 50:2,2,8 53:5,13 56:7 57:1,10,11,12,18 58:9 59:10,10 70:2,9,13 71:25 72:9 73:4,7 99:23 118:21</p>	<p>118:25 126:13,14 130:14 130:15 131:24 137:15,16 137:17,19,20 159:15,16 163:15 <b>engage</b> [2] 40:11 41:9 <b>engaged</b> [3] 40:21 41:1 46:6 <b>engineer</b> [1] 70:25 <b>engineers</b> [1] 61:23 <b>enjoying</b> [1] 59:5 <b>enjoys</b> [1] 58:3 <b>ensure</b> [2] 28:3 47:22 <b>enter</b> [1] 119:19 <b>entered</b> [7] 59:17 72:6 72:20 74:13,14 119:10 128:17 <b>entering</b> [2] 38:12 39:23 <b>entire</b> [3] 60:25 121:16 166:7 <b>entirely</b> [1] 156:5 <b>entities</b> [2] 148:24 150:10 <b>entitled</b> [1] 167:4 <b>entity</b> [1] 148:25 <b>environment</b> [2] 41:16 159:5 <b>envision</b> [1] 163:5 <b>envisioned</b> [3] 109:4,5 120:5 <b>EPCA</b> [2] 65:14,17 <b>equal</b> [1] 38:7 <b>equipment</b> [6] 10:2 29:15 34:14 89:16 94:21 94:22 <b>essentially</b> [8] 1:20 2:8 2:10 25:14 52:6 68:25 130:22 159:9 <b>establish</b> [2] 164:14,17 <b>established</b> [1] 22:20 <b>estimate</b> [4] 53:12 153:4 163:10,12 <b>estimates</b> [3] 76:1,7,8 <b>et</b> [2] 69:11 83:14 <b>etc</b> [5] 23:25 24:2,10,10 40:20 <b>evaluating</b> [1] 34:2 <b>evening</b> [1] 10:21 <b>event</b> [16] 3:9 5:12 9:6 9:14 19:7 21:8 22:24 23:4 48:13 60:13 80:17 83:5 89:7,8 92:22 109:8 <b>events</b> [5] 2:13 6:16 46:25 47:19 88:5 <b>evidence</b> [25] 2:6 4:19 93:2 97:6,25 98:12 99:2 99:18,24 100:1 105:4,4 105:8,14 106:4 111:24 125:16,23 128:17 133:4 134:6 138:11,19 142:7 142:15 <b>evolution</b> [2] 151:23 154:13 <b>exactly</b> [4] 5:1 88:24 112:19 119:6</p>	

<p><b>example</b> [2] 145:19 152:11</p> <p><b>exceed</b> [2] 58:10 59:10</p> <p><b>except</b> [1] 70:14</p> <p><b>exception</b> [3] 98:20 109:12 149:17</p> <p><b>exceptions</b> [1] 149:15</p> <p><b>excess</b> [1] 2:25</p> <p><b>excuse</b> [1] 12:4</p> <p><b>executing</b> [1] 46:22</p> <p><b>executive</b> [1] 147:25</p> <p><b>exemption</b> [5] 65:14 66:5 67:10 71:10,21</p> <p><b>exercise</b> [1] 8:10</p> <p><b>exhibit</b> [3] 51:4,5,21</p> <p><b>exist</b> [1] 154:16</p> <p><b>existing</b> [1] 72:25</p> <p><b>expect</b> [18] 20:11,20 36:6 45:3,5 47:13 75:11 85:20 96:11 104:16 110:20 124:7 125:2 126:13 139:13 140:20 161:16 164:20</p> <p><b>expectation</b> [9] 73:19 94:15 101:1 103:25 115:11 116:8 120:12,16 142:11</p> <p><b>expected</b> [10] 34:7 40:22 44:5 105:18 112:25 113:1 115:5 116:6 117:1 123:22</p> <p><b>expecting</b> [2] 39:8 112:16</p> <p><b>expending</b> [1] 41:4</p> <p><b>expenditure</b> [6] 160:22 161:4,7,21 162:16,18</p> <p><b>expenditures</b> [2] 169:20 169:22</p> <p><b>expense</b> [2] 38:5 162:23</p> <p><b>experience</b> [20] 5:10 9:22 44:3 78:10 105:11 105:12 108:25 109:21 112:24 114:4 117:24 118:1 121:10 122:1 124:2 124:12 141:18 160:2 162:24 169:5</p> <p><b>experienced</b> [4] 39:19 78:3,4 83:16</p> <p><b>experiences</b> [1] 44:12</p> <p><b>expert</b> [1] 91:23</p> <p><b>explain</b> [7] 53:20 56:10 134:23 154:6 161:13 166:14 168:8</p> <p><b>explained</b> [1] 1:23</p> <p><b>explanation</b> [1] 168:5</p> <p><b>explanatory</b> [1] 114:19</p> <p><b>exposed</b> [6] 8:20 9:13 9:14,17 20:13 89:9</p> <p><b>exposure</b> [21] 8:22,25 9:2,11,18 24:14,16 28:8 35:22 36:5,20 37:12 46:19 88:8,15,22 89:5 89:25 90:4,23,25</p> <p><b>exposures</b> [1] 92:14</p> <p><b>express</b> [1] 49:6</p>	<p><b>extent</b> [7] 59:9 91:17 104:24 105:23 124:19 141:4 166:18</p> <p><b>external</b> [2] 131:10,13</p> <p><b>externally</b> [1] 130:25</p> <p><b>extra</b> [3] 15:2 57:11 72:18</p> <p><b>eye</b> [1] 25:2</p> <hr/> <p style="text-align: center;"><b>-F-</b></p> <hr/> <p><b>facility</b> [3] 75:4 79:1 88:7</p> <p><b>fact</b> [10] 2:20 3:8 18:9 39:8 46:15 70:18 89:9 103:12 121:14 169:9</p> <p><b>factor</b> [32] 3:14 8:14 34:18 35:9 36:10 39:18 98:3 99:10,21 100:10 103:7,14,16,17 104:18 107:21,24 119:2 123:15 124:14 125:10 132:5 135:24 136:16 139:16 141:3,6,6,21,24 143:22 167:24</p> <p><b>factored</b> [2] 105:1 135:7</p> <p><b>factors</b> [32] 35:21 37:10 37:13 44:23 58:20 101:13 101:19,21 102:13,16 104:9,12,14 107:9,18 112:3 114:3,19,25 115:1 115:1,13,18 122:24 132:21 133:12 139:2,12 140:9,19,22 141:7</p> <p><b>Fagan</b> [1] 75:2</p> <p><b>failures</b> [1] 92:23</p> <p><b>fair</b> [4] 41:6 103:12 112:17 161:3</p> <p><b>fairly</b> [3] 112:13 160:20 166:6</p> <p><b>fairness</b> [1] 144:20</p> <p><b>fall</b> [8] 38:24 107:13 113:7 124:2 126:1,18 153:5 164:19</p> <p><b>falls</b> [7] 6:5 48:9 95:21 115:21 146:2,23 149:3</p> <p><b>familiar</b> [7] 18:6 59:24 63:23 77:12 83:15 97:25 128:22</p> <p><b>fan</b> [6] 100:12 115:23 116:6 118:13 123:6 124:16</p> <p><b>fancy</b> [1] 86:13</p> <p><b>far</b> [2] 40:23 62:5</p> <p><b>fast</b> [1] 14:11</p> <p><b>favourable</b> [6] 108:13 122:14 124:16 132:12 142:12 144:2</p> <p><b>February</b> [3] 47:16 87:11 95:22</p> <p><b>feed</b> [2] 63:8 126:4</p> <p><b>Feeder</b> [1] 83:10</p> <p><b>feeling</b> [1] 103:1</p> <p><b>fellow</b> [1] 114:12</p> <p><b>Fermeuse</b> [1] 80:16</p> <p><b>few</b> [2] 8:17 35:24</p>	<p><b>figure</b> [2] 68:8 167:9</p> <p><b>figures</b> [1] 70:5</p> <p><b>file</b> [7] 22:9 23:13 46:7 48:11 65:6,8 75:14</p> <p><b>filed</b> [14] 22:13 45:21 49:2 51:12,14 66:9 77:11 85:3 87:14 98:1 100:1 115:24 116:4 159:10</p> <p><b>filing</b> [10] 31:22 40:24 42:9 87:2 106:18 111:4 117:2 131:2,4,10</p> <p><b>filings</b> [1] 126:2</p> <p><b>fill</b> [1] 74:25</p> <p><b>final</b> [3] 92:25 116:21 166:22</p> <p><b>finally</b> [1] 96:6</p> <p><b>financial</b> [5] 24:12,16 26:8,9,19</p> <p><b>finding</b> [1] 32:15</p> <p><b>fine</b> [4] 3:11 82:7 158:13 170:1</p> <p><b>finish</b> [2] 29:9 170:11</p> <p><b>finished</b> [1] 170:8</p> <p><b>finishing</b> [1] 32:13</p> <p><b>firm</b> [11] 3:1,2 14:11 49:16 57:11,11,12,12,18 58:9 59:10</p> <p><b>first</b> [14] 15:13 28:11 32:13,24 66:13 71:11 84:22 92:23 95:1,16,24 101:18 149:4 160:17</p> <p><b>five</b> [29] 25:18 29:5 35:18 39:20 40:1 43:5,8 44:14 44:16 45:3,8,14 57:7 59:12 68:17 95:18 100:24 105:10 108:5,9,11 112:3 112:11 113:9 114:4 115:11 133:20 135:11,19</p> <p><b>five-year</b> [8] 55:3 68:25 100:22 104:11,15,21 105:2,9</p> <p><b>fixed</b> [3] 36:19 60:1,3</p> <p><b>flat</b> [2] 11:6 108:20</p> <p><b>flow</b> [3] 41:11 57:13 66:19</p> <p><b>flowed</b> [1] 26:4</p> <p><b>flows</b> [1] 22:7</p> <p><b>focus</b> [1] 47:1</p> <p><b>folks</b> [5] 18:21 21:25 47:5 62:16 78:7</p> <p><b>follow</b> [10] 23:4,6 52:6 52:21 62:3 83:12 85:7 85:12,18 141:13</p> <p><b>followed</b> [2] 20:6 78:17</p> <p><b>following</b> [2] 21:7 52:17</p> <p><b>footnote</b> [2] 148:21,23</p> <p><b>forced</b> [2] 58:22 118:13</p> <p><b>forecast</b> [35] 1:20,21,25 2:1,18 3:7,18 33:7,12,22 39:1,3 42:15 54:12 68:15 69:1,11,12 101:2,12 106:2,17,21,23 107:6 109:1,18 110:25 112:21 123:25 125:3 126:4 127:16 128:2 141:20</p>	<p><b>forecasting</b> [6] 1:17 6:7 39:18 47:11 120:18 157:19</p> <p><b>forecasts</b> [5] 60:23 122:18,20 129:7,17</p> <p><b>forefront</b> [2] 35:23 37:11</p> <p><b>foregoing</b> [1] 171:2</p> <p><b>foresee</b> [3] 13:20 61:7 74:4</p> <p><b>forever</b> [1] 2:7</p> <p><b>form</b> [1] 168:9</p> <p><b>format</b> [1] 141:14</p> <p><b>formed</b> [1] 154:24</p> <p><b>formerly</b> [1] 155:1</p> <p><b>forth</b> [2] 83:22 106:17</p> <p><b>forward</b> [10] 41:20 43:14 68:15 69:1 80:20 113:6 114:3,18,25 133:19</p> <p><b>found</b> [1] 71:15</p> <p><b>four</b> [9] 38:15 40:1 63:5 68:20 95:23 96:1,10,18 154:5</p> <p><b>frame</b> [2] 32:10 154:14</p> <p><b>frequency</b> [12] 99:11 116:20,23 118:15,18 156:18,24 159:22 160:3 165:8,12,13</p> <p><b>frequently</b> [2] 127:1,4</p> <p><b>fro's</b> [1] 56:11</p> <p><b>front</b> [1] 34:2</p> <p><b>frontline</b> [1] 163:21</p> <p><b>FTEs</b> [3] 166:2,12 167:14</p> <p><b>fuel</b> [74] 23:22 26:4 34:18 35:9,20 36:2,9,15 37:4 38:4 39:5,18 53:23 54:10 54:11 56:17 58:6 69:10 69:11,13,16,20 74:1 97:19 102:5 106:23,23 106:25 107:2,7,14,22 112:3,7,12 113:2,4,7,10 114:1 115:6,20 118:23 119:1 122:25 123:7,23 125:3 132:5,23 133:9,14 133:24 134:3 135:6,17 135:24,24 136:15 137:14 137:15,16 138:17 139:7 141:3,5,18,19,25 142:9 142:12,14,16 143:22</p> <p><b>full</b> [6] 28:2 32:20 92:10 118:16,16 124:5</p> <p><b>function</b> [6] 30:22 70:8 76:2 117:6 155:4,5</p> <p><b>functions</b> [1] 117:10</p> <p><b>funds</b> [1] 140:3</p> <p><b>future</b> [4] 70:17 105:11 114:21 122:4</p> <hr/> <p style="text-align: center;"><b>-G-</b></p> <hr/> <p><b>gas</b> [8] 19:8,10 21:25 139:10,14 140:17 141:1 165:18</p> <p><b>gathering</b> [2] 41:6 125:19</p> <p><b>general</b> [9] 7:6,8 99:1</p>	<p>99:21 104:9 125:6 137:22 167:16 171:4</p> <p><b>generally</b> [5] 77:4,7,9 79:16 130:1</p> <p><b>generated</b> [1] 70:11</p> <p><b>generating</b> [5] 25:17 35:11 41:18 130:4,18</p> <p><b>generation</b> [33] 2:22 3:12,15 5:13 6:6 8:15 25:24 37:20 38:20 39:3 40:12 44:18 48:9,14 52:3 52:5,14 60:24 61:5,8 62:8 68:23 72:5 79:1 83:4 85:2 92:19,21 130:12,16,24 165:16 166:8</p> <p><b>generator</b> [1] 20:1</p> <p><b>gentlemen</b> [1] 85:7</p> <p><b>gigawatt</b> [5] 53:14 54:1 57:8 68:1,7</p> <p><b>given</b> [4] 89:24 126:13 157:24 168:5</p> <p><b>glad</b> [1] 156:14</p> <p><b>glib</b> [1] 136:13</p> <p><b>glim</b> [1] 103:2</p> <p><b>GLYNN</b> [12] 13:6 14:21 22:16 23:16 45:16 82:13 84:21 119:9,14,18,23 128:14</p> <p><b>goal</b> [1] 72:10</p> <p><b>goes</b> [6] 18:6 91:10,23 125:19 146:20 160:2</p> <p><b>gone</b> [2] 100:18 164:4</p> <p><b>good</b> [6] 1:13,13 41:3 63:9 98:15 129:17</p> <p><b>goodness</b> [1] 36:11</p> <p><b>Goulding</b> [287] 1:10 8:17 8:24 9:20 10:7,13,18 11:3,11,25 12:6,13,24 13:4,12,19 14:3,8,19,24 15:10,17,24 16:5,19,25 17:6,14,19,23 18:4,19 19:2,15,21 20:8 21:6 22:6,12,22 23:12,20 24:15,20 25:13 26:11,15 34:17 35:17 36:18 37:2 37:17 38:17 39:12,16 40:2,6 50:13,20 51:2,11 51:19 53:6,10,18 54:5 54:17,23 55:2,24 56:4,8 56:14 57:4,23 58:5,16 59:8,25 60:11,14,19 61:20 62:19 65:2 66:6 68:3,9 69:22 70:6,23 72:2,21 73:2,14 74:2,12 74:19 77:15,20,23,24 78:21 79:2,8,15,24 80:25 81:1,8,21 82:4 83:17 84:5 85:19 86:7,22 87:6 87:15,20,24 88:14 89:1 89:6 90:3,8,22 91:9,14 96:22 97:17,22 98:4,8 98:13,23 99:6 100:15 101:6,24 102:19,23 103:4 103:19,23,24 104:4,19 105:15,20,25 106:10,15 106:22 107:1,5,20 108:2 108:7,21 109:2,17,23</p>
---	---	---	---	---



<p>110:2,7,11,16,22 111:1 111:6,11,15,20 112:6,18 113:5,17,23 114:6 115:4 115:17 116:10,15 117:3 117:9,20,25 118:6,10 119:5 120:2,9,22 121:12 121:20 122:3,10,16,23 123:10,16,24 124:18 125:1,7,12,24 126:10,19 126:24 127:5,10,14,19 127:24 128:5,12,20,24 129:4,8,15,25 130:11,21 131:7,12,18,25 132:6,14 132:18 133:1,17,25 134:8 134:12,24 135:3,10,15 136:1,9,17 137:7,12 138:3,8 139:20 140:5 141:11,23 142:20,24 143:8,13,17 144:4,9,13 158:1,3,8,16,23 159:11 159:23 160:5,10,16 161:18 162:10,19 163:1 163:6,19 164:1,11 165:2 166:17 167:25 168:11,19 169:2,8,16,23</p> <p><b>Goulding's</b> [5] 111:23 125:15 138:19 157:14,22</p> <p><b>Government</b> [2] 64:24 65:11</p> <p><b>GRA</b> [9] 31:22 35:19 42:14 51:14,21 126:2 127:1 158:20 165:25</p> <p><b>grabbing</b> [1] 77:17</p> <p><b>Grand</b> [1] 95:21</p> <p><b>Grant</b> [1] 148:20</p> <p><b>granted</b> [2] 63:22 64:7</p> <p><b>granular</b> [2] 82:9 130:9</p> <p><b>Gray</b> [9] 51:6 55:9,14 74:17 95:11 100:2,5 165:19 166:24</p> <p><b>great</b> [1] 164:25</p> <p><b>greater</b> [1] 103:16</p> <p><b>greatly</b> [3] 43:19,25 44:22</p> <p><b>green</b> [1] 48:2</p> <p><b>grid</b> [1] 62:9</p> <p><b>gross</b> [4] 99:22 120:11 122:20,25</p> <p><b>ground</b> [1] 39:8</p> <p><b>group</b> [18] 70:7 71:2 76:3 78:7 80:5,19 150:4,8 154:25 155:18 157:5,7 157:12,14 164:7,8 166:2 168:6</p> <p><b>growth</b> [1] 38:1</p> <p><b>guard</b> [1] 10:5</p> <p><b>guarding</b> [1] 89:12</p> <p><b>guess</b> [103] 2:1,12 3:3,6 4:15 6:5 9:10,21,23 11:5 12:1 14:9 19:5,22 21:2 30:11,18 31:1,9 32:11 33:18,25 35:18 36:21,23 37:12 38:11,18 39:22 40:17,21 41:2 42:18 44:2 45:23,24 46:19 47:5,10 51:12,15 52:3 53:19 56:23 58:17 60:1 61:4 61:17 62:23 68:10,17</p>	<p>69:3,18 70:7 71:3 72:3 73:17 75:13,20 77:25 79:20 88:15 92:6 96:16 97:1 99:8,10 100:16,25 101:7,10 103:7 104:20 104:22 107:10 112:23 113:21 118:2,11 129:16 137:9,14 139:24 149:20 156:16,19,25 157:11,25 159:13,19 160:25 161:11 162:4,11,22 163:7 164:13 165:4,9,18 166:22 167:8</p> <p><b>guide</b> [1] 25:7</p> <p><b>gut</b> [1] 103:1</p> <p><b>guys</b> [2] 25:10 86:13</p> <hr/> <p style="text-align: center;"><b>-H-</b></p> <hr/> <p><b>half</b> [1] 2:18</p> <p><b>happening</b> [3] 10:6 48:14 49:15</p> <p><b>Harbour</b> [2] 80:18,21</p> <p><b>hard</b> [1] 58:17</p> <p><b>Hardwood's</b> [1] 165:17</p> <p><b>Hardwoods</b> [8] 85:5 90:10,12,12,16,18,20 91:2</p> <p><b>hats</b> [1] 98:14</p> <p><b>haul</b> [1] 72:17</p> <p><b>he'd</b> [1] 79:19</p> <p><b>heads</b> [4] 61:15 62:1,2 93:14</p> <p><b>heard</b> [5] 98:12 99:2 145:6,11 171:5</p> <p><b>hearing</b> [1] 171:3</p> <p><b>heat</b> [11] 36:15 102:4 103:18,20 107:18 123:22 132:22 135:8 137:23 142:10,15</p> <p><b>heating</b> [7] 113:1 122:25 133:9,14 135:6 137:14 137:15</p> <p><b>held</b> [3] 82:20 90:13 158:13</p> <p><b>help</b> [3] 43:12 53:20 152:8</p> <p><b>helpful</b> [1] 47:4</p> <p><b>Henderson</b> [12] 46:20 49:23 51:10 59:19 63:11 75:1,17 76:17 95:5 134:1 137:11 142:6</p> <p><b>hereby</b> [1] 171:2</p> <p><b>high</b> [4] 30:3 72:13 112:14 124:11</p> <p><b>higher</b> [21] 3:18,19 32:16 33:4 38:8 39:3,17,19 92:17 104:13 105:13,23 115:10 121:2 134:3,25 135:2 142:10,15 154:21 163:22</p> <p><b>highest</b> [2] 9:12 52:11</p> <p><b>historical</b> [1] 104:17</p> <p><b>historically</b> [4] 2:21 4:16 43:13 104:14</p> <p><b>history</b> [3] 103:13 114:20 157:25</p>	<p><b>hit</b> [1] 24:7</p> <p><b>Holyrood</b> [82] 9:4 10:11 12:15,16,18 13:10,16,22 13:25 14:1,6,17 15:2,8 15:15 16:3,7,13,18 18:7 18:17,21 19:1 21:19 25:20,22 26:1 27:21 28:10 30:9 31:11 34:18 35:11,20 36:6 37:14,22 37:25 38:7,11,24 39:9 39:23,24 43:20 44:18,22 44:23,24,25 52:12 53:2 53:23 69:13 72:10,14 73:4,6,7,12 88:7 90:21 91:7,22 92:10 97:19 98:3 107:10,19 108:20 109:4 109:10 113:4 115:6 118:14 119:1 123:23 132:23 138:15,16 141:19 142:9</p> <p><b>home</b> [1] 47:20</p> <p><b>hope</b> [3] 8:3 41:8 98:18</p> <p><b>Hopefully</b> [1] 30:8</p> <p><b>horizon</b> [1] 36:5</p> <p><b>hosted</b> [1] 80:17</p> <p><b>hour</b> [4] 21:4 22:4 124:5 124:11</p> <p><b>hours</b> [20] 6:23 7:1,9 10:22 11:20 12:21 13:21 15:3,7 53:14 54:1 57:8 68:2,7 92:14 105:7 108:14 120:25 121:6 137:17</p> <p><b>HROE</b> [1] 150:18</p> <p><b>Humphries</b> [116] 1:7 2:3 2:9,19 4:1,7,12,19,25 5:5 5:19 6:1,17,24 7:4,16 8:2 8:6 26:22 27:1,6,13,18 29:21 30:2,7,14,23 31:8 31:20,24 32:6 33:11 34:9 35:5 40:10,14 41:7,24 44:6,10,15 45:9,19 46:3 46:8 47:8 48:5,17 49:1 49:25 50:5,12,16 60:11 62:21,22 64:1,13,19 75:2 75:6,16 76:10,16 77:5,6 77:14,18 87:22 92:4 93:1 93:18,22 94:1,16 95:4 95:25 96:2 128:21 136:23 144:15,24 145:2,8,14,21 146:8,14,19,25 147:8,17 147:22 148:6,10,16,22 149:8,13,19 150:5,12 151:1,22 152:12,25 153:13,21,25 154:5,12 155:13,19,25 157:10</p> <p><b>hydraulic</b> [3] 38:20 39:2 43:21</p> <p><b>hydro</b> [102] 2:6,15,16 5:23 6:9 7:23 8:19 11:22 14:25 15:3,6,15 16:17 17:3,12 21:2 22:9,19 24:4,9 25:24 27:12 31:5 33:6 34:1 35:9,16 36:13 37:12 40:12,24 41:3 42:20 45:12 47:5 48:11 52:8,19 63:20 64:6,8,13 65:6 66:3 67:2 68:6 70:4 70:21 75:2 78:14 79:12 80:15 81:11 82:21 85:12</p>	<p>85:21 87:2 89:24 96:15 99:20 125:19,21 126:5,7 128:9 129:12 130:2,5 133:4 135:22 136:7,14 138:2 139:24 140:20,22 140:24 142:18,21,25 145:24 146:13,17 149:15 149:24 151:4,4 152:1,22 153:9 154:10 158:15 161:12,17,24 162:5,11 163:9,22 165:6,10 167:20</p> <p><b>Hydro's</b> [11] 36:1 54:12 77:3 84:3 85:1 93:2 99:17 104:10 105:4 130:18 171:4</p> <p><b>hydrology</b> [2] 38:19 108:13</p> <hr/> <p style="text-align: center;"><b>-I-</b></p> <hr/> <p><b>IC-144</b> [1] 165:1</p> <p><b>IC-145</b> [1] 165:18</p> <p><b>IC-NLH-87</b> [1] 166:23</p> <p><b>icing</b> [1] 58:24</p> <p><b>ICs</b> [1] 165:5</p> <p><b>idea</b> [5] 52:3 62:12 74:6 74:7 167:22</p> <p><b>identified</b> [4] 53:25 72:6 72:18 140:25</p> <p><b>identify</b> [3] 8:11 48:22 135:22</p> <p><b>idle</b> [1] 96:25</p> <p><b>immediately</b> [1] 143:6</p> <p><b>impact</b> [22] 9:25 20:3 35:25 58:11 94:20 102:13 104:6 106:14 110:20 120:17 121:25 122:14,19 124:16 132:5 137:25 139:10 142:12 143:5,21 144:3 162:1</p> <p><b>impacted</b> [2] 90:15 122:24</p> <p><b>impacting</b> [1] 103:16</p> <p><b>impacts</b> [1] 107:22</p> <p><b>impetus</b> [1] 35:14</p> <p><b>implementation</b> [1] 53:22</p> <p><b>imposed</b> [1] 21:15</p> <p><b>impossible</b> [2] 18:1,5</p> <p><b>impression</b> [1] 97:17</p> <p><b>improved</b> [6] 53:13 57:14 58:8,10 123:6 134:20</p> <p><b>improvement</b> [4] 105:6 124:8,22 134:13</p> <p><b>improvements</b> [3] 104:16 133:9,22</p> <p><b>improving</b> [1] 133:15</p> <p><b>in-flows</b> [1] 38:22</p> <p><b>in-service</b> [1] 46:17</p> <p><b>incentive</b> [4] 24:3,5,12 26:8</p> <p><b>included</b> [4] 144:11 153:3 165:14,15</p> <p><b>includes</b> [1] 165:17</p>	<p><b>including</b> [1] 159:4</p> <p><b>incorrect</b> [1] 131:3</p> <p><b>increase</b> [2] 47:17 166:10</p> <p><b>increased</b> [4] 26:4 37:11 38:13 101:15</p> <p><b>increasing</b> [1] 166:13</p> <p><b>incurred</b> [3] 13:2 23:22 59:1</p> <p><b>incurring</b> [1] 52:18</p> <p><b>indicate</b> [3] 34:24 120:24 134:2</p> <p><b>indicated</b> [20] 1:19 6:24 7:13 21:2 26:23,25 32:2 34:21 54:14 60:20 63:16 89:4 95:5 100:24 104:13 115:5,10 117:7 126:17 126:22</p> <p><b>indicates</b> [5] 54:9 80:10 85:11 93:4 100:8</p> <p><b>indicating</b> [5] 14:16 45:13 83:5 138:6 148:13</p> <p><b>indication</b> [2] 33:20 36:4</p> <p><b>indications</b> [3] 32:14 62:10 133:20</p> <p><b>indicative</b> [2] 43:9 44:4</p> <p><b>indicator</b> [1] 7:7</p> <p><b>individually</b> [1] 70:21</p> <p><b>industrial</b> [15] 71:2 75:18 78:11 98:1 131:19 156:21 157:6,12,18 164:8 164:19 166:14 167:8 168:5,8</p> <p><b>influence</b> [1] 141:24</p> <p><b>information</b> [17] 34:12 42:23 49:8 50:17,21 81:7 104:22 119:24 125:20 128:18 129:21,23 130:2 136:8 151:11 157:19 164:21</p> <p><b>initial</b> [2] 75:20,21</p> <p><b>input</b> [1] 18:25</p> <p><b>inputs</b> [3] 41:17,18 112:24</p> <p><b>inside</b> [7] 18:6,21 34:14 91:11,21,23 136:4</p> <p><b>installation</b> [1] 118:15</p> <p><b>installed</b> [1] 169:10</p> <p><b>instance</b> [4] 102:5 122:8 141:17 150:18</p> <p><b>instead</b> [5] 14:17 15:8 120:21 121:8 122:13</p> <p><b>instruction</b> [2] 23:13 61:3</p> <p><b>instructions</b> [2] 62:4,5</p> <p><b>instrument</b> [1] 64:9</p> <p><b>intakes</b> [1] 58:23</p> <p><b>integration</b> [15] 147:11 150:21 151:3,13 152:15 154:8,9,15,18,24 155:1 155:3,12,16,23</p> <p><b>integrity</b> [1] 5:15</p> <p><b>intend</b> [1] 48:11</p> <p><b>intended</b> [2] 132:3 140:2</p>
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**intent** [4] 26:23 41:12,14 97:4  
**intention** [1] 96:25  
**intents** [3] 25:21 38:21 52:12  
**interconnected** [4] 41:16 93:5 165:16 166:9  
**interconnection** [6] 6:18,19,25 49:5 76:1 152:5  
**interconnections** [2] 8:9 49:15  
**interest** [1] 156:15  
**interested** [3] 43:4 85:16 157:22  
**interface** [5] 152:23 153:9 154:10 157:11,15  
**interfaces** [1] 157:17  
**interject** [1] 71:8  
**internal** [7] 68:21 83:24 84:8 136:3,19 140:12,18  
**internally** [4] 112:21 130:25 138:2 140:23  
**interrupt** [2] 71:7 82:18  
**interruptible** [1] 63:8  
**introduce** [1] 102:6  
**introduction** [1] 37:21  
**inventory** [9] 69:17,18 69:21,25 70:19 73:15 74:1,5 97:3  
**invoice** [1] 70:10  
**invoices** [2] 70:17 71:5  
**involved** [9] 28:5 33:6 34:1 75:11,21 76:11,14 146:1 162:14  
**involvement** [3] 149:24 151:25 154:21  
**island** [6] 7:22 8:13 23:2 61:1 93:5 98:1  
**isolated** [3] 3:25 4:2 20:15  
**isolations** [1] 28:3  
**issue** [23] 31:10 38:9 47:7 47:12 62:6 66:16 76:23 83:22,24 84:2,4 87:4,7 87:25 89:13 136:22 138:18 139:9 146:1 157:24 164:9 169:13,15  
**issued** [1] 72:4  
**issues** [17] 10:1 23:5 58:23 61:5,5 83:15,18 85:8 86:24 98:16 141:1 146:12 152:5 155:3 156:23 157:4 159:21  
**it'll** [2] 68:6 140:23  
**item** [2] 70:12 83:12  
**items** [4] 83:3 126:12 152:15 153:3  
**itself** [3] 9:25 117:18 122:17

---

**-J-**

**January** [9] 2:13 3:15 3:21 5:10,11 6:16 47:15

47:16 74:21  
**Jennifer** [1] 82:19  
**Jenny** [4] 51:3 74:15 119:6 130:7  
**job** [1] 84:4  
**John's** [2] 171:7,10  
**Johnson** [212] 1:5,11,12 1:14 2:5,11 3:22 4:3,9 4:14 5:3,17,22 6:13,21 7:12,19 8:4,16 9:16 10:3 10:10,15,23 11:9,21 12:3 12:8,19 13:1,8,17,23 14:5,14,23 15:12,22 16:2 16:15,23 17:2,11,16,21 17:25 18:15,23 19:13,17 20:5 21:1 22:2,8,14,18 23:9,14,18 24:18 25:9 26:6,13,20 27:3,11,15 29:18,25 30:4,10,17,25 31:17,19 32:1 33:2,24 34:16 35:7 36:7,25 37:9 38:10 39:6,14,21 40:4,8 40:16 41:22 42:1,6,17 43:3 44:1,8,13 45:7,11 45:18 46:5,23 47:24 48:7 48:24 49:21 50:7,14,18 50:25 51:8,17 53:3,8,16 54:3,7,19,25 55:5,10,11 55:16 56:1,6,12 57:2,21 57:25 58:14 59:3,15 60:8 60:17 61:16 62:15 63:10 64:3,21 65:4,10,16,20 66:1,8 67:1,17 68:5 69:2 70:3,20 71:7,17,22 72:19 72:23 73:9,21 74:9,22 75:12 76:6,13 77:2,10 77:16,22 78:18,23 79:5 79:10,22 80:1 81:3,18 81:23 82:6,11,15 84:1 84:12,20 85:6,23 86:5,9 86:14,18,25 87:12,18 88:2,21 89:3,20 90:5,17 91:3,12 92:2,5,24 93:20 93:24 94:4,24 95:8,12 95:13 96:5 97:9  
**joined** [1] 158:1  
**joint** [7] 77:11,12,25 80:2 80:7 93:10 169:14  
**judgment** [2] 45:25 149:24  
**Judy** [2] 171:2,12  
**July** [4] 110:1,3 111:19 123:5  
**June** [13] 93:12,21 100:1 109:6,16,22 111:18 123:4 127:20,20 128:9 129:20 129:22  
**jurisdiction** [1] 66:17  
**jurisdictions** [7] 3:23 20:11,14,17,20 34:20,25

---

**-K-**

**keen** [1] 25:2  
**keep** [4] 37:4 67:20 130:23 149:20  
**Kevin** [2] 1:10 43:12  
**key** [3] 164:17,17,18  
**kilowatt** [9] 60:3 62:24

63:4 105:7 120:25 121:5 124:5,11 137:17  
**knew** [6] 2:17 31:11 95:6 161:21,24,25  
**knowing** [1] 2:16  
**knowledge** [7] 46:4,19 47:18 86:19 94:25 168:6 168:10  
**knowledgeable** [2] 18:16,20  
**known** [2] 97:1 102:2  
**kV** [1] 28:6

---

**-L-**

**Labrador** [4] 71:13 171:4,7,10  
**lack** [2] 19:18,22  
**laid** [1] 60:24  
**Lake** [16] 52:5 62:9,12 78:5,20,25 80:15 82:21 93:14 131:15 158:2,21 159:16,20 160:17 168:24  
**Lake/Corner** [1] 96:9  
**landing** [1] 75:24  
**large** [5] 35:25 78:10 118:13 134:13,16  
**larger** [1] 120:16  
**Larry** [1] 159:10  
**last** [33] 25:18 26:1 28:23 33:19 35:19,23,24 36:3 37:8 38:15 39:25 53:11 68:16,16 85:3 87:10,10 105:2 107:13 108:5,9,11 112:7 113:9 114:4 126:25 127:8,13,15 133:19 144:8 158:20 165:24  
**late** [7] 29:6 30:5 41:25 41:25 47:15 70:18 117:6  
**latest** [3] 31:22 33:19 51:12  
**lead** [1] 108:15  
**leadership** [4] 144:16 144:25 145:22 147:6  
**leads** [1] 166:22  
**lean** [1] 49:4  
**learning** [1] 19:23  
**learnings** [3] 19:6 22:24 109:8  
**least** [7] 24:9 40:23 101:12 115:8 131:4 139:8 146:17  
**leaves** [1] 95:14  
**led** [3] 68:22 75:22 165:18  
**left** [6] 24:4,5 55:18 74:10 74:25 167:9  
**legal** [1] 148:24  
**lengthy** [1] 170:7  
**less** [4] 37:14 136:19 142:19,25  
**level** [18] 2:22 3:4 5:14 28:7 38:23 46:19 75:10 106:8 112:16 132:9,11 140:11 144:5,10 154:20 160:18 161:21 163:22

**levels** [14] 3:1,2 4:17 13:14 25:6 32:12,16 33:5 38:8 52:19 58:24 72:13 79:4 157:11  
**liaise** [3] 157:2,6 168:7  
**liaises** [1] 164:8  
**life** [1] 35:11  
**light** [3] 6:15 24:25 57:17  
**lights** [1] 48:2  
**likelihood** [1] 4:13  
**likely** [2] 84:9 162:7  
**limited** [4] 27:24 29:24 36:5 121:4  
**line** [39] 9:1,3,10,22,25 10:2 20:1 29:3 36:1 46:14 54:8,8 75:24 80:6 80:22 81:12,14 88:12 89:17,19 90:14 91:1 93:3 95:18 99:20 100:7 101:8 101:11 111:25 125:17 126:12 133:7 138:20 139:5,11 148:9,15 156:8 167:11  
**lined** [2] 29:1,2  
**lines** [17] 8:21,23 9:7,15 28:6 34:1 88:10,17,19 88:24 89:14,22 90:25 95:17 102:5 144:19,25  
**ling** [1] 154:4  
**link** [1] 149:3  
**linkage** [1] 88:22  
**linked** [1] 69:16  
**links** [3] 48:10,14 88:16  
**list** [1] 156:23  
**load** [63] 3:2,7,10 6:23 7:1,8 9:12 11:14,15,17 13:15 14:7 21:12,16,22 22:7 25:7 28:22 31:21 31:23 32:2,9,20 38:1,3 38:25 43:20 45:1 47:17 52:6,16,22 60:23 62:8 62:14 75:9 94:23 100:18 101:1 102:7 103:13,14 104:12,14 107:21 108:20 110:21 111:8,8 112:25 115:10 118:17,19,20 120:11,15,24 124:6 126:3 126:14 130:4,6 157:19  
**loading** [6] 38:8 107:23 108:15 118:17 121:2 123:1  
**loads** [11] 11:5 32:7,17 33:5 92:11,16 102:3 112:13 120:19 130:24 157:20  
**LOLH** [1] 7:7  
**LOLHs** [1] 2:25  
**long-term** [3] 80:20,23 81:19  
**longer** [8] 11:22 12:11 29:16 52:18 72:7 97:1 100:20 164:4  
**look** [12] 3:6 44:16 45:2 65:25 67:21 84:4 114:3 140:8 151:2 161:13 162:7 167:11

**looked** [5] 46:13 57:6 71:9 101:23 103:14  
**looking** [12] 29:22 33:4 42:10 43:14 49:12,20 87:2 114:3,5,18,25 154:3  
**lose** [4] 9:2,7 89:10 90:24  
**loses** [1] 42:8  
**loss** [6] 6:23,25 7:8 42:16 43:25 92:14  
**losses** [9] 42:11,14 43:9 43:17 44:5,21,21,25 45:2  
**lost** [1] 161:1  
**low** [7] 58:24 61:8 103:14 104:12 113:10 160:20 161:22  
**lower** [29] 3:10,16,18 32:10,16,22 33:5 36:1 45:1 79:4 92:12 103:14 108:12,15 120:15 121:1 142:25 146:24 147:1,15 147:24 151:7 152:14,19 152:23 153:2,8,15 169:11

---

**-M-**

**M** [2] 156:17,20  
**MacDonald** [1] 163:18  
**machine** [9] 93:9,16 95:2 95:23 96:11,17,20,24,25  
**machines** [1] 68:20  
**magnitude** [3] 102:12 102:17 150:24  
**maintain** [2] 5:15 26:16  
**maintained** [1] 16:12  
**maintenance** [39] 10:12 14:10 16:7,21 17:13,17 18:3,8,17 27:22 28:10 28:14,18 29:1,10,11 76:9 80:21 81:12,15,20 88:11 88:19 91:11,21 116:18 159:5 165:7,12,24 166:1 166:4,7,11,20 167:7,14 167:21 169:4  
**major** [9] 8:20,23 9:7,15 88:9,23 89:19 90:24 122:24  
**majority** [1] 149:14  
**makes** [2] 38:4 52:25  
**manage** [2] 17:3 25:11  
**management** [2] 147:16 154:4  
**manager** [19] 78:25 79:3 79:18 85:22,22 154:7,15 154:16,17,25 155:1,11 158:7,22,25 159:2,20 161:12 163:15  
**managers** [6] 154:5 155:5,17,23 164:17,18  
**mandate** [3] 24:9,22 26:16  
**Manitoba** [1] 6:9  
**March** [12] 12:2 19:7 21:7 22:23 54:13 92:20 95:10,24,25 96:24 97:7 109:8  
**margin** [1] 4:23

<p><b>Maritime</b> [1] 149:3  <b>Marks</b> [4] 159:10,12,14          162:25  <b>match</b> [2] 52:16 126:15  <b>material</b> [7] 45:4,6 81:6          93:3 115:25 166:10          167:22  <b>materials</b> [2] 166:4,8  <b>matter</b> [7] 64:16 75:1          90:7 101:5 115:1 131:6          171:3  <b>matters</b> [1] 1:4  <b>maximum</b> [1] 111:14  <b>may</b> [42] 4:8,8 20:14,18          25:23 45:4 62:1 66:23          67:10 70:18 73:20,22          78:16,16 80:2,5,7,18          92:13 95:12,14 96:7,7          96:11,16 97:2,6 100:19          101:14,15 106:21 117:11          125:10 127:20 131:3          141:13 144:20 145:23,25          149:15 151:8 158:9  <b>MCR</b> [1] 123:5  <b>mean</b> [18] 6:3 36:9,11,12          43:12,24 44:11,16 64:4          64:12 66:23 71:7 85:15          99:1 103:2 134:23 155:22          166:15  <b>means</b> [2] 1:20 171:8  <b>meant</b> [3] 2:17 10:5          52:16  <b>measure</b> [2] 129:16          137:16  <b>measured</b> [3] 118:23          137:25 138:1  <b>mechanism</b> [1] 24:13  <b>mechanisms</b> [1] 140:1  <b>meet</b> [5] 12:9,22 25:4          38:25 72:10  <b>meeting</b> [14] 7:21 77:12          78:8 80:3,7 82:20 85:21          94:13 97:4 145:23 146:12          147:6 149:21 162:12  <b>meetings</b> [11] 21:21          46:11 60:21,22 77:13,25          78:15 79:13,14 146:6          169:14  <b>megawatt</b> [3] 26:24          30:20 31:3  <b>megawatts</b> [17] 4:22 5:9          5:14 31:13,14 32:10,21          32:21,25 49:17 94:10          96:12,13,14 111:8 120:12          120:19  <b>members</b> [5] 1:14 18:24          34:23 144:22 145:6  <b>memory</b> [1] 162:14  <b>mention</b> [1] 93:14  <b>mentioned</b> [5] 4:20          13:13 14:24 24:9 35:22  <b>merit</b> [1] 72:14  <b>met</b> [2] 49:3 162:11  <b>metering</b> [2] 70:8 71:1  <b>methodology</b> [8] 2:14          3:24 6:7,7 76:19 168:18</p>	<p>168:20,23  <b>mic</b> [1] 77:17  <b>might</b> [20] 3:24 9:19          34:23 43:12 65:24 66:16          71:8 82:2 101:20 104:16          106:7 137:5 138:6 139:10          140:9 145:25 146:11          147:3 148:14 168:9  <b>migrate</b> [1] 7:17  <b>migrated</b> [1] 155:18  <b>migrating</b> [2] 7:1,14  <b>milestones</b> [1] 46:12  <b>mill</b> [8] 52:6,16,22 62:8          68:22 95:22 159:17          163:16  <b>million</b> [8] 53:24 54:21          55:22 59:22 60:4 134:14          134:15 163:12  <b>mind</b> [2] 45:12 104:10  <b>minds</b> [1] 49:19  <b>minimize</b> [4] 53:2 72:10          91:17 94:20  <b>minimum</b> [7] 10:21          11:20 25:20 38:4,6          108:14 111:7  <b>minutes</b> [16] 77:11 80:3          80:5 82:17 85:11 93:10          93:12,13,17,19,21 94:2          94:6 95:10 96:7 170:8  <b>mirrors</b> [1] 23:1  <b>mischaracterizing</b> [1]          155:10  <b>missed</b> [1] 144:8  <b>missing</b> [1] 9:19  <b>mistaken</b> [1] 132:4  <b>misunderstanding</b> [1]          147:7  <b>mitigate</b> [1] 9:10  <b>mitigating</b> [1] 48:23  <b>mitigations</b> [1] 49:13  <b>mix</b> [2] 37:20 44:18  <b>mode</b> [1] 90:14  <b>model</b> [1] 41:15  <b>models</b> [1] 41:21  <b>modest</b> [2] 54:14 166:7  <b>moment</b> [5] 1:16 54:4          65:24 69:5 74:24  <b>moments</b> [1] 8:18  <b>money</b> [6] 40:10,22 41:4          41:5 42:2 53:17  <b>monitor</b> [2] 61:17 69:24  <b>monitoring</b> [4] 49:12          63:20 64:10 136:3  <b>month</b> [3] 69:25 70:11          126:14  <b>monthly</b> [11] 33:14 37:5          126:12 128:18,23 129:21          130:19 131:5,6 146:6          147:6  <b>months</b> [10] 33:18 63:6          70:15,17 108:19 109:11          109:14 110:14 123:4          128:2  <b>Moore</b> [2] 157:1,4</p>	<p><b>morning</b> [8] 1:13,13,15          4:16 10:20,24 40:18          42:24  <b>Moss</b> [2] 171:2,12  <b>most</b> [16] 17:7 18:20          20:11,20 25:4 28:8 52:24          54:12,12 57:14 100:23          103:9 107:6 115:20 146:3          151:25  <b>mother</b> [1] 64:7  <b>motors</b> [2] 118:13,20  <b>MOULTON</b> [4] 1:8          35:1 42:4 137:2  <b>move</b> [5] 41:20 144:13          156:3 164:13,16  <b>moved</b> [2] 76:2 154:23  <b>moving</b> [1] 33:16  <b>MR.STRATTON</b> [1]          114:17  <b>Ms</b> [22] 13:6 14:21 22:16          23:16 45:16 51:6 55:9          55:14 74:17 82:13 84:21          84:25 95:11 100:2,5          119:9,14,18,23 128:14          165:19 166:24  <b>Muskkrat</b> [3] 6:5 48:9          149:3</p> <hr/> <p style="text-align: center;"><b>-N-</b></p> <p><b>N-1</b> [1] 20:13  <b>Nalcor</b> [22] 80:11,14          82:24 144:16,19,25,25          145:22 146:18,20 147:13          147:21,25 148:5,9 149:11          149:14,18,18,23 150:9          151:21  <b>Nalcor's</b> [1] 148:24  <b>name</b> [2] 85:15,17  <b>NARL</b> [2] 80:12 94:8  <b>nature</b> [1] 64:7  <b>Navigant</b> [1] 6:8  <b>necessarily</b> [3] 6:2 115:7          169:4  <b>need</b> [17] 12:10 21:25          28:2 35:14 61:7,9 62:1          72:6 80:8 83:9,21 116:1          116:3 118:1 124:19 140:9          150:2  <b>needed</b> [4] 12:11 27:21          75:25 89:18  <b>needs</b> [5] 12:22 39:9,17          60:13 67:14  <b>negotiated</b> [1] 63:6  <b>neighbours</b> [1] 20:17  <b>neither</b> [2] 90:20,23  <b>net</b> [7] 58:11 62:11 99:12          107:22 118:23 119:4          130:5  <b>never</b> [2] 7:14 35:10  <b>new</b> [24] 7:24 8:15 10:5          26:24 31:12 37:21 40:19          47:21 49:8 72:4 75:18          102:6,8 105:19 106:6,17          106:19,21 116:17,20,22          155:12,14 169:9</p>	<p><b>Newfoundland</b> [12]          23:25 31:22 32:7,8 71:13          78:15 80:12 82:22 131:20          171:4,7,10  <b>newsprint</b> [1] 95:22  <b>next</b> [4] 28:22 32:19          133:7 144:1  <b>NLH-285</b> [1] 67:19  <b>Nobody</b> [1] 35:8  <b>non-firm</b> [10] 52:9,10          52:18 57:1,6,9,19 58:19          59:1,9  <b>none</b> [3] 136:2 143:25          166:11  <b>Nonetheless</b> [1] 121:24  <b>normalized</b> [2] 38:19          38:20  <b>normally</b> [3] 78:6,16          91:16  <b>North</b> [3] 7:2,5,15  <b>note</b> [2] 149:22 165:25  <b>noted</b> [9] 13:7 14:22          22:17 23:17 45:17 72:12          82:14 128:15 133:8  <b>notes</b> [2] 50:24 158:10  <b>nothing</b> [1] 48:1  <b>notice</b> [4] 61:11,13 94:5          95:25  <b>notify</b> [1] 33:14  <b>November</b> [5] 40:23,25          93:9 95:3 104:23  <b>now</b> [58] 6:18 7:6 8:8,10          20:3,13 21:19 29:24 33:3          35:14,15 38:12 39:22          40:25 46:4,25 48:6,20          50:22 57:13 64:5,23          72:25 73:10 78:2 79:12          79:16,18 86:23 88:10          96:6 99:12 104:1 110:23          116:25 124:3,13 126:1,2          128:19 134:1 147:23          151:2,3,14 152:4 159:9          159:12 160:1 161:6          162:15,22,24 163:13,20          164:4,13 170:13  <b>NP-002</b> [1] 74:16  <b>NP-297</b> [1] 45:15  <b>number</b> [35] 6:4 9:21          28:13,16 31:4,4 35:21          37:10 49:18 54:20,21,24          55:1,4 56:22,23 57:15          57:22 58:20 59:23 67:9          68:24 72:7 93:8,15 95:23          96:1,10,18 107:8,13          124:13 131:14 153:19          162:14  <b>numbers</b> [2] 71:12          102:20</p> <hr/> <p style="text-align: center;"><b>-O-</b></p> <p><b>O</b> [2] 156:17,20  <b>O&amp;M</b> [16] 74:24 76:14          76:19 160:2,11 161:13          161:19 162:7,22 163:5          164:9 166:12,19 167:7          167:10 169:11</p>	<p><b>O'Brien</b> [14] 24:3 34:19          106:5 108:18 111:25          125:18 128:17 131:23          135:21 138:13,20,23          144:16,18  <b>O'Brien's</b> [2] 45:21          140:15  <b>O'Reilly</b> [4] 85:25 86:3          170:5,14  <b>objection</b> [1] 99:7  <b>observe</b> [1] 40:22  <b>obtain</b> [1] 80:20  <b>obtained</b> [1] 73:24  <b>obviously</b> [12] 34:5 39:4          41:18 44:25 45:15 47:20          48:20 51:9 66:2 89:22          112:2 155:11  <b>occasion</b> [1] 67:11  <b>occasionally</b> [1] 145:25  <b>occur</b> [2] 81:16 84:6  <b>occurred</b> [2] 87:11          117:24  <b>October</b> [5] 1:1 111:24          116:22 171:5,11  <b>odd</b> [2] 35:12 56:2  <b>off</b> [13] 1:16 6:10 10:12          10:25 11:13,16 16:22          19:19 49:9,10 91:19          98:14 126:1  <b>official</b> [1] 85:12  <b>offload</b> [1] 9:9  <b>offset</b> [1] 57:14  <b>offsetting</b> [2] 73:4,6  <b>often</b> [1] 145:18  <b>oil</b> [1] 73:12  <b>old</b> [1] 113:16  <b>once</b> [8] 11:6,17 24:7          30:18 61:21,24 97:7          148:2  <b>one</b> [58] 8:20,22 9:7,15          9:23 15:9 18:2,25 21:14          21:21 28:9 35:16 62:4          66:15 67:11 71:14 73:17          80:10,13,14,15,15,16,19          81:14 84:8,11 87:8 88:9          88:19,23 89:10,14 90:24          91:8 93:8,15 103:17          107:9,21 108:19 114:21          117:16 119:19 121:22          127:13,15 132:3,21          136:18 139:12 140:25          142:5 144:21 152:13          157:13 163:12,21  <b>one-week</b> [1] 60:22  <b>one-year</b> [2] 54:24 55:1  <b>ongoing</b> [3] 86:20 164:7          164:9  <b>onto</b> [1] 119:10  <b>onwards</b> [2] 105:12          109:16  <b>open</b> [1] 34:10  <b>opening</b> [1] 28:6  <b>operable</b> [2] 90:21,24  <b>operate</b> [15] 4:21 13:16          13:21,22 15:20 16:1</p>
---	--	---	---	---

<p>19:24 20:12,21 21:17,25 24:22 25:8 52:5,23</p> <p><b>operated</b> [3] 9:11 90:12 109:10</p> <p><b>operating</b> [16] 9:6 11:19 15:6 23:23 25:15,22 26:1 26:12 37:15,18 38:6 108:14 120:5,15 165:6 167:6</p> <p><b>operation</b> [13] 14:13 15:3 16:13 21:13 25:20 61:23 74:15 76:9 83:14 85:14 92:10 155:4 159:15</p> <p><b>operationally</b> [1] 157:16</p> <p><b>operations</b> [20] 27:9 37:3 60:15 70:7,25 76:3 79:20 85:22 137:9 148:3 153:11 154:8,16 155:6 157:5,14 159:4,5,16,17</p> <p><b>operators</b> [5] 23:4 24:21 61:4 62:2 136:4</p> <p><b>opportunities</b> [2] 11:13 27:23</p> <p><b>opportunity</b> [14] 20:16 28:11,12,23 29:23 50:23 52:2,23 66:24 134:17,19 134:22,25 142:9</p> <p><b>opposed</b> [7] 19:5 102:15 129:7 141:20 142:16 150:21 152:23</p> <p><b>optimistic</b> [1] 107:12</p> <p><b>order</b> [19] 12:22 27:20 33:15 52:9,15,20 57:8 65:14 72:8 91:20 96:13 100:9,10 102:12,17 121:5 150:24 153:19 163:12</p> <p><b>orders</b> [3] 71:10,21 153:17</p> <p><b>ordinarily</b> [5] 9:5 13:9 14:11 57:19 126:3</p> <p><b>originally</b> [1] 106:9</p> <p><b>otherwise</b> [4] 104:11 110:19 117:6 123:9</p> <p><b>ought</b> [1] 141:21</p> <p><b>outage</b> [29] 8:20,22 9:4 9:13,15,18,23 12:15 16:20 17:9 19:9,12,25 20:2,13,19 21:11 29:2 88:9,23 89:2,11,25 92:1 92:18,20,22 94:18 109:12</p> <p><b>outages</b> [6] 21:10 58:21 80:24 83:5,6 94:19</p> <p><b>outcome</b> [1] 76:24</p> <p><b>outlined</b> [1] 53:12</p> <p><b>outlines</b> [1] 54:9</p> <p><b>outlook</b> [2] 21:22 107:7</p> <p><b>output</b> [2] 68:23 137:15</p> <p><b>outside</b> [12] 61:23 66:17 66:23 84:7 122:18 140:8 147:5,9 152:5 165:3 168:2,4</p> <p><b>overall</b> [3] 6:6 110:21 153:4</p> <p><b>overheads</b> [1] 167:16</p> <p><b>overload</b> [2] 89:19 91:1</p>	<p><b>overly</b> [1] 18:6</p> <p><b>oversee</b> [1] 70:8</p> <p><b>overseeing</b> [2] 159:13 159:15</p> <p><b>oversees</b> [1] 70:25</p> <p><b>oversight</b> [1] 71:3</p> <p><b>own</b> [4] 37:20 72:14 145:24 149:24</p> <p><b>owner</b> [3] 27:7,8,12</p> <hr/> <p style="text-align: center;"><b>-P-</b></p> <hr/> <p><b>p.m</b> [5] 101:3 114:16 129:14 143:2 170:18</p> <p><b>P50</b> [7] 1:17,19 2:7,17 3:8,24 4:6</p> <p><b>P90</b> [3] 1:17,23 3:7</p> <p><b>page</b> [35] 65:15,17 71:9 71:16 80:4,4,10 82:17 83:1 85:10 93:2 94:5,6 96:8 99:18,25 100:3,5,6 105:5,14 111:23 125:15 133:5,8,8 134:5 138:19 139:5,11 142:6 148:19 150:10 159:3 167:3</p> <p><b>paid</b> [1] 63:7</p> <p><b>panel</b> [12] 1:14 18:24 34:23 97:11 136:21 137:9 144:22 145:6 150:18 156:23 164:15 170:15</p> <p><b>panels</b> [1] 36:22</p> <p><b>paper</b> [54] 50:2 51:23 52:1,4,14,18 55:7 56:21 57:1,17 58:3 59:5,18,21 61:10,25 62:7 63:14,21 64:11,15,23 65:1 66:4 66:16 67:10,23,25 68:12 68:19,20 69:15 72:1 73:25 80:16 93:8,15 95:2 95:2,23 96:9,10,16,24 126:8 156:17,18,22 157:4 157:9 160:4,23 164:5 167:6</p> <p><b>Paper's</b> [7] 55:21 61:18 63:15 69:18,21 73:16 166:12</p> <p><b>paragraph</b> [1] 69:8</p> <p><b>paraphrasing</b> [1] 105:14</p> <p><b>pardon</b> [3] 84:24 95:16 138:18</p> <p><b>part</b> [14] 19:23 21:22 22:24 23:6 27:7 58:6,17 82:1 144:8,15,24 146:3 146:11 151:25</p> <p><b>partial</b> [1] 94:8</p> <p><b>participate</b> [1] 127:8</p> <p><b>particular</b> [8] 8:25 35:24 66:21 89:7 99:3 128:9 138:22 156:8</p> <p><b>particularly</b> [4] 5:11 32:23 85:16 147:10</p> <p><b>particulars</b> [1] 73:24</p> <p><b>parties</b> [1] 162:14</p> <p><b>party</b> [2] 64:6,9</p> <p><b>passed</b> [1] 56:18</p>	<p><b>past</b> [13] 15:15 33:18 35:18 36:22,24 37:14 39:20 45:2 59:12 68:25 100:13 126:17 166:19</p> <p><b>path</b> [1] 33:16</p> <p><b>Patrick</b> [2] 98:2 167:13</p> <p><b>PAUL</b> [3] 1:7,9 97:14</p> <p><b>Paul's</b> [1] 62:20</p> <p><b>pay</b> [1] 117:18</p> <p><b>payer</b> [1] 39:4</p> <p><b>payers</b> [4] 56:18,22 58:13 59:14</p> <p><b>paying</b> [3] 25:10 62:18 62:24</p> <p><b>payment</b> [2] 60:4,5</p> <p><b>payments</b> [1] 60:2</p> <p><b>pays</b> [2] 142:18,25</p> <p><b>peak</b> [7] 1:21,25 2:1,18 10:20,21 11:7</p> <p><b>peaking</b> [1] 72:11</p> <p><b>pending</b> [1] 87:16</p> <p><b>Peninsula</b> [2] 8:21 28:17</p> <p><b>PENNELL</b> [1] 84:25</p> <p><b>people</b> [5] 78:12 151:6 152:2 153:11,14</p> <p><b>per</b> [13] 11:20 13:21 60:3 62:24 69:10,12 105:7 120:25 121:6 124:6,11 134:15 163:21</p> <p><b>perceived</b> [1] 12:9</p> <p><b>percent</b> [18] 1:21,22,24 93:6 95:20 99:22 100:10 102:15 111:10,12 123:5 149:23 150:20 166:13 167:18,19,20,24</p> <p><b>percentage</b> [3] 134:16 150:19,25</p> <p><b>Perfect</b> [1] 119:24</p> <p><b>perform</b> [1] 91:20</p> <p><b>performance</b> [7] 61:18 107:8 113:7,10 123:7 136:5 141:25</p> <p><b>performing</b> [2] 117:6 117:10</p> <p><b>perhaps</b> [16] 4:10 10:21 67:2 83:3 106:6 108:25 124:10,12 125:2 126:23 128:22 140:24 144:14 150:3,21 152:10</p> <p><b>period</b> [39] 2:21,24 3:15 10:17 15:5 16:13 17:9 19:20 21:13 32:23 33:13 33:23 39:23 42:11 43:6 43:8 47:14 75:22 88:20 89:13 90:13 91:8,15,18 91:18,24 92:7,15 96:3 100:19,20 103:8,15 104:11,15,15 114:5 127:23 161:8</p> <p><b>periods</b> [10] 3:3 5:2 9:12 18:10,10 21:18 22:1 38:14 44:19 92:9</p> <p><b>person</b> [4] 80:14,14 137:5 164:20</p> <p><b>personally</b> [1] 35:6</p>	<p><b>persons</b> [1] 150:8</p> <p><b>perspective</b> [21] 26:12 26:19 36:8 37:4,19,23 37:24 38:2 47:11 52:25 53:4 60:16 61:1,2 62:23 120:18 121:1,15 133:19 157:23,24</p> <p><b>pertaining</b> [2] 85:8 87:3</p> <p><b>pertains</b> [1] 88:5</p> <p><b>phase</b> [1] 38:12</p> <p><b>phone</b> [1] 162:6</p> <p><b>pick</b> [2] 78:8 162:6</p> <p><b>picked</b> [2] 59:6 100:22</p> <p><b>picture</b> [1] 101:23</p> <p><b>piece</b> [3] 3:6 47:2 166:23</p> <p><b>pilot</b> [5] 55:18,19,21,22 64:17</p> <p><b>piloted</b> [1] 51:22</p> <p><b>pitching</b> [1] 40:19</p> <p><b>place</b> [8] 13:20 23:2 78:1 78:16 79:17,23 82:21 94:12</p> <p><b>plan</b> [7] 31:1,11 48:12 80:21 81:20 161:25 162:13</p> <p><b>planned</b> [15] 5:6 9:4 10:12 16:17 17:17 18:2 31:3 58:22 83:4,6 88:11 88:18 94:19 109:12 169:20</p> <p><b>planning</b> [16] 3:17 7:21 7:25 8:15 47:10 48:8 70:25 75:8 94:8 109:15 148:3 153:12 154:17 155:2,4,6</p> <p><b>plans</b> [3] 48:22,23 49:13</p> <p><b>plant</b> [30] 12:15 16:8,20 17:9 18:7,21 19:9 32:20 34:14 80:18,23 81:15 83:20 84:7 91:11,22,23 92:1 94:8 100:18 102:8 136:4 158:6,22,24 159:2 159:20 161:11 162:5 169:9</p> <p><b>plants</b> [2] 130:4,13</p> <p><b>play</b> [2] 4:23 8:14</p> <p><b>plus</b> [4] 37:20 99:13 108:13 128:1</p> <p><b>PM</b> [1] 96:10</p> <p><b>point</b> [29] 9:10 11:15 15:1,4 21:4,5,9,20,24 22:11 27:1 28:18 39:22 43:1 61:8 62:3,10 102:2 113:21 117:12 120:24 121:4 123:3,7 127:25 142:8,13 143:4 165:1</p> <p><b>points</b> [3] 52:24 101:10 117:16</p> <p><b>policy</b> [1] 22:20</p> <p><b>Porter</b> [33] 156:7,12 157:21 158:5,12,18 159:1 159:8,18,25 160:8,14 161:9 162:3,17,21 163:3 163:17,24 164:6,24 165:20,21 166:21,25 167:1 168:3,17,21 169:6</p>	<p>169:12,21,25</p> <p><b>portions</b> [4] 25:23 46:13 145:23 151:8</p> <p><b>posed</b> [1] 144:21</p> <p><b>position</b> [11] 7:24 11:23 64:13,20 67:14 85:14,17 148:2 155:12,14 158:14</p> <p><b>positions</b> [3] 165:5,11 165:12</p> <p><b>positive</b> [1] 58:11</p> <p><b>possibility</b> [1] 133:14</p> <p><b>possible</b> [2] 14:15 24:24</p> <p><b>possibly</b> [1] 147:10</p> <p><b>post</b> [1] 6:18</p> <p><b>post-2018</b> [1] 40:13</p> <p><b>pot</b> [1] 162:9</p> <p><b>potential</b> [2] 54:10,15</p> <p><b>power</b> [54] 20:12 23:25 24:21,23 25:15 32:7 33:15 37:21 38:22 48:15 52:6,7,8,11,15,19,19,20 57:6,9 58:19 59:1 62:9 62:12 66:4 68:14 72:3,7 72:16,18 73:5 78:6,11 78:13,15,20,25 79:21 80:12 82:21,22 89:10 93:14 96:12,13 128:19 128:23 129:21 131:20 158:2,21 159:20 163:15 168:24</p> <p><b>Power's</b> [2] 31:22 32:9</p> <p><b>practically</b> [1] 40:25</p> <p><b>practice</b> [4] 5:23 20:6 126:17 138:24</p> <p><b>pre-filed</b> [1] 100:6</p> <p><b>precisely</b> [1] 167:18</p> <p><b>predict</b> [1] 58:18</p> <p><b>preliminary</b> [6] 1:4 117:11,24 118:1 120:23 124:21</p> <p><b>premise</b> [1] 51:25</p> <p><b>preparation</b> [1] 127:15</p> <p><b>prepared</b> [2] 47:22 127:13</p> <p><b>preparedness</b> [1] 29:10</p> <p><b>present</b> [1] 168:10</p> <p><b>presented</b> [1] 100:16</p> <p><b>presently</b> [2] 7:3 25:12</p> <p><b>President</b> [1] 148:3</p> <p><b>pressure</b> [1] 49:10</p> <p><b>presume</b> [2] 85:11 141:12</p> <p><b>pretty</b> [3] 33:17 49:4 140:3</p> <p><b>prevent</b> [2] 92:19,22</p> <p><b>previous</b> [12] 18:9 19:5 19:9 56:24 70:15 105:10 112:11,23 115:11 147:23 148:14 164:12</p> <p><b>previously</b> [3] 32:22 33:1 60:20</p> <p><b>price</b> [8] 54:12 69:16 73:18,22 106:25 107:2 142:25 143:5</p>
--	---	---	--	--

<p><b>prices</b> [4] 54:11 73:12 74:5 131:24</p> <p><b>primarily</b> [2] 93:7 163:14</p> <p><b>primary</b> [2] 9:23 25:25</p> <p><b>principle</b> [1] 137:22</p> <p><b>probability</b> [2] 1:24 3:10</p> <p><b>problem</b> [3] 31:11 66:2 83:8</p> <p><b>problems</b> [1] 86:20</p> <p><b>procedure</b> [1] 77:4</p> <p><b>proceeding</b> [2] 65:5 131:5</p> <p><b>process</b> [9] 6:3,6,10 8:8 27:16,19 75:18 137:19 137:20</p> <p><b>Processing</b> [1] 80:18</p> <p><b>produced</b> [1] 43:21</p> <p><b>producing</b> [3] 45:12 106:7,7</p> <p><b>production</b> [10] 32:16 33:4 38:23 43:17,19 99:23 105:13,24 127:9 130:13</p> <p><b>program</b> [2] 86:1 161:23</p> <p><b>progress</b> [1] 46:11</p> <p><b>project</b> [27] 100:12 114:20 115:24 116:1,7 117:18 121:24 123:18 124:17 149:3 151:7,9,10 151:12,18,24 152:2,4,6 152:15,17,20 153:2,4 154:10,22,23</p> <p><b>projected</b> [3] 56:16 122:4 141:20</p> <p><b>projects</b> [2] 146:23 149:4</p> <p><b>proper</b> [4] 41:15,17 66:19 67:13</p> <p><b>proposals</b> [1] 72:4</p> <p><b>proposing</b> [2] 99:20 139:24</p> <p><b>protection</b> [1] 86:1</p> <p><b>protocol</b> [3] 22:25 23:1 61:3</p> <p><b>proven</b> [2] 27:1 30:19</p> <p><b>provide</b> [12] 12:20 14:15 26:24 30:12 48:19 51:25 52:1 53:21 71:3 82:1 83:19 151:11</p> <p><b>provided</b> [7] 23:11 76:8 81:7,20,25 93:11 149:5</p> <p><b>provides</b> [2] 41:13 85:4</p> <p><b>providing</b> [7] 34:12 44:24 63:14 73:1 152:2 154:19,21</p> <p><b>Province</b> [1] 64:8</p> <p><b>provinces</b> [1] 8:10</p> <p><b>proving</b> [2] 27:4,17</p> <p><b>prudent</b> [1] 21:9</p> <p><b>PUB-NLH-409</b> [3] 150:3 153:12 154:3</p> <p><b>Public</b> [1] 171:6</p> <p><b>Pulp</b> [52] 50:1 51:23 52:1</p>	<p>52:4,13,18 55:7,20 56:21 56:25 57:17 58:3 59:5 59:18,21 61:10,18,25 62:6 63:13,15,21 64:11 64:15,22 65:1 66:4,15 67:10,23,25 68:12,19 69:15,17,20 71:25 73:16 73:25 80:16 95:1 96:9 156:17,18,22 157:4,9 160:4,23 164:5 166:12 167:6</p> <p><b>purchase</b> [7] 57:10 69:15 72:7,9 78:13 96:11 130:15</p> <p><b>purchased</b> [1] 67:25</p> <p><b>purchasers</b> [1] 78:12</p> <p><b>purchases</b> [14] 37:20,21 38:23 59:1 66:4 67:22 67:24 68:11 69:6,14 70:2 72:3,16 130:14</p> <p><b>purchasing</b> [1] 68:7</p> <p><b>purpose</b> [2] 17:5 130:18</p> <p><b>purposes</b> [6] 25:21 38:21 52:12 73:7 131:11 135:7</p> <p><b>pursuant</b> [1] 129:19</p> <p><b>pursue</b> [1] 156:8</p> <p><b>purview</b> [2] 159:6 165:3</p> <p><b>put</b> [10] 3:20 7:1 28:3 36:8 41:21 54:20 106:17 116:17 117:17 137:19</p> <p><b>putting</b> [3] 28:7,22 34:4</p> <p><b>puzzle</b> [1] 166:23</p>	<p>91:3,12 92:2,24 93:20 93:24 94:4,24 95:8,13 96:5 97:9 170:5,14</p> <p><b>qualified</b> [1] 137:6</p> <p><b>qualified</b> [4] 104:3,8 106:13,16</p> <p><b>quantifies</b> [1] 121:9</p> <p><b>quantify</b> [4] 103:20 104:5 110:23 123:20</p> <p><b>quantifying</b> [1] 117:12</p> <p><b>quantity</b> [2] 107:2,4</p> <p><b>quarter</b> [1] 32:24</p> <p><b>questioned</b> [1] 24:3</p> <p><b>questioning</b> [5] 98:19 139:5 156:4,5,9</p> <p><b>questions</b> [17] 1:15 45:21 65:23 74:25 97:10 97:18,21 108:18 128:20 131:23 138:12 144:17 157:20 170:2,4,6,10</p> <p><b>quickly</b> [1] 156:16</p> <p><b>quite</b> [5] 6:4 47:1 78:1 81:9 107:11</p> <p><b>quote</b> [1] 134:1</p> <p><b>quoted</b> [1] 57:16</p>	<p><b>reasonable</b> [3] 6:11 19:20 43:7</p> <p><b>reasonableness</b> [2] 4:5 34:3</p> <p><b>reasonably</b> [1] 4:21</p> <p><b>reasons</b> [3] 9:21 58:25 66:15</p> <p><b>reassess</b> [1] 6:19</p> <p><b>recalculated</b> [1] 124:25</p> <p><b>receiving</b> [2] 59:22 96:16</p> <p><b>recent</b> [12] 37:14 43:5,8 44:3,11 49:2 54:12 100:23 103:5,9,13 107:7</p> <p><b>recently</b> [3] 6:5 29:14 33:19</p> <p><b>recite</b> [1] 149:1</p> <p><b>recommendations</b> [1] 99:8</p> <p><b>record</b> [14] 13:7 14:22 22:17 23:17 45:17 51:18 65:5 66:10 80:9 82:14 82:19 104:17 119:11 128:15</p> <p><b>recorded</b> [1] 145:13</p> <p><b>recovering</b> [1] 23:21</p> <p><b>red</b> [1] 48:3</p> <p><b>redacted</b> [3] 86:12,17 86:19</p> <p><b>reduce</b> [4] 38:3 69:14 72:14 94:10</p> <p><b>reduced</b> [7] 22:20 25:20 69:12 93:7 96:14 118:21 126:8</p> <p><b>reduces</b> [1] 44:24</p> <p><b>reducing</b> [1] 99:13</p> <p><b>reduction</b> [6] 53:24 54:14 68:21,23 118:25 119:1</p> <p><b>redundancy</b> [1] 75:10</p> <p><b>refer</b> [8] 50:13 54:4 76:7 80:2 82:16 93:1 95:9 152:22</p> <p><b>reference</b> [7] 3:23 4:16 40:9 93:25 96:8 125:16 125:21</p> <p><b>referenced</b> [4] 31:4,21 37:10 84:9</p> <p><b>references</b> [1] 83:1</p> <p><b>referred</b> [5] 31:20 54:22 57:22 95:16 133:4</p> <p><b>referring</b> [10] 5:9,16 65:15 99:18 108:17,24 146:7,24 152:20 154:3</p> <p><b>reflect</b> [4] 48:21 70:17 119:1 121:13</p> <p><b>reflected</b> [3] 70:1 103:13 143:1</p> <p><b>reflection</b> [3] 160:21 161:20 166:20</p> <p><b>reflective</b> [2] 73:15 113:11</p> <p><b>reflects</b> [1] 42:10</p> <p><b>refurbishment</b> [3] 161:23,25 162:13</p>	<p><b>regard</b> [4] 31:23 97:21 131:4 161:17</p> <p><b>regarding</b> [4] 51:13 83:3 88:8 131:23</p> <p><b>regardless</b> [1] 118:17</p> <p><b>regards</b> [9] 18:17 22:21 30:21 33:7 45:19 48:8 59:16 64:15,23</p> <p><b>regime</b> [2] 120:5,15</p> <p><b>regression</b> [17] 105:9 112:1,22 113:14 114:2 114:10,13,18 122:9,11 122:15,17,19 125:18 133:13,16,18</p> <p><b>regrets</b> [1] 80:13</p> <p><b>regretted</b> [1] 82:24</p> <p><b>regular</b> [4] 33:12 36:14 46:9 157:18</p> <p><b>regulated</b> [4] 93:2 99:19 105:5 133:6</p> <p><b>Regulation</b> [1] 71:13</p> <p><b>regulations</b> [1] 71:10</p> <p><b>rejoined</b> [1] 158:14</p> <p><b>related</b> [11] 51:22 87:23 88:1 129:2 145:24 149:15 151:12 153:15 156:17 159:21 164:22</p> <p><b>relating</b> [4] 64:25 66:4 70:12 146:12</p> <p><b>relation</b> [24] 34:17 48:8 65:11 79:13 98:2 116:1 116:5 123:3 125:18 138:14,15,16,17 139:6,7 139:9 140:16 141:1,2,5 144:15 149:2,6 150:9</p> <p><b>relationship</b> [2] 136:14 142:17</p> <p><b>relative</b> [5] 36:2,10 62:17 93:6 95:20</p> <p><b>relatively</b> [2] 155:12 156:15</p> <p><b>relaying</b> [1] 164:21</p> <p><b>reliability</b> [8] 21:21,23 25:1 26:2 37:24 38:2 60:21 109:9</p> <p><b>reliably</b> [4] 11:16 24:23 25:3,15</p> <p><b>reliance</b> [1] 37:14</p> <p><b>relied</b> [2] 33:8 48:13</p> <p><b>rely</b> [2] 37:22 153:4</p> <p><b>relying</b> [1] 37:25</p> <p><b>remainder</b> [2] 15:20 128:1</p> <p><b>remaining</b> [4] 9:9 36:6 91:1 155:5</p> <p><b>remind</b> [1] 129:23</p> <p><b>remove</b> [1] 80:8</p> <p><b>repeat</b> [3] 65:8 91:5 114:21</p> <p><b>reply</b> [4] 24:8 45:15 67:18 165:25</p> <p><b>report</b> [10] 45:22 51:12 53:12 85:2 129:22 130:23 139:14 148:20,20 150:11</p> <p><b>reported</b> [3] 83:16 84:3</p>
---	--	--	--	---

-R-

-Q-

**Q.C** [208] 1:11,12 2:5,11  
3:22 4:3,9,14 5:3,17,22  
6:13,21 7:12,19 8:4,16  
9:16 10:3,10,15,23 11:9  
11:21 12:3,8,19 13:1,8  
13:17,23 14:5,14,23  
15:12,22 16:2,15,23 17:2  
17:11,16,21,25 18:15,23  
19:13,17 20:5 21:1 22:2  
22:8,14,18 23:9,14,18  
24:18 25:9 26:6,13,20  
27:3,11,15 29:18,25 30:4  
30:10,17,25 31:17,19  
32:1 33:2,24 34:16 35:7  
36:7,25 37:9 38:10 39:6  
39:14,21 40:4,8,16 41:22  
42:1,6,17 43:3 44:1,8,13  
45:7,11,18 46:5,23 47:24  
48:7,24 49:21 50:7,14  
50:18,25 51:8,17 53:3,8  
53:16 54:3,7,19,25 55:5  
55:11,16 56:1,6,12 57:2  
57:21,25 58:14 59:3,15  
60:8,17 61:16 62:15  
63:10 64:3,21 65:4,10  
65:16,20 66:1,8 67:1,17  
68:5 69:2 70:3,20 71:17  
71:22 72:19,23 73:9,21  
74:9,22 75:12 76:6,13  
77:2,10,16,22 78:18,23  
79:5,10,22 80:1 81:3,18  
81:23 82:6,11,15 84:1  
84:12 85:6,23,25 86:5,9  
86:14,18,25 87:12,18  
88:2,21 89:3,20 90:5,17

<p>130:25  <b>reporting</b> [1] 47:2  <b>reports</b> [8] 31:5 37:6  46:21 128:19,23 131:5,6  131:13  <b>represent</b> [1] 56:17  <b>representative</b> [3]  38:14 39:24 80:12  <b>representatives</b> [6]  80:11,11,13 82:22,23  164:18  <b>represented</b> [2] 78:12  85:21  <b>represents</b> [1] 120:11  <b>request</b> [5] 81:5,11 128:8  151:10 163:9  <b>requested</b> [1] 165:5  <b>requests</b> [1] 72:4  <b>require</b> [1] 16:10  <b>required</b> [8] 9:5 16:7  19:12 25:24 53:2 62:14  161:4,7  <b>requirement</b> [3] 38:24  61:13 91:25  <b>requirements</b> [12] 7:22  31:21 38:14 40:13 68:21  75:8,24 93:5 95:20  101:16 105:13,24  <b>requires</b> [5] 16:8,21  18:13 35:16 91:18  <b>requiring</b> [1] 94:23  <b>research</b> [1] 20:9  <b>reserve</b> [11] 2:22 3:9  4:17,22 5:14 8:11 20:23  23:5 32:12 61:5 62:6  <b>reserves</b> [5] 21:22,24  22:25 23:2 61:8  <b>resources</b> [2] 24:6 53:1  <b>respect</b> [13] 63:13,22  64:11 71:11 97:18 99:10  102:4 105:12 131:22  138:11 148:23 156:5  166:3  <b>respond</b> [5] 9:9 20:4,14  20:22 140:25  <b>response</b> [9] 36:13 45:21  72:12 106:5 108:18 121:9  125:17 138:12 165:9  <b>responsible</b> [1] 27:4  <b>restart</b> [2] 28:12 97:8  <b>result</b> [6] 20:2 21:11  89:11 113:15,20,20  <b>results</b> [1] 132:10  <b>RESUME</b> [1] 84:18  <b>reverse</b> [1] 112:9  <b>reverting</b> [1] 6:15  <b>review</b> [7] 5:24 6:6 21:8  46:16 53:11 109:9 124:20  <b>reviewed</b> [7] 2:14,15 6:4  6:8,9 93:13 98:7  <b>reviewing</b> [1] 156:16  <b>revise</b> [2] 121:11 125:3  <b>revised</b> [3] 124:15  125:10 127:6</p>	<p><b>Revision</b> [4] 55:10  165:20,22 166:25  <b>RFI</b> [5] 56:24 72:12  74:13 121:8 165:4  <b>RFIs</b> [2] 50:21 140:23  <b>right</b> [44] 1:5 2:8 4:4 5:23  7:6 13:18 14:2 15:16  16:3 17:13 23:15 25:12  26:17,18 30:1 31:18  33:21 37:16 42:7 43:4  48:6 55:6,20 57:3 64:8  73:10 79:6,11 84:16  85:24 86:23 91:13 94:25  97:10 109:10,14 110:23  132:17 137:24 148:11  151:2 153:22 162:4  168:22  <b>rights</b> [7] 63:16,18,22  64:7,7,12,18  <b>risk</b> [4] 28:22 29:16 30:3  92:17  <b>road</b> [1] 25:6  <b>Robert</b> [2] 1:8 86:8  <b>robust</b> [1] 20:18  <b>role</b> [12] 63:20 64:10 71:3  79:11,16 144:15 147:23  151:3,4 159:9,13,19  <b>roles</b> [1] 148:14  <b>roll</b> [1] 162:12  <b>rolling</b> [1] 85:2  <b>Rolph's</b> [2] 148:19  150:11  <b>room</b> [1] 98:10  <b>rotating</b> [1] 161:6  <b>roughly</b> [2] 55:23 127:20  <b>RSP</b> [10] 26:5 56:19  57:13 58:12 139:25 140:8  141:14 143:1,7,16  <b>rule</b> [1] 22:4  <b>rules</b> [4] 140:8,12,18  143:16  <b>run</b> [17] 10:16 11:1,4,23  12:9,11,17,22 19:1 88:6  92:19,21 109:22 110:1  123:5 140:2,3  <b>running</b> [15] 10:4 13:25  14:17 15:1,1 19:14 28:9  108:19 109:4,16 111:18  116:25 124:7 139:9  140:16</p> <hr/> <p style="text-align: center;"><b>-S-</b></p> <hr/> <p><b>safe</b> [1] 28:20  <b>safety</b> [1] 159:4  <b>sake</b> [1] 146:2  <b>salaries</b> [2] 165:8 167:21  <b>save</b> [1] 39:5  <b>savings</b> [23] 50:3,8 53:5  53:13,17,22,25 54:10,15  55:6 56:2,7,16,17 58:1,2  58:6 59:4,11 118:21,22  118:24 120:24  <b>saw</b> [1] 77:17  <b>says</b> [4] 64:6 69:8 120:23  168:14</p>	<p><b>schedule</b> [8] 14:10 46:13  60:2 81:11 107:10 126:2  128:10 149:21  <b>scheduled</b> [2] 29:8 52:8  <b>schedules</b> [5] 17:12 29:1  29:2 94:18 149:21  <b>scheduling</b> [1] 28:19  <b>scope</b> [12] 41:12 75:25  152:6,13,17,19,21,21,24  153:8,16 168:4  <b>screen</b> [3] 64:5 80:9  82:19  <b>scroll</b> [2] 67:20 130:6  <b>scrolling</b> [1] 67:21  <b>se</b> [1] 163:21  <b>season</b> [1] 62:25  <b>second</b> [5] 26:21 69:7  94:7 138:18 167:11  <b>section</b> [4] 99:19 105:5  133:5,6  <b>see</b> [33] 6:25 10:4,11  11:10 13:24 18:24 20:6  39:2 48:2 61:2 67:24  69:3,8 70:4 80:9,24  81:19 82:10 84:13 88:3  90:18,18 93:13,25 94:8  112:17 124:3,8 125:10  129:19 139:1 154:6 166:9  <b>seeing</b> [4] 32:12 33:9  68:24 140:17  <b>sought</b> [1] 11:12  <b>segue</b> [1] 69:4  <b>selling</b> [1] 117:16  <b>sense</b> [9] 26:9,19 38:4  41:2 43:14 52:25 58:22  67:4 73:1  <b>sensitive</b> [2] 73:11 85:15  <b>sensitivity</b> [3] 56:19  57:5 59:13  <b>sent</b> [1] 80:13  <b>separate</b> [2] 151:5  154:25  <b>separated</b> [1] 119:22  <b>September</b> [12] 28:24  28:24 29:4 49:3 63:12  82:17,20 85:10 109:7  134:5 142:7 156:25  <b>September/October</b>  [1] 94:9  <b>sequence</b> [3] 23:3,6,7  <b>serve</b> [2] 31:14 75:9  <b>service</b> [32] 28:17,21  87:9 99:9,12,13,15,21  100:9,17 101:16 102:6,9  103:6,17 104:17,25  107:21 116:17 117:13  118:22,25 121:16,21  122:19 123:15 124:14  125:10 130:4 161:5  164:14 168:13  <b>services</b> [1] 149:6  <b>servicing</b> [1] 81:15  <b>set</b> [7] 36:19 42:2 49:4  60:2 112:8 132:9,11  <b>sets</b> [1] 150:3</p>	<p><b>settle</b> [2] 5:24 7:24  <b>settled</b> [2] 21:5 47:20  <b>settling</b> [1] 4:6  <b>seven</b> [4] 25:19 26:2  94:10 95:17  <b>shape</b> [2] 21:12,16  <b>shared</b> [1] 58:12  <b>sharing</b> [2] 8:11 20:23  <b>sheets</b> [2] 145:11 153:24  <b>shift</b> [1] 56:20  <b>short</b> [3] 96:3 103:8  156:15  <b>shortfall</b> [1] 5:13  <b>shortfalls</b> [1] 48:23  <b>shortly</b> [1] 75:20  <b>showing</b> [1] 22:10  <b>shown</b> [1] 71:12  <b>shows</b> [2] 100:17 166:5  <b>shut</b> [7] 16:9,11 93:9,15  96:24 97:2,7  <b>shutdown</b> [7] 16:17  68:19 94:9,11 95:23 96:1  96:4  <b>shutdowns</b> [1] 94:14  <b>shutting</b> [2] 95:2 109:5  <b>side</b> [3] 76:15 78:5 147:12  <b>sight</b> [1] 46:15  <b>signed</b> [1] 6:10  <b>significant</b> [6] 8:14 34:6  34:6 35:19 37:7 92:15  <b>significantly</b> [2] 44:19  151:17  <b>similar</b> [3] 68:13,13  94:11  <b>simply</b> [2] 167:20,23  <b>simultaneously</b> [1]  16:22  <b>single</b> [3] 19:25 20:19  75:24  <b>sit</b> [1] 47:25  <b>situated</b> [1] 31:7  <b>situation</b> [7] 3:11,20  5:20 8:19 28:8 33:3  61:19  <b>situations</b> [1] 5:8  <b>six</b> [10] 25:19 26:1 29:5  35:18 55:3 82:17 83:1  85:10 158:21 159:2  <b>slight</b> [1] 166:10  <b>small</b> [7] 45:4 92:14  145:3,17 150:13,16,23  <b>smoothing</b> [1] 150:21  <b>software</b> [1] 41:14  <b>solely</b> [1] 167:12  <b>solicitor</b> [1] 67:12  <b>someone</b> [3] 70:4 83:12  138:6  <b>sometime</b> [1] 30:5  <b>sometimes</b> [1] 146:22  <b>somewhat</b> [3] 36:8 82:9  123:19  <b>soon</b> [1] 87:14</p>	<p><b>sorry</b> [23] 3:20 12:7,14  20:1 28:13 51:4,20 55:13  55:15 57:24 65:9 77:21  84:24 91:5 93:21 95:14  100:3,7 111:4 119:13  138:16 141:19 144:8  <b>sort</b> [12] 20:23 33:9 49:9  112:16 126:1 130:9 138:1  145:5 148:5 150:3,19  155:17  <b>sorted</b> [1] 12:10  <b>sound</b> [1] 171:8  <b>source</b> [3] 31:15 52:11  73:5  <b>sourced</b> [1] 48:16  <b>sources</b> [4] 4:11 72:5,9  72:18  <b>span</b> [1] 35:11  <b>speak</b> [9] 18:8 24:21  26:12 37:3 60:15 67:13  136:18,21 160:6  <b>speaking</b> [2] 150:18  159:14  <b>speaks</b> [1] 91:10  <b>spec</b> [9] 134:3,14,20,21  135:8,11,17 142:18,21  <b>specific</b> [4] 96:20 105:1  148:15 168:12  <b>specifically</b> [15] 74:24  138:15 157:2,8 160:19  160:24 162:1,4 163:11  164:22 165:10 167:5  168:15 169:17,18  <b>specification</b> [1] 135:18  <b>specifics</b> [1] 160:6  <b>specify</b> [2] 134:3,25  <b>speed</b> [2] 116:18 118:16  <b>spell</b> [1] 156:7  <b>spent</b> [2] 40:23 150:20  <b>split</b> [7] 125:22 126:5,8  128:10 129:12 130:3,5  <b>spoke</b> [1] 67:12  <b>spoken</b> [1] 132:22  <b>spreadsheet</b> [3] 126:11  128:10 129:19  <b>spring</b> [6] 29:24 30:5,8  94:12 125:25 126:18  <b>square</b> [1] 166:15  <b>St</b> [2] 171:7,10  <b>staff</b> [5] 67:8 165:5,10  166:1,11  <b>staffing</b> [1] 165:23  <b>stage</b> [4] 48:18 76:2  124:14 151:16  <b>stages</b> [1] 33:6  <b>stakeholders</b> [1] 131:14  <b>stand</b> [2] 63:11 137:18  <b>standard</b> [5] 6:15 7:1,2  7:5 78:17  <b>standards</b> [1] 40:20  <b>standby</b> [6] 20:22 21:10  23:7 90:9,13 130:16  <b>standpoint</b> [2] 26:3 38:5  <b>Star</b> [1] 80:15</p>
---	--	--	---	--

<p><b>start</b> [27] 1:16 10:20 21:9 23:7 26:21,25 27:5,22 28:5,19,21 29:12,14 30:9 30:12,21 31:6,10,15 41:9 41:21 49:7 90:16 97:5 104:24 121:21 144:14</p> <p><b>started</b> [9] 12:17 19:11 47:17,17 51:24 90:11 91:2 116:19,22</p> <p><b>starting</b> [5] 16:14 54:8 93:3 95:18 138:20</p> <p><b>starts</b> [3] 47:13 74:21 139:5</p> <p><b>startup</b> [1] 96:13</p> <p><b>state</b> [1] 91:19</p> <p><b>states</b> [1] 93:4</p> <p><b>station</b> [29] 80:22 81:13 83:14 85:9,14 86:21 89:16,23 99:9,13,14,20 100:9,17 101:16 102:6,9 103:6,16 104:17 107:21 118:22,25 122:18 123:15 124:14 125:10 130:3 166:2</p> <p><b>stations</b> [2] 43:23 165:15</p> <p><b>statistical</b> [1] 130:23</p> <p><b>statistics</b> [3] 114:12,14 114:14</p> <p><b>status</b> [3] 85:5 97:1 123:18</p> <p><b>stay</b> [2] 11:8,18</p> <p><b>stayed</b> [2] 15:19,23</p> <p><b>steam</b> [1] 68:21</p> <p><b>step</b> [4] 23:3,3 50:23 118:19</p> <p><b>Stephenville</b> [1] 165:17</p> <p><b>stick</b> [1] 103:8</p> <p><b>still</b> [20] 3:8,24 17:8 25:1 25:2 29:22 32:18 46:16 49:14 58:11 59:13 73:18 89:22 90:9 92:13 106:1 106:6 112:13 123:18 155:7</p> <p><b>storages</b> [1] 25:25</p> <p><b>storm</b> [1] 5:12</p> <p><b>straight</b> [1] 101:8</p> <p><b>Stratton</b> [14] 1:9,19 35:3 42:13,25 43:11 44:20 47:11 96:19 114:11,15 126:3 136:25 157:16</p> <p><b>strokes</b> [1] 160:3</p> <p><b>strong</b> [1] 99:7</p> <p><b>structure</b> [1] 148:25</p> <p><b>studied</b> [1] 21:4</p> <p><b>studies</b> [2] 84:8 135:22</p> <p><b>stuff</b> [1] 148:5</p> <p><b>subject</b> [2] 52:9 71:18</p> <p><b>subsequent</b> [1] 71:15</p> <p><b>subsequently</b> [2] 63:19 96:17</p> <p><b>such</b> [15] 9:6 16:11 19:24 19:25 20:12 34:20,25 35:10 38:20 58:21,23 81:14 112:24 156:21 168:25</p>	<p><b>suddenly</b> [1] 35:16</p> <p><b>suggest</b> [2] 97:6 100:21</p> <p><b>suggested</b> [1] 106:5</p> <p><b>sum</b> [1] 42:5</p> <p><b>summary</b> [1] 139:14</p> <p><b>summer</b> [15] 14:7 15:15 15:20 18:11 27:20 28:9 30:6 89:21 90:1,6 91:8 92:11 108:19 109:11,14</p> <p><b>summers</b> [4] 17:3 18:9 19:6,9</p> <p><b>summertime</b> [4] 11:6 11:17 14:12 16:18</p> <p><b>Sunnyside</b> [2] 88:17 89:23</p> <p><b>supervisor</b> [1] 79:19</p> <p><b>supplemental</b> [1] 87:3</p> <p><b>supplies</b> [10] 45:1 165:9 165:11,15,24 166:4,8,11 167:14,22</p> <p><b>supply</b> [5] 50:1 64:17 83:7,20 131:24</p> <p><b>supplying</b> [1] 44:25</p> <p><b>support</b> [9] 28:4 44:24 151:11 154:9,9,18,22 155:7,23</p> <p><b>supporting</b> [1] 22:4</p> <p><b>suppose</b> [2] 4:5 85:17</p> <p><b>switching</b> [2] 83:7,22</p> <p><b>system</b> [48] 4:21 5:15 6:11 7:10 20:12,18 24:21 24:23 25:8,15 27:9 28:3 28:4,7,16 29:15 34:4 41:16 43:15 50:2,8 52:24 53:4,5,13 56:7 58:4 60:12,13 61:6,22 70:7 70:24 71:24 72:11 73:1 78:14 79:21 83:10 85:22 89:10 93:6 136:3 154:7 154:16 155:4,6 157:13</p> <p><b>systematic</b> [1] 138:1</p> <p><b>systems</b> [7] 3:25 19:24 79:23 91:21 148:3 153:11 157:5</p>	<p><b>team</b> [4] 144:16,25 145:22 151:10</p> <p><b>technical</b> [1] 75:23</p> <p><b>technically</b> [1] 8:8</p> <p><b>telling</b> [1] 16:16</p> <p><b>ten</b> [8] 42:11,15,21 45:8 45:14,15 94:10 101:13</p> <p><b>ten-year</b> [4] 100:19 101:22,23 103:15</p> <p><b>tend</b> [1] 11:7</p> <p><b>tends</b> [1] 11:18</p> <p><b>term</b> [6] 7:13 47:3 72:7 74:20 97:1 137:24</p> <p><b>terminal</b> [11] 10:1 80:22 81:13 83:13 85:9,14 86:21 89:16,23 165:14 166:2</p> <p><b>terms</b> [42] 18:7 20:21 22:3 31:2,23 33:3 34:2 36:14 40:18 46:1 47:5 55:6 60:1 61:12 75:14 89:2 91:11 98:18 106:13 114:1,3 120:17,17 122:13 123:14 129:22 137:9,13 137:24 139:2 141:3,18 142:23 143:21,24 144:1 144:1 150:20,22,23,25 168:22</p> <p><b>test</b> [34] 27:20,21 28:1,2 29:12,17 30:16 36:2,10 36:16 38:18 40:11 42:14 43:10 69:10 73:22,23 93:7 101:2 106:2 108:8 108:12 109:3,18,20 112:19 113:11 120:18,25 121:14 123:17 141:6,21 166:6</p> <p><b>tested</b> [4] 5:21 27:1,10 30:19</p> <p><b>testimony</b> [6] 13:14 95:6 100:6 134:2 164:13 166:19</p> <p><b>testing</b> [2] 27:4,16</p> <p><b>thank</b> [16] 22:15 23:19 71:23 82:12,16 86:10 97:11,16,16 100:5 109:20 119:13 120:1 134:11 144:13 156:14</p> <p><b>themselves</b> [1] 18:22</p> <p><b>theoretically</b> [1] 28:7</p> <p><b>thereby</b> [1] 118:21</p> <p><b>thermal</b> [7] 125:21 126:5 126:8 128:9 129:12 130:3 130:5</p> <p><b>they've</b> [3] 77:25 84:9 92:25</p> <p><b>third</b> [2] 121:22,25</p> <p><b>Thomas</b> [1] 155:7</p> <p><b>Thornton</b> [1] 148:20</p> <p><b>thought</b> [3] 39:7 71:18 86:3</p> <p><b>thoughts</b> [1] 99:14</p> <p><b>thousand</b> [1] 56:2</p> <p><b>three</b> [15] 16:17 17:22 18:11,14 21:13 32:14 38:15 51:15 90:20 91:7</p>	<p>93:3 100:7 110:5,8 121:15</p> <p><b>threshold</b> [4] 21:15,19 24:8 138:23</p> <p><b>thresholds</b> [1] 25:6</p> <p><b>through</b> [49] 2:22,24 3:2 4:18 6:5,9 8:7 19:4 25:11 26:4 28:8 32:23,24 33:13 33:22 41:18 45:2 46:16 47:14 49:18 50:24 56:19 57:13 59:5,20 67:18 68:8 68:18 75:17,19 78:6 79:6 92:7,8,9 93:10 94:2 98:21 100:18 109:14 120:11 127:2,6 143:1 145:22 154:23 157:13 162:22,25</p> <p><b>throughout</b> [2] 11:4 109:11</p> <p><b>thrown</b> [2] 162:9 167:24</p> <p><b>thrust</b> [1] 140:14</p> <p><b>thunderstorm</b> [1] 9:24</p> <p><b>tied</b> [1] 169:5</p> <p><b>timeframe</b> [1] 103:25</p> <p><b>timelines</b> [1] 161:1</p> <p><b>times</b> [4] 6:4 17:8 28:15 72:12</p> <p><b>titles</b> [1] 154:18</p> <p><b>to's</b> [1] 56:10</p> <p><b>to-day</b> [1] 46:21</p> <p><b>today</b> [2] 48:1 92:16</p> <p><b>together</b> [1] 41:21</p> <p><b>Tom</b> [1] 1:14</p> <p><b>too</b> [5] 86:3 103:2 124:11 142:14 165:1</p> <p><b>took</b> [6] 4:18 15:4 21:12 92:17 114:10 140:14</p> <p><b>tool</b> [1] 114:14</p> <p><b>top</b> [4] 80:6 167:6,20,24</p> <p><b>topic</b> [2] 74:23 92:25</p> <p><b>total</b> [11] 9:4 12:15 16:20 17:9 19:9 52:16 55:21 61:1 92:1 109:12 167:17</p> <p><b>touched</b> [1] 40:17</p> <p><b>towards</b> [4] 25:3 99:9 104:10 151:17</p> <p><b>tracing</b> [4] 102:4 103:18 103:20 107:18</p> <p><b>track</b> [6] 8:5 37:4,6 126:1 130:23 136:5</p> <p><b>transcribed</b> [1] 171:7</p> <p><b>transcript</b> [2] 51:9 171:3</p> <p><b>transfer</b> [1] 62:11</p> <p><b>transformer</b> [3] 19:25 87:8 88:1</p> <p><b>transformers</b> [4] 83:8 83:19,23 87:9</p> <p><b>transient</b> [1] 83:9</p> <p><b>translate</b> [1] 118:22</p> <p><b>transmission</b> [24] 9:9 9:22 20:1,18 28:6,20 29:8,15 42:7,10 43:9 44:5,21 80:22 81:12 83:4 88:9,12,23 89:22 154:17</p>	<p>155:2,3,6</p> <p><b>transmitted</b> [1] 43:22</p> <p><b>treated</b> [1] 76:20</p> <p><b>tree</b> [2] 150:4 153:12</p> <p><b>trends</b> [1] 100:13</p> <p><b>tried</b> [1] 163:8</p> <p><b>trigger</b> [1] 14:25</p> <p><b>trip</b> [3] 9:22 89:8 90:14</p> <p><b>tripped</b> [1] 89:15</p> <p><b>trips</b> [1] 83:11</p> <p><b>true</b> [2] 39:11 171:2</p> <p><b>try</b> [4] 84:4 91:16,17 94:18</p> <p><b>trying</b> [7] 58:18 140:15 162:23,23 163:4,4 167:9</p> <p><b>turbine</b> [5] 19:10 21:25 28:1,5 31:13</p> <p><b>turbines</b> [6] 19:8 139:10 139:14 140:17 141:1 165:18</p> <p><b>turn</b> [14] 8:17 15:7 19:19 55:8 74:23 96:6 111:23 116:1,3 129:23 142:15 148:19 164:25 167:2</p> <p><b>turned</b> [4] 16:22 27:19 48:3 116:13</p> <p><b>turning</b> [4] 26:21 113:15 114:11 125:15</p> <p><b>turns</b> [2] 11:16 135:11</p> <p><b>twelve</b> [1] 33:18</p> <p><b>twice</b> [1] 126:18</p> <p><b>two</b> [47] 1:16 18:3 21:13 28:10 32:19 35:24 36:3 44:22 51:15 59:16 68:19 71:10 80:10,11,12 82:22 82:23,23 83:19 84:22 87:9 88:16 91:16 94:5,6 99:10 102:16 103:17 110:14 115:18,19 116:16 116:21 118:12,13 121:21 122:1 123:4,8 131:5 132:15 152:9 154:6 155:5 155:17,22 157:11</p> <p><b>type</b> [5] 20:7 130:1 152:5 154:22 157:15</p> <p><b>types</b> [3] 34:15 76:5 157:20</p> <p><b>typical</b> [1] 21:12</p> <p><b>typically</b> [4] 13:24 14:6 14:10 79:17</p>
<b>-T-</b>				
<p><b>T001</b> [2] 61:4 62:4</p> <p><b>T1</b> [1] 83:7</p> <p><b>T2</b> [1] 83:7</p> <p><b>table</b> [10] 51:3,4,20 53:19 54:9 56:9 79:23 119:6 126:12 166:5</p> <p><b>take-or-pay</b> [1] 68:12</p> <p><b>takeaway</b> [1] 73:17</p> <p><b>takes</b> [2] 105:8 112:23</p> <p><b>taking</b> [9] 3:4 29:9 78:1 79:17 100:11 112:2 114:19 122:8 141:8</p> <p><b>talks</b> [1] 163:22</p> <p><b>tangent</b> [1] 12:5</p> <p><b>tanks</b> [1] 73:16</p> <p><b>target</b> [1] 46:18</p> <p><b>tasked</b> [3] 70:22 85:18 156:23</p>	<p><b>team</b> [4] 144:16,25 145:22 151:10</p> <p><b>technical</b> [1] 75:23</p> <p><b>technically</b> [1] 8:8</p> <p><b>telling</b> [1] 16:16</p> <p><b>ten</b> [8] 42:11,15,21 45:8 45:14,15 94:10 101:13</p> <p><b>ten-year</b> [4] 100:19 101:22,23 103:15</p> <p><b>tend</b> [1] 11:7</p> <p><b>tends</b> [1] 11:18</p> <p><b>term</b> [6] 7:13 47:3 72:7 74:20 97:1 137:24</p> <p><b>terminal</b> [11] 10:1 80:22 81:13 83:13 85:9,14 86:21 89:16,23 165:14 166:2</p> <p><b>terms</b> [42] 18:7 20:21 22:3 31:2,23 33:3 34:2 36:14 40:18 46:1 47:5 55:6 60:1 61:12 75:14 89:2 91:11 98:18 106:13 114:1,3 120:17,17 122:13 123:14 129:22 137:9,13 137:24 139:2 141:3,18 142:23 143:21,24 144:1 144:1 150:20,22,23,25 168:22</p> <p><b>test</b> [34] 27:20,21 28:1,2 29:12,17 30:16 36:2,10 36:16 38:18 40:11 42:14 43:10 69:10 73:22,23 93:7 101:2 106:2 108:8 108:12 109:3,18,20 112:19 113:11 120:18,25 121:14 123:17 141:6,21 166:6</p> <p><b>tested</b> [4] 5:21 27:1,10 30:19</p> <p><b>testimony</b> [6] 13:14 95:6 100:6 134:2 164:13 166:19</p> <p><b>testing</b> [2] 27:4,16</p> <p><b>thank</b> [16] 22:15 23:19 71:23 82:12,16 86:10 97:11,16,16 100:5 109:20 119:13 120:1 134:11 144:13 156:14</p> <p><b>themselves</b> [1] 18:22</p> <p><b>theoretically</b> [1] 28:7</p> <p><b>thereby</b> [1] 118:21</p> <p><b>thermal</b> [7] 125:21 126:5 126:8 128:9 129:12 130:3 130:5</p> <p><b>they've</b> [3] 77:25 84:9 92:25</p> <p><b>third</b> [2] 121:22,25</p> <p><b>Thomas</b> [1] 155:7</p> <p><b>Thornton</b> [1] 148:20</p> <p><b>thought</b> [3] 39:7 71:18 86:3</p> <p><b>thoughts</b> [1] 99:14</p> <p><b>thousand</b> [1] 56:2</p> <p><b>three</b> [15] 16:17 17:22 18:11,14 21:13 32:14 38:15 51:15 90:20 91:7</p>	<p>93:3 100:7 110:5,8 121:15</p> <p><b>threshold</b> [4] 21:15,19 24:8 138:23</p> <p><b>thresholds</b> [1] 25:6</p> <p><b>through</b> [49] 2:22,24 3:2 4:18 6:5,9 8:7 19:4 25:11 26:4 28:8 32:23,24 33:13 33:22 41:18 45:2 46:16 47:14 49:18 50:24 56:19 57:13 59:5,20 67:18 68:8 68:18 75:17,19 78:6 79:6 92:7,8,9 93:10 94:2 98:21 100:18 109:14 120:11 127:2,6 143:1 145:22 154:23 157:13 162:22,25</p> <p><b>throughout</b> [2] 11:4 109:11</p> <p><b>thrown</b> [2] 162:9 167:24</p> <p><b>thrust</b> [1] 140:14</p> <p><b>thunderstorm</b> [1] 9:24</p> <p><b>tied</b> [1] 169:5</p> <p><b>timeframe</b> [1] 103:25</p> <p><b>timelines</b> [1] 161:1</p> <p><b>times</b> [4] 6:4 17:8 28:15 72:12</p> <p><b>titles</b> [1] 154:18</p> <p><b>to's</b> [1] 56:10</p> <p><b>to-day</b> [1] 46:21</p> <p><b>today</b> [2] 48:1 92:16</p> <p><b>together</b> [1] 41:21</p> <p><b>Tom</b> [1] 1:14</p> <p><b>too</b> [5] 86:3 103:2 124:11 142:14 165:1</p> <p><b>took</b> [6] 4:18 15:4 21:12 92:17 114:10 140:14</p> <p><b>tool</b> [1] 114:14</p> <p><b>top</b> [4] 80:6 167:6,20,24</p> <p><b>topic</b> [2] 74:23 92:25</p> <p><b>total</b> [11] 9:4 12:15 16:20 17:9 19:9 52:16 55:21 61:1 92:1 109:12 167:17</p> <p><b>touched</b> [1] 40:17</p> <p><b>towards</b> [4] 25:3 99:9 104:10 151:17</p> <p><b>tracing</b> [4] 102:4 103:18 103:20 107:18</p> <p><b>track</b> [6] 8:5 37:4,6 126:1 130:23 136:5</p> <p><b>transcribed</b> [1] 171:7</p> <p><b>transcript</b> [2] 51:9 171:3</p> <p><b>transfer</b> [1] 62:11</p> <p><b>transformer</b> [3] 19:25 87:8 88:1</p> <p><b>transformers</b> [4] 83:8 83:19,23 87:9</p> <p><b>transient</b> [1] 83:9</p> <p><b>translate</b> [1] 118:22</p> <p><b>transmission</b> [24] 9:9 9:22 20:1,18 28:6,20 29:8,15 42:7,10 43:9 44:5,21 80:22 81:12 83:4 88:9,12,23 89:22 154:17</p>	<p>155:2,3,6</p> <p><b>transmitted</b> [1] 43:22</p> <p><b>treated</b> [1] 76:20</p> <p><b>tree</b> [2] 150:4 153:12</p> <p><b>trends</b> [1] 100:13</p> <p><b>tried</b> [1] 163:8</p> <p><b>trigger</b> [1] 14:25</p> <p><b>trip</b> [3] 9:22 89:8 90:14</p> <p><b>tripped</b> [1] 89:15</p> <p><b>trips</b> [1] 83:11</p> <p><b>true</b> [2] 39:11 171:2</p> <p><b>try</b> [4] 84:4 91:16,17 94:18</p> <p><b>trying</b> [7] 58:18 140:15 162:23,23 163:4,4 167:9</p> <p><b>turbine</b> [5] 19:10 21:25 28:1,5 31:13</p> <p><b>turbines</b> [6] 19:8 139:10 139:14 140:17 141:1 165:18</p> <p><b>turn</b> [14] 8:17 15:7 19:19 55:8 74:23 96:6 111:23 116:1,3 129:23 142:15 148:19 164:25 167:2</p> <p><b>turned</b> [4] 16:22 27:19 48:3 116:13</p> <p><b>turning</b> [4] 26:21 113:15 114:11 125:15</p> <p><b>turns</b> [2] 11:16 135:11</p> <p><b>twelve</b> [1] 33:18</p> <p><b>twice</b> [1] 126:18</p> <p><b>two</b> [47] 1:16 18:3 21:13 28:10 32:19 35:24 36:3 44:22 51:15 59:16 68:19 71:10 80:10,11,12 82:22 82:23,23 83:19 84:22 87:9 88:16 91:16 94:5,6 99:10 102:16 103:17 110:14 115:18,19 116:16 116:21 118:12,13 121:21 122:1 123:4,8 131:5 132:15 152:9 154:6 155:5 155:17,22 157:11</p> <p><b>type</b> [5] 20:7 130:1 152:5 154:22 157:15</p> <p><b>types</b> [3] 34:15 76:5 157:20</p> <p><b>typical</b> [1] 21:12</p> <p><b>typically</b> [4] 13:24 14:6 14:10 79:17</p>	
<b>-U-</b>				
<p><b>Uh-hm</b> [3] 17:24 143:18 162:20</p> <p><b>ultimately</b> [4] 26:18 31:14 43:25 92:17</p> <p><b>unavailability</b> [2] 3:19 3:19</p> <p><b>unavailable</b> [1] 18:14</p> <p><b>uncertainty</b> [1] 132:24</p> <p><b>under</b> [15] 42:22 56:15 59:12 61:12 66:5,12 67:3 68:12 69:7,9 80:5 83:4 83:11 96:9 142:17</p>	<p><b>team</b> [4] 144:16,25 145:22 151:10</p> <p><b>technical</b> [1] 75:23</p> <p><b>technically</b> [1] 8:8</p> <p><b>telling</b> [1] 16:16</p> <p><b>ten</b> [8] 42:11,15,21 45:8 45:14,15 94:10 101:13</p> <p><b>ten-year</b> [4] 100:19 101:22,23 103:15</p> <p><b>tend</b> [1] 11:7</p> <p><b>tends</b> [1] 11:18</p> <p><b>term</b> [6] 7:13 47:3 72:7 74:20 97:1 137:24</p> <p><b>terminal</b> [11] 10:1 80:22 81:13 83:13 85:9,14 86:21 89:16,23 165:14 166:2</p> <p><b>terms</b> [42] 18:7 20:21 22:3 31:2,23 33:3 34:2 36:14 40:18 46:1 47:5 55:6 60:1 61:12 75:14 89:2 91:11 98:18 106:13 114:1,3 120:17,17 122:13 123:14 129:22 137:9,13 137:24 139:2 141:3,18 142:23 143:21,24 144:1 144:1 150:20,22,23,25 168:22</p> <p><b>test</b> [34] 27:20,21 28:1,2 29:12,17 30:16 36:2,10 36:16 38:18 40:11 42:14 43:10 69:10 73:22,23 93:7 101:2 106:2 108:8 108:12 109:3,18,20 112:19 113:11 120:18,25 121:14 123:17 141:6,21 166:6</p> <p><b>tested</b> [4] 5:21 27:1,10 30:19</p> <p><b>testimony</b> [6] 13:14 95:6 100:6 134:2 164:13 166:19</p> <p><b>testing</b> [2] 27:4,16</p> <p><b>thank</b> [16] 22:15 23:19 71:23 82:12,16 86:10 97:11,16,16 100:5 109:20 119:13 120:1 134:11 144:13 156:14</p> <p><b>themselves</b> [1] 18:22</p> <p><b>theoretically</b> [1] 28:7</p> <p><b>thereby</b> [1] 118:21</p> <p><b>thermal</b> [7] 125:21 126:5 126:8 128:9 129:12 130:3 130:5</p> <p><b>they've</b> [3] 77:25 84:9 92:25</p> <p><b>third</b> [2] 121:22,25</p> <p><b>Thomas</b> [1] 155:7</p> <p><b>Thornton</b> [1] 148:20</p> <p><b>thought</b> [3] 39:7 71:18 86:3</p> <p><b>thoughts</b> [1] 99:14</p> <p><b>thousand</b> [1] 56:2</p> <p><b>three</b> [15] 16:17 17:22 18:11,14 21:13 </p>			

<p><b>undergoing</b> [1] 9:4  <b>understand</b> [28] 2:6  17:12 26:14 39:7 42:9  55:17 58:2 67:18 69:3  83:2 87:1 91:6 105:8  106:17 114:13 117:11  128:10 130:20 140:10  147:6 156:22 157:25  158:13 160:11 165:2  166:18 168:9 170:9  <b>understood</b> [4] 116:4  125:22 168:24 169:3  <b>undertake</b> [3] 18:13  65:6 81:24  <b>undertaking</b> [19] 12:21  14:15 42:19,22 45:13  63:19,19,24 64:5 69:4  73:17 76:23 80:4 82:2  85:1,4 93:11 128:8  129:20  <b>undertakings</b> [3] 24:1  45:20 84:22  <b>undertook</b> [2] 21:8 75:3  <b>unexpectedly</b> [1] 33:10  <b>unfavourable</b> [1] 144:3  <b>unique</b> [1] 157:24  <b>unit</b> [68] 9:5,8 12:16,18  13:10,16,22 14:1,6,11  14:17 15:2,8,14,18,20  16:1,3 17:4,7,9 19:11  21:13,14,14,19 25:17  26:24 27:21,24 28:2,9  28:13,25 29:4,13 31:3  38:3,7 68:14 88:6 90:9  90:23 97:5 107:19 109:4  109:6,10 110:15 111:7  112:25 116:21,21 118:17  118:20 120:16 121:25  122:20 124:7 151:5,6,15  161:4,6 163:23 165:14  165:16 166:9  <b>units</b> [33] 10:11 13:25  16:8,10,11,18,22 18:3  18:11,14,18 21:10 25:22  26:1,17 30:8,21 38:2  52:23 58:21 90:21 91:7  91:19 107:23 108:20  109:15 110:5,8 116:16  118:14 120:6 123:8 136:5  <b>unknown</b> [3] 123:19,22  124:1  <b>untoward</b> [1] 10:6  <b>up</b> [57] 11:7,18,18 12:17  16:14 23:7 24:2 28:19  29:1,2 32:13,14,18,23  33:13,22 51:3 58:4,6  59:6 61:15 62:1,2 65:25  67:7,19 69:5 74:3,16  79:6 83:12 85:7,12,18  92:8 93:14 97:5 104:13  108:1,3,3,5,9 116:19,25  119:7 129:20,22 134:15  135:19 151:8 161:22  162:6 166:6 167:17,17  169:13  <b>upcoming</b> [1] 16:12  <b>update</b> [3] 33:19 49:2  127:16  <b>updates</b> [6] 33:12 46:9</p>	<p>48:19,20 82:2 157:19  <b>upfront</b> [3] 41:19 75:7,7  <b>Upper</b> [1] 147:1  <b>usage</b> [2] 39:23 106:6  <b>used</b> [15] 22:21 38:22  39:9,25,25 42:14 52:5  69:1 77:5 108:6 113:1,8  115:15 133:18 149:25  <b>useful</b> [1] 71:8  <b>uses</b> [4] 3:7 7:7 15:3  112:24  <b>using</b> [8] 2:7 42:20 43:5  73:7,18 104:10 112:21  113:16  <b>utilities</b> [4] 3:7 80:3,7  171:6  <b>utility</b> [6] 20:6 77:11,12  77:25 93:10 169:14  <b>utilization</b> [4] 53:14  57:15 58:8,10  <b>utilize</b> [2] 52:2,25</p> <hr/> <p style="text-align: center;"><b>-V-</b></p> <hr/> <p><b>Vale</b> [24] 32:7,12 33:6  33:13 75:3,15 76:8,19  80:10,17,20,24 81:5,25  82:23 83:1,5,6,13,16,20  84:4 85:13 86:21  <b>Vale's</b> [3] 32:2 33:3 85:9  <b>validated</b> [2] 6:8 8:9  <b>value</b> [5] 30:20 63:9 67:6  76:25 134:25  <b>values</b> [1] 11:7  <b>variable</b> [12] 60:5 99:11  100:12 115:23 116:6,17  116:20,23 118:15,18  123:6 124:16  <b>variables</b> [1] 121:15  <b>variances</b> [2] 23:21 37:6  <b>various</b> [4] 46:12 48:3  58:25 79:4  <b>vary</b> [1] 14:9  <b>vein</b> [1] 20:21  <b>verifies</b> [1] 70:5  <b>verify</b> [3] 70:9,14 71:4  <b>versa</b> [1] 132:17  <b>version</b> [2] 50:24 51:15  <b>versus</b> [6] 1:17 15:1 16:1  43:5 44:14,18  <b>vice</b> [2] 132:17 148:2  <b>vicinity</b> [1] 50:9  <b>view</b> [3] 113:6,21 123:8  <b>voltage</b> [2] 44:24 83:11  <b>Volume</b> [1] 99:19</p> <hr/> <p style="text-align: center;"><b>-W-</b></p> <hr/> <p><b>walking</b> [1] 162:22  <b>water</b> [11] 57:15 58:8,10  58:24 63:16,18,22 64:6  64:12,18 72:13  <b>ways</b> [1] 20:14  <b>weakest</b> [1] 88:16</p>	<p><b>weather</b> [2] 9:24 89:16  <b>web</b> [4] 65:14,17 71:9,16  <b>week</b> [6] 21:21 22:1  33:19 49:9 60:25 85:3  <b>weekly</b> [1] 46:10  <b>weeks</b> [1] 91:16  <b>weigh</b> [1] 101:14  <b>weighed</b> [1] 104:10  <b>weighted</b> [5] 112:10  113:8 115:3,9,15  <b>welcome</b> [1] 93:1  <b>whack</b> [1] 36:16  <b>Whereas</b> [1] 55:3  <b>whereby</b> [1] 8:19  <b>whole</b> [3] 6:3 31:10 70:13  <b>wind</b> [3] 9:24 68:13 80:16  <b>window</b> [10] 27:9 28:19  28:23,25 29:7,22,23  60:22 100:22,25  <b>windows</b> [1] 27:22  <b>winter</b> [13] 29:10 45:19  46:1,7,22 47:1,6,12,13  47:16 60:3 62:25 87:10  <b>wish</b> [2] 65:23 170:15  <b>within</b> [9] 117:19 136:7  136:14 150:8 153:11  157:7 159:6 165:14,15  <b>without</b> [5] 4:18 55:19  55:22 68:10 140:8  <b>withstand</b> [1] 20:19  <b>witness</b> [1] 86:1  <b>wonder</b> [2] 65:6 66:9  <b>wondering</b> [6] 2:15  15:13 42:22 50:22 86:4  115:13  <b>word</b> [2] 86:13 137:23  <b>words</b> [2] 93:1 132:9  <b>worked</b> [1] 158:20  <b>works</b> [6] 3:11 60:4 62:7  66:22 67:4 130:5  <b>writing</b> [3] 22:21 23:10  95:14  <b>wrong</b> [2] 12:5 122:7</p> <hr/> <p style="text-align: center;"><b>-Y-</b></p> <hr/> <p><b>year</b> [54] 8:19 16:8 27:23  32:13,14 36:3,10,17  38:18 40:11 41:10,20  42:11,15,15,21 43:10  44:14 55:4 56:16 69:10  73:22,23 78:17 93:7  100:25,25 101:2 106:2  107:13 108:8,12 109:3  109:18,20 110:21 112:19  113:12 117:19 120:18,25  121:14,16,22 123:17  126:18,22 128:2 133:20  135:11,19 141:7,21 166:6  <b>years</b> [47] 5:25 7:9 25:19  25:19 26:2 32:19 35:13  35:14,18,24,25 36:3,12  36:21,24 37:14 38:15  39:20 40:1 43:5,6,8  44:17 45:3 49:18 54:13</p>	<p>57:7 59:12 67:9 68:8,17  72:8 74:10 101:13 105:10  108:5,9,11 112:3,11  113:9 114:4 115:11 122:4  158:20 159:2 161:5  <b>yellow</b> [1] 48:3  <b>yesterday</b> [33] 1:18 4:19  5:10,16 6:22 7:13 8:18  13:14 14:24 15:5 23:20  26:23 31:2,20 40:9 41:8  42:9,19 45:23 46:10,14  48:11 88:8 89:5 106:4  111:24 115:24 125:16  128:18 138:11,20 144:17  158:1  <b>yet</b> [1] 40:21  <b>Young</b> [12] 65:7,13,18  65:22 66:10,11 67:5 71:6  71:20,23 82:7,8  <b>yourself</b> [2] 97:21 154:5</p>
---	--	--	--