

1 OCTOBER 8, 2015
 2 (9:00 a.m.)
 3 CHAIRMAN:
 4 Q. Good morning, everybody. I think we're ready
 5 to go except there's one undertaking.
 6 MS. PENNELL:
 7 Q. We do have one undertaking, that's Undertaking
 8 37, and that's about the accountability and
 9 responsibility of Nalcor employees with
 10 respect to Hydro leadership. This was the
 11 undertaking that Mr. Coxworthy was waiting on
 12 yesterday.
 13 CHAIRMAN:
 14 Q. And I think, sir, we're back to you.
 15 MR. COXWORTHY:
 16 Q. Yes, you are, Mr. Chair, thank you.
 17 MR. ROBERT HENDERSON
 18 MR. DARREN MOORE
 19 MR. TERRY GARDINER
 20 CROSS-EXAMINATION BY MR. PAUL COXWORTHY:
 21 MR. COXWORTHY:
 22 Q. Good morning, Mr. Henderson, Mr. Moore, Mr.
 23 Gardiner.
 24 MR. HENDERSON:
 25 A. Good morning.

1 MR. COXWORTHY:
 2 Q. Well, if you look at Undertaking 37, I don't
 3 believe any of the other Vice President
 4 positions are referred to in Undertaking 37?
 5 I'm correct in that, aren't I?
 6 MR. HENDERSON:
 7 A. You are correct. Undertaking 37 is related to
 8 the Hydro leadership team and that one is the
 9 Nalcor leadership team.
 10 MR. COXWORTHY:
 11 Q. And I was wondering whether that was the
 12 answer. So you're saying that apart from the
 13 VP Corporate Relations, everyone else in PUB-
 14 NLH-228 is not part of the Hydro leadership
 15 team?
 16 MR. HENDERSON:
 17 A. That's right.
 18 MR. COXWORTHY:
 19 Q. So in terms of their accountability and the
 20 clarity with respect to spending time specific
 21 to Hydro activities, how would we go about
 22 getting that clarity for those people, those
 23 other people in PUB-NLH-228?
 24 MR. HENDERSON:
 25 A. Well, the Nalcor people who are on the Hydro

1 MR. MOORE:
 2 A. Good morning.
 3 MR. GARDINER:
 4 A. Good morning.
 5 MR. COXWORTHY:
 6 Q. Could we bring up PUB-NLH-228, please,
 7 Attachment 1. Thank you. Mr. Henderson, do
 8 you have a copy of the response to Undertaking
 9 37 there.
 10 MR. HENDERSON:
 11 A. I do.
 12 MR. COXWORTHY:
 13 Q. You do. There are a number of positions, Vice
 14 President positions that are outlined in PUB-
 15 NLH-228. In Undertaking 37, can you confirm
 16 to me that the only Vice President position
 17 that's referred to in Undertaking 37 with
 18 respect to there being a job description, job
 19 description on the record is the VP Corporate
 20 Relations, which is now VP Corporate Relations
 21 and Customer Service?
 22 MR. HENDERSON:
 23 A. I can't say that they're the only ones. I
 24 think most of the Nalcor ones were on the
 25 record.

1 leadership team report to one of these
 2 executives, and so the accountability is done
 3 through these people.
 4 MR. COXWORTHY:
 5 Q. From that direction, but I'm talking from the
 6 other direction in terms of the
 7 accountability, how do we determine with
 8 clarity how these Nalcor officers provide
 9 their services to Hydro? What direction is
 10 there, what guidance is there, and perhaps to
 11 assist we could turn to the second page of
 12 Undertaking 37 because perhaps this is part of
 13 the answer, "Conflict of interest between
 14 companies is dealt with as noted in the record
 15 in PUB-NLH-315", and there's cited there an
 16 extract from there that, "Board and leadership
 17 team members are aware of their obligations to
 18 serve the interest of the company they
 19 represent and to avoid and/or disclose any
 20 potential conflict of interest involving two
 21 or more Nalcor entities". Does this conflict
 22 of interest policy apply to all of the
 23 officers referred to in PUB-NLH-228, or only
 24 to what you've described as the Hydro
 25 leadership team?

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1 MR. HENDERSON:
 2 A. This applies to the Nalcor executive team and
 3 the Hydro leadership team.
 4 MR. COXWORTHY:
 5 Q. And this extract describes that if there is a
 6 potential conflict of interest involving two
 7 or more Nalcor entities, that the Corporate
 8 Secretary, and this would be of Nalcor, is
 9 available to assist in ensuring these
 10 standards are met. What standards?
 11 MR. HENDERSON:
 12 A. The conflict of interest standards.
 13 MR. COXWORTHY:
 14 Q. And is there a separate document?
 15 MR. HENDERSON:
 16 A. I think this is an extract from the conflict
 17 of interest document which is in PUB-NLH-315.
 18 MR. COXWORTHY:
 19 Q. We'll have to look at the whole of the
 20 document. In your time as VP Hydro, has there
 21 ever been disclosure by anyone in PUB-NLH-228,
 22 anyone holding those positions, of a potential
 23 conflict of interest between Hydro and another
 24 Nalcor entity?
 25 MR. HENDERSON:

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1 A. Nothing that I've been aware of.
 2 MR. COXWORTHY:
 3 Q. And have you ever disclosed a potential
 4 conflict?
 5 MR. HENDERSON:
 6 A. A conflict, no.
 7 MR. COXWORTHY:
 8 Q. Have you ever had reason to go to the
 9 Corporate Secretary as VP Hydro?
 10 MR. HENDERSON:
 11 A. No, I haven't.
 12 MR. COXWORTHY:
 13 Q. Are you aware of anyone else within the Nalcor
 14 leadership team that works with Hydro that's
 15 had reason?
 16 MR. HENDERSON:
 17 A. No, I have not heard of it.
 18 MR. COXWORTHY:
 19 Q. If we could go to the September 21 transcript,
 20 page 85. Actually, if we could start at page
 21 84, line 19, just for the context. Board
 22 Counsel was asking some questions of Mr.
 23 Roberts and the question was, "In bringing
 24 down the theory of how you give guidance,
 25 would Mr. Henderson, as Vice President of

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1 Hydro, be able to reject a direction that had
 2 come from Human Resources with respect to one
 3 of the matters within your area". Mr. Roberts
 4 then answers, and if we can continue on down
 5 to the next page, page 85, "I wouldn't do so
 6 far as to say he would need to reject it
 7 because we would seek alignment before we put
 8 it there, but he has full accountability for
 9 that, Newfoundland and Labrador Hydro is going
 10 to take that on". So when searching for that
 11 type of alignment, you're saying there's no
 12 need to go to the Corporate Secretary, this is
 13 an issue that you would work out between
 14 yourself and Mr. Roberts?
 15 MR. HENDERSON:
 16 A. That's correct.
 17 MR. COXWORTHY:
 18 Q. Or at least attempt to.
 19 MR. HENDERSON:
 20 A. Yes.
 21 MR. COXWORTHY:
 22 Q. And the answer - the question seems to have
 23 been directed according to the transcript to
 24 Mr. Roberts, the answer was given by Mr.
 25 McDonald, "That's correct". So there seems to

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1 be a little bit of ping-ponging back and forth
 2 here, but the next question then is apparently
 3 directed on page 85 to Mr. Roberts, "Can you
 4 provide an example of how that would work? So
 5 this process of your aligning with advice
 6 that's being given by the VP HR", and the
 7 example there is given with respect to an
 8 education awareness program, how quickly Hydro
 9 employees could be put through that program,
 10 and a discussion there about there was some
 11 give and take or discussion about, and I don't
 12 think we need to go through that in detail,
 13 but continuing on down, "Are there any other
 14 examples other than that, let's say, specific
 15 to Human Resources, of that type of discussion
 16 going on between yourself as VP Hydro and HR
 17 to align your respective objectives".
 18 MR. HENDERSON:
 19 A. Well, the way that would typically happen with
 20 respect to objectives is that they would bring
 21 forward a document which would be their
 22 proposal, I'll say, from HR of what they -
 23 either the HR area, the environment area, or
 24 safety, they would bring forward their
 25 suggestions of things to undertake or advance

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1 in the upcoming year, and I would be reviewing
 2 those and we would discuss those at the Hydro
 3 leadership group as to what we could actually
 4 achieve in the year, and whether we should
 5 perhaps go slower in one area or maybe
 6 accelerate the actions in another area. So
 7 those types of things would occur during our
 8 planning cycle for the year, and so there
 9 would be a bit of back and forth with regard
 10 to those functional areas to ensure that the
 11 right priority for Hydro and what Hydro is
 12 able to accomplish was put forward.
 13 MR. COXWORTHY:
 14 Q. If we could move down page 86, line 14, and
 15 Ms. Greene asked, "If there was a conflict",
 16 and I believe Mr. McDonald in response to a
 17 question last week, you indicated in your
 18 memory you cannot recall any instance of a
 19 disagreement or conflict. You were asked how
 20 conflict would be dealt with and your answer
 21 was you couldn't recall that there had been a
 22 conflict or disagreement about a particular
 23 matter, and then if we could go to Mr.
 24 McDonald's response at the top of page 87,
 25 "Yeah, I think there was in the contexts of

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1 questions I was being asked around the third
 2 line from the Bay d'Espoir to Western Avalon,
 3 and I can certainly remember, you know, around
 4 commercial decisions like that and capital
 5 decision, no, I don't have a recall", and what
 6 Mr. McDonald is referring to there is an
 7 earlier line of questioning from Mr. O'Brien,
 8 I believe, to Mr. McDonald. I just wanted to
 9 set the context that this was discussing the
 10 conflicts, if there are conflicts, how they're
 11 resolved, what issues may have come up that
 12 required that type of consideration. I'd like
 13 to go now to the September 22nd transcript,
 14 page 51. I'm not going to go to Mr.
 15 McDonald's evidence because essentially Mr.
 16 McDonald when he was being asked by Mr.
 17 O'Brien about this issue suggested that either
 18 yourself or Mr. MacIsaac would be the better
 19 persons to ask about what discussions may have
 20 been around the secondment of Hydro employees
 21 to the Lower Churchill Management Corporation
 22 in relation to the Bay d'Espoir Western Avalon
 23 transmission line that Mr. McDonald said he
 24 had not had direct involvement with that. I
 25 can go to his evidence if need be, and he

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1 suggested either Mr. MacIsaac or yourself
 2 might be able to provide some more
 3 illumination around that. This is the section
 4 of the evidence where Mr. O'Brien, following
 5 up on Mr. McDonald's suggestion, asks you
 6 about this. So if we could go to page 52,
 7 line 12, actually line 14. Mr. O'Brien asked
 8 you, "Were you involved in making the
 9 determination as to who was going to provide
 10 those services to project management
 11 engineering and construction management
 12 services, and these are the services to build
 13 the Bay d'Espoir Western Avalon transmission
 14 line". You confirmed that you were. When
 15 were those determinations made, the ones that
 16 you were involved in?
 17 MR. HENDERSON:
 18 A. The discussions around - I can't recall the
 19 specific time, but it would have been in
 20 advance of the application going to the Board.
 21 We were looking at ways to execute that and
 22 different options were being considered as to
 23 how to do that, and the idea of having the
 24 Lower Churchill group do it was brought
 25 forward because of the things that we talked

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1 about with Mr. O'Brien in terms of the
 2 benefits that we would get there. So we
 3 continued to explore that, and so Mr. MacIsaac
 4 and Mr Gardiner would also have been involved
 5 because that's an area of Mr. Gardiner's
 6 responsibility particularly within PETS,
 7 within that group, to work the solution as to
 8 what was the most effective way and cost
 9 effective way to complete that project.
 10 MR. COXWORTHY:
 11 Q. So were you in the VP Hydro position at the
 12 time of your involvement in these
 13 determinations?
 14 MR. HENDERSON:
 15 A. Yes, it was in that role that I recall the
 16 discussions.
 17 MR. COXWORTHY:
 18 Q. Mr. O'Brien's questions continue in this vein
 19 and I'm not going to go through it page by
 20 page, but I want to go forward to page 57 in
 21 the same transcript, line 13. Mr. O'Brien
 22 then asks you, "One of the things I wanted to
 23 ask you about is the individuals that were
 24 seconded out of Hydro in the first place, was
 25 there an analysis done as to whether that was

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1 in the best interest to Hydro to second these
 2 individuals out, whether there would be any
 3 resourcing issues as a result of that", and
 4 this is the - I think it's clear from the
 5 context if went through the whole transcript,
 6 this is the seconding out of Hydro employees
 7 to the Lower Churchill Management Corporation.
 8 Your answer was, "When that occurred, that was
 9 several years ago, I wasn't party to any
 10 discussions, so I can't really say what was
 11 done or what the considerations were taken at
 12 that time", and Mr. McDonald, I will say, gave
 13 a similar answer, although he was in the VP
 14 Human Resources, that he wasn't involved in
 15 those discussions at that time. You were
 16 Manager of Systems Operations at that time, so
 17 you didn't have any involvement in those
 18 discussions as Manager of System Operations?
 19 MR. HENDERSON:
 20 A. No, there was nobody in my particular group in
 21 System Operations that would have been part of
 22 that. So this would have been specifically
 23 engineering people. It would have been our
 24 engineering services division at that time.
 25 MR. COXWORTHY:

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1 Q. They would be the ones to decide whether it
 2 was in the interest of Hydro to second Hydro
 3 employees to another Nalcor entity?
 4 MR. HENDERSON:
 5 A. I'm not sure the process that went through.
 6 This was a project, obviously a very
 7 significant project that would have long term
 8 impacts on Hydro, so putting the right people
 9 in on a project would have been a
 10 consideration when there was determination of
 11 that, but that was, I'll say, a very good many
 12 years ago. Terry might remember when, but the
 13 person that was there with Hydro, he's been
 14 with that project now for quite a while.
 15 MR. COXWORTHY:
 16 Q. Well, perhaps - thank you, Mr. Henderson.
 17 Perhaps I'll take up your invitation. Mr.
 18 Gardiner, were you involved in this decision,
 19 this analysis at the time of deciding whether
 20 Hydro employees, whether it was in the best
 21 interest of Hydro to second Hydro employees to
 22 the Lower Churchill Management Corporation?
 23 (9:15 a.m.)
 24 MR. GARDINER:
 25 A. I think when the Lower Churchill received

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1 sanction, it was standard practice, as I
 2 understand it, that we would take some Hydro
 3 employees and embed them in the project,
 4 recognizing that eventually those assets would
 5 return to Hydro, and the best way to gain that
 6 knowledge and the build would be to take Hydro
 7 employees - our employees and embed them in
 8 the project, so that when the asset came back
 9 in we would have the expertise, and in
 10 particular this one, you know - I wasn't
 11 involved in the decision, but I knew what was
 12 going on, and with the DC technology that was
 13 being employed, it was certainly a good move
 14 to take some people that had expertise in
 15 Hydro in transmission directly, to put them
 16 over on the project to lend them to get that
 17 expertise and give oversight and guidance.
 18 MR. COXWORTHY:
 19 Q. Those persons that were seconded to the Lower
 20 Churchill Management Corporation, what were
 21 their responsibilities within Hydro before
 22 they were seconded?
 23 MR. GARDINER:
 24 A. They were responsible - we had one person that
 25 was an easement and property person. There was

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1 another one that was a transmission design
 2 engineer, much the same as I was at the time.
 3 MR. COXWORTHY:
 4 Q. So two persons?
 5 MR. GARDINER:
 6 A. From transmission, that's correct, and then we
 7 had some junior engineers, John Walsh, and
 8 that, he continued over with them as well. He
 9 was a co-op student at the time and he was
 10 just graduating, so he was placed over there
 11 as well.
 12 MR. COXWORTHY:
 13 Q. So the work that those people were doing
 14 within Hydro before they were seconded to the
 15 Lower, who took up that work within Hydro?
 16 MR. GARDINER:
 17 A. There was some additional hires that we made
 18 within our own group. We had, for example, in
 19 the Properties Division, that gentleman we
 20 replaced with a lady that now does that job.
 21 MR. COXWORTHY:
 22 Q. And with similar qualifications and
 23 experience?
 24 MR. GARDINER:
 25 A. Absolutely, absolutely, 100 percent, and the

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1 same would have happened with the transmission
 2 people that went over as well, right.
 3 MR. COXWORTHY:
 4 Q. Mr. Henderson, if I could go back to you, if
 5 this decision was being made today to second
 6 individuals out of Hydro to another Nalcor
 7 entity for a project like this, would you be
 8 involved in that decision?
 9 MR. HENDERSON:
 10 A. Yes, I would. That would be an important
 11 consideration as to what impact that would
 12 have, so that would be part of it. Some of
 13 the positions that would be put in there, they
 14 wouldn't be perhaps a direct secondment. Some
 15 people may opt to choose to take a vacancy
 16 that's over there that's posted and generally
 17 applied, and if a person -
 18 MR. COXWORTHY:
 19 Q. They could transfer to the position?
 20 MR. HENDERSON:
 21 A. They could transfer, and just like the could
 22 go anywhere. We wouldn't restrict people from
 23 other opportunities.
 24 MR. COXWORTHY:
 25 Q. Mr. Gardiner, at your level, do you ever have

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1 to implement directions from Human Resources
 2 at your level?
 3 MR. GARDINER:
 4 A. Other than hiring, or if we had a vacancy and
 5 advertising and ensuring that that's done.
 6 MR. COXWORTHY:
 7 Q. We've heard Mr. Roberts say that sometimes
 8 he's asked to sit in - I'm sure not at every
 9 level of interview, but depending on the
 10 seniority of the person who's being hired,
 11 he's asked sometimes to sit in?
 12 MR. GARDINER:
 13 A. That has happened. I haven't been in an
 14 interview with Mr. Roberts, but quite common
 15 what happens is we normally have a person from
 16 HROE sit with every interview that we have,
 17 and the way we structure our interview, they
 18 have a part to play, and we have a part to
 19 play at job related, so at the end of the day
 20 then there's usually two people from our
 21 department that would - if we're hiring a
 22 civil engineer or transmission engineer, there
 23 would be two people probably from IT that
 24 would sit in at different levels, and then
 25 there would be a HROE person that would be

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1 there to facilitate the interview as well.
 2 MR. COXWORTHY:
 3 Q. And is the HROE person a Nalcor employee?
 4 MR. GARDINER:
 5 A. I'm not sure. I don't know. I look at the -
 6 when we sit there, I look at in the terms of
 7 that person is there providing a function to
 8 us.
 9 MR. COXWORTHY:
 10 Q. But at the higher policy level, it doesn't
 11 sound like you're involved in making decisions
 12 or assisting or aligning Hydro's objectives
 13 with Nalcor objectives in terms of HR?
 14 MR. GARDINER:
 15 A. From a project execution and technical
 16 services, in my role now as Manager of
 17 Engineering and Project Services, one of the
 18 things that I keep is the staffing, so in
 19 terms of when we have vacancies, I guess Mr.
 20 MacIsaac has asked me to look at to make sure
 21 that these positions are filled in an
 22 expeditious manner, so I do meet somewhat
 23 regularly with HR to make sure that we're
 24 getting those positions filled.
 25 MR. COXWORTHY:

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1 Q. And if there's a problem with getting those
 2 positions filled, and if there were a problem
 3 with the assistance you were getting from HR
 4 in getting those, if there was -
 5 MR. GARDINER:
 6 A. There hasn't been.
 7 MR. COXWORTHY:
 8 Q. Who would you - I understand. I was sort of
 9 expecting that that's what I was going to
 10 hear, but if there was one, who would you go
 11 to with that problem and say, look, we have
 12 something we need to work out here, who would
 13 you go to within either the Hydro or Nalcor
 14 organization to sort that out?
 15 MR. GARDINER:
 16 A. I would talk to Mr. MacIsaac first, obviously,
 17 and then we would have a conversation with Mr.
 18 Roberts. That hasn't happened, but that's as
 19 I would see -
 20 MR. COXWORTHY:
 21 Q. That would be the chain?
 22 MR. GARDINER:
 23 A. Absolutely. I would certainly take it to Mr.
 24 MacIsaac first, who I report to, and then -
 25 but that hasn't happened. Normally things are

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1 done in an expeditious manner, we advertise in
 2 a timely manner, receive the applications, we
 3 review, set up the interviews, and a second
 4 interview, you know, which HR reaches out to
 5 all those candidates in that function, and
 6 then we fill in and we have a discussion
 7 usually to see who the best candidate is, and
 8 then the offer is made and it's done in terms
 9 of the hiring stuff, salary, and various
 10 things like that.
 11 MR. COXWORTHY:
 12 Q. Thank you, Mr. Gardiner. I'd like to move on,
 13 but still broadly within the same area in
 14 terms of areas of potential conflict, but
 15 you'll recall, Mr. Henderson, yesterday we
 16 spoke about work orders and how a lot of
 17 employees within Nalcor who charge in their
 18 time within Hydro would look to the work order
 19 that describes whatever project they're
 20 working on as providing some guidance or
 21 providing "the" guidance as to whether this is
 22 time that should be charged directly into
 23 Hydro, and Mr. Roberts has given us a specific
 24 example of that in terms of how he charges his
 25 time. You were then going to go on, and I

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1 said we would return to that. Who within the
 2 Hydro organization monitors/audits whether
 3 those work orders are appropriately charged
 4 directly to Hydro as opposed to otherwise?
 5 MR. HENDERSON:
 6 A. The charges that go in go into a business
 7 unit, and that business unit manager who has
 8 accountability for that particular area would
 9 see the charges come in, and would be expected
 10 to look at the charges if they see something
 11 that's excessive, they would be looking to
 12 understand that and make adjustments. I know
 13 in my own experience when I was with System
 14 Operations, that type of thing, I would be
 15 looking at the charge in that's coming in and
 16 if there was - and I have had that where
 17 somebody used the wrong work order and say,
 18 listen, that doesn't belong, and talk to the
 19 person who put that in and understand the work
 20 and we get it straightened out to make sure it
 21 was the right charges that are coming in to my
 22 area of responsibility. So each manager has
 23 their own area of accountability with respect
 24 to their budget, and they would be expected to
 25 monitor for the appropriate charges and would

Page 23

1 understand why the charges are coming in.
 2 MR. COXWORTHY:
 3 Q. So these issues would sometimes come to you,
 4 they would come up the chain, and you would
 5 look at it yourself?
 6 MR. HENDERSON:
 7 A. No, they have not been brought to my attention
 8 in that regard. All I'm saying is that I know
 9 that that's the general mechanism that would
 10 occur if they were inappropriate charges.
 11 They could be dealt with at the individual
 12 level who is managing those accounts.
 13 MR. COXWORTHY:
 14 Q. So who decides whether it's inappropriate? Is
 15 it a number of different individuals, all
 16 across the organization who make those
 17 decisions?
 18 MR. HENDERSON:
 19 A. Each individual has their area of
 20 responsibility and they manage their budgets
 21 to ensure that they're meeting expectations
 22 with respect to their particular budget for
 23 the year, so they are expected to do that.
 24 MR. COXWORTHY:
 25 Q. And if there's disagreement between the

Page 24

1 individual within Hydro, whoever that happens
 2 to be for the particular business unit who is
 3 checking those work orders and the person who
 4 put the charge in from Nalcor, how does that
 5 disagreement get resolved?
 6 MR. HENDERSON:
 7 A. That would escalate up, I would expect, to
 8 another level if it couldn't be resolved, but
 9 I have -
 10 MR. COXWORTHY:
 11 Q. But it's never come up to your level?
 12 MR. HENDERSON:
 13 A. I've never had anything come to my level to
 14 say anything in that regard.
 15 MR. COXWORTHY:
 16 Q. And below you, who would it escalate up to if
 17 there was ever an issue that did escalate?
 18 MR. HENDERSON:
 19 A. Well, I mean, there is an organization chain
 20 here where each manager has their
 21 responsibility that they can go to their next
 22 level, which could be a vice president, or it
 23 could be a more senior manager.
 24 MR. COXWORTHY:
 25 Q. Who would be the person immediately below you

Page 25

1 who would be responsible for that?

2 MR. HENDERSON:

3 A. Below me, I have the COO, Chief Operating

4 Officer, would address those if they came to

5 his attention. I doubt very much - I would

6 think most of them would be at the - for

7 instance, a plant manager level or a regional

8 manager level type of - at their level when

9 they're looking at the roll up of their

10 operating expenses.

11 MR. COXWORTHY:

12 Q. Correct me if I'm wrong, or if you haven't had

13 an opportunity to explain this, but it doesn't

14 appear to me that there's a single point of

15 accountability within Hydro in terms of

16 verifying whether charges being charged in

17 from Nalcor are appropriate, that there are

18 multiple points of accountability?

19 MR. HENDERSON:

20 A. There is. It would be flagged to my attention

21 if it was excessive in the sense that when I

22 see the monthly report and the finance group

23 flag to me, let's say, that there's a lot of

24 time charged in, then we would look into that,

25 but there hasn't been an issue in that regard

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1 flagged to me.

2 MR. COXWORTHY:

3 Q. And I thought we might work our way towards

4 the finance group because, I think, based on

5 earlier evidence, if there was any sort of

6 collection or aggregation of responsibility,

7 it sounds like it might end up in there if

8 there was reason to look at in aggregate

9 whether the charges that were coming in from

10 Nalcor were reasonable?

11 MR. HENDERSON:

12 A. That's right.

13 MR. COXWORTHY:

14 Q. Who then within your finance at Hydro would be

15 that single - that point of accountability? I

16 won't say "single", we've already established

17 there isn't a single, but who would be that

18 point of accountability?

19 MR. HENDERSON:

20 A. So there would be the General Manager of

21 Finance would have the general accountability

22 with respect to that.

23 MR. COXWORTHY:

24 Q. This would be Ms. Russell?

25 MR. HENDERSON:

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1 A. Yes.

2 MR. COXWORTHY:

3 Q. Ms. Russell reports in the charts that I've

4 seen at PUB-NLH-138 to a Nalcor officer,

5 doesn't she?

6 (9:30 a.m.)

7 MR. HENDERSON:

8 A. She does, she reports to the CFO who is an

9 officer of Hydro, but a Nalcor employee.

10 MR. COXWORTHY:

11 Q. Is he part of the Hydro leadership team?

12 MR. HENDERSON:

13 A. No, he would be involved at the higher level

14 decisions, but he doesn't - he's not a regular

15 attendee of the Hydro leadership team.

16 MR. COXWORTHY:

17 Q. I want to push up this discussion to the level

18 of the persons that are listed in PUB-NLH-228,

19 the various VPs of Nalcor who are charging

20 their time. If there was a question about the

21 time that VP Finance, who doesn't charge in a

22 lot of time, I'll note, directly to Hydro, but

23 if there was, would you expect that Ms.

24 Russell, his subordinate, would be able to

25 raise that issue with him in a way that they

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1 could resolve a conflict?

2 MR. HENDERSON:

3 A. I would think so, that she would be able to

4 raise it, highlight that there's a concern

5 there.

6 MR. COXWORTHY:

7 Q. We'll have the opportunity to ask her about

8 whether that's ever occurred. So that

9 wouldn't come to you, though, that would go to

10 a Nalcor officer who is not a member of the

11 Hydro leadership team?

12 MR. HENDERSON:

13 A. It could, but it could also come to me when

14 it's -

15 MR. COXWORTHY:

16 Q. So Ms. Russell might go to you without going

17 to the VP?

18 MR. HENDERSON:

19 A. Yes, she may go to me with regard to charges

20 that are coming in. She attends and

21 participates in the Hydro leadership team and

22 she explains to me the changes in the

23 operating expenses, and if it was due to

24 charge in, it could be brought to me and dealt

25 with there.

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1 MR. COXWORTHY:
 2 Q. With respect to the VP Human Resources and
 3 Organizational Effectiveness, and I've asked
 4 you some questions about this, as well as Mr.
 5 McDonald and Mr. Roberts, and they have
 6 indicated that in 2015/2016, that the numbers
 7 that are in PUB-NLH-228 represent time that's
 8 going to be put in by both of them, and as I
 9 understand it, to a large extent, not
 10 exclusively, to a large extent in relation to
 11 the integration of Hydro with the Muskrat
 12 Falls Lower Churchill generation, the
 13 transmission of that generation to the island
 14 and the Maritime Link, the integration of that
 15 piece into Hydro?
 16 MR. HENDERSON:
 17 A. Yes, the integration of those assets into
 18 Hydro's ongoing operation.
 19 MR. COXWORTHY:
 20 Q. And those are all non-regulated projects?
 21 MR. HENDERSON:
 22 A. That's correct.
 23 MR. COXWORTHY:
 24 Q. Do you feel it's appropriate that Hydro's
 25 customers should be bearing the cost of the

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1 integration of non-regulated projects into
 2 Hydro?
 3 MR. HENDERSON:
 4 A. Yes, the cost related to the integration of
 5 these will be - the cost of all of these
 6 assets will ultimately be used to supply
 7 Hydro's customers in the province, and they'll
 8 be paid for by those customers, so it's very
 9 appropriate for Hydro to be very much involved
 10 with the integration to ensure that it's
 11 properly done, ensure proper long term
 12 reliable operation, effective operation, so I
 13 think it is very appropriate that Hydro be
 14 very much involved with that and ensuring that
 15 that's the case so this all works well
 16 together.
 17 MR. COXWORTHY:
 18 Q. I'm not questioning that Hydro employees
 19 shouldn't be involved in that, that's the
 20 regulated business and any costs involved with
 21 Hydro employees being involved with that is
 22 properly addressed in this form here. What
 23 I'm asking is officers from the non-regulated
 24 entities involved in that process, is it
 25 appropriate that that be charged to the Hydro

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1 customers?
 2 MR. HENDERSON:
 3 A. The work that Mr. McDonald is going with
 4 regard to that is to assist in that full
 5 coordination of the integration. He's
 6 providing a very important coordination role
 7 that's working with Hydro folks in terms of
 8 getting all of the work done, organizing it,
 9 ensuring there's regular meetings and
 10 everything keeps moving forward. So that's a
 11 very much bringing all the people together
 12 that's required to get what we call the "ready
 13 for operations" activities completed.
 14 MR. COXWORTHY:
 15 Q. Isn't this integration piece of benefit to the
 16 whole of the Nalcor organization, or at least
 17 across several lines of business as opposed to
 18 something that's just to the benefit of Hydro?
 19 MR. HENDERSON:
 20 A. This would be very much to Hydro's benefit and
 21 to Hydro's customers benefit because these
 22 assets and these facilities will be used to
 23 supply Hydro's customers, so the primary
 24 purpose of all of the assets is to provide
 25 service to the customers of Newfoundland and

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1 Labrador Hydro. Yes, it is appropriate for
 2 customers to be paying for that because it is
 3 in the end ultimately to serve their lines
 4 (phonetic - coughing).
 5 MR. COXWORTHY:
 6 Q. And in the end, absolutely when the
 7 integration is completed, but before the
 8 integration is completed, aren't those
 9 services that are being provided in relation
 10 to integration as much in relation to the non-
 11 Nalcor entities that are involved in those
 12 projects as it is in relation to Hydro?
 13 MR. HENDERSON:
 14 A. Well, all of the activities related to those
 15 entities, while they are not regulated, the
 16 cost will all flow back in to customers.
 17 MR. COXWORTHY:
 18 Q. That's the question I'm asking, whether that's
 19 appropriate?
 20 MR. HENDERSON:
 21 A. So the -
 22 MR. COXWORTHY:
 23 Q. If it's costs that are not only in relation to
 24 Hydro, but in relation to non-regulated Hydro
 25 entities?

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1 MR. HENDERSON:
 2 A. It's costs related to providing electricity
 3 service in the province, so to the extent that
 4 that's what they are for, which is what it is
 5 for, then that is appropriate that customers
 6 pay for the cost that's required to provide
 7 them long term reliable service.
 8 MR. COXWORTHY:
 9 Q. Mr. Martin has said there's all sorts of
 10 services that are provided by Nalcor officers
 11 that have as part of their objective providing
 12 services to Hydro, and ultimately that means
 13 providing electrical services, and Mr. Martin
 14 has said, look, but if there's any aspect of
 15 it that also benefits other Nalcor lines of
 16 business, we don't charge that into Hydro.
 17 MR. HENDERSON:
 18 A. That's correct.
 19 MR. COXWORTHY:
 20 Q. Yeah, so why would this integration piece,
 21 work in relation to that be charged into
 22 Hydro?
 23 MR. HENDERSON:
 24 A. Because this is the integration of equipment
 25 and generation that is going to be used to

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1 supply electricity to Newfoundland and
 2 Labrador Hydro's customers.
 3 MR. COXWORTHY:
 4 Q. With respect to the Vice President of Human
 5 Resources, plural, there are now effectively
 6 two Vice President of Human Resources of
 7 Nalcor who provide services to Hydro that are
 8 being charged in to Hydro. We've established
 9 this.
 10 MR. HENDERSON:
 11 A. I would say, yes, but Mr. Roberts is
 12 essentially the Vice President of Human
 13 Resources and Organizational Effectiveness,
 14 and Mr. McDonald is the former in - because
 15 there has been no permanent change, but Mr.
 16 McDonald is in effect doing a different role
 17 that is not HROE, it's a totally different
 18 role.
 19 MR. COXWORTHY:
 20 Q. If it's not an HROE role, what is the role
 21 that Mr. McDonald is playing?
 22 MR. HENDERSON:
 23 A. The main role that he is playing with respect
 24 to what he's charging into Hydro is around the
 25 integration work and he continues to do work

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1 with regard to assisting in the reporting for,
 2 for instance, the - I'll give an example, the
 3 most recent piece of work that he was working
 4 on was the winter readiness report that got
 5 filed recently. Mr. McDonald was part of the
 6 coordination of that, which was a direct
 7 activity for Hydro.
 8 MR. COXWORTHY:
 9 Q. So is that not part of the organizational
 10 effectiveness aspect of the HROE position?
 11 MR. HENDERSON:
 12 A. What I - no, not what he was doing there. It
 13 was a coordination and basically doing work
 14 for me and for the Hydro group, you know,
 15 Hydro team, I'll say, in order to complete
 16 that work.
 17 MR. COXWORTHY:
 18 Q. Let's go with that, that there is one VP HROE
 19 that is providing services to Hydro, part
 20 time, from the perspective of Hydro, he's not
 21 devoting 100 percent of his time to Hydro, do
 22 you agree with that?
 23 MR. HENDERSON:
 24 A. That's correct.
 25 MR. COXWORTHY:

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1 Q. We're talking about Mr. Roberts here.
 2 MR. HENDERSON:
 3 A. Yes.
 4 MR. COXWORTHY:
 5 Q. We've heard about the challenges that Hydro
 6 has been having, expects to continue to have
 7 with retaining individuals, hiring new
 8 individuals to fill vacancies as they come
 9 forward, aging workforce. Is Hydro, as a
 10 regulated entity, tasked with providing
 11 reliable least cost service to customers, is
 12 it best served by having a part time Vice
 13 President of Human Resources, given the
 14 challenges that its facing?
 15 MR. HENDERSON:
 16 A. I must have misspoke if I said it was part
 17 time.
 18 MR. COXWORTHY:
 19 Q. I said that. You didn't. If you want to
 20 disagree with that characterization, please
 21 explain?
 22 MR. HENDERSON:
 23 A. Yes, because Mr. Roberts is highly focused on
 24 that and he has a group of people working with
 25 him who are part of the Hydro leadership team

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1 that are highly focused on those activities,
 2 and Mr. Roberts has a broader responsibility
 3 which would also pick up other Nalcor
 4 activities, so all of his time is not charged
 5 to Hydro, but he is very much engaged in that
 6 issue, and he has people working for him that
 7 are totally dedicated to that issue.
 8 MR. COXWORTHY:
 9 Q. But he's not 100 percent engaged to Hydro
 10 issues?
 11 MR. HENDERSON:
 12 A. He would be 100 percent engaged in the issues
 13 of recruitment and retention of people in
 14 general within the Nalcor group, but there's
 15 specific times that he's focused on Hydro
 16 which he'll charge his time to, and as you can
 17 see, he does put a considerable amount of time
 18 to that, but he also has a team of individuals
 19 who are totally dedicated to this.
 20 MR. COXWORTHY:
 21 Q. Well, we can certainly see that in 2015 and
 22 2016 that the intention is for a large amount
 23 of VP HROE time to be charged in to Hydro, but
 24 that wasn't the case in 2012 and 2013. The
 25 challenges I was talking about before in

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1 relation to hiring employees to fill
 2 vacancies, retention of employees, aging
 3 workforce, those existed in 2012 and 2013,
 4 would you agree?
 5 MR. HENDERSON:
 6 A. Yes, they have, they've existed for a few
 7 years.
 8 MR. COXWORTHY:
 9 Q. If we could turn to the response to
 10 Undertaking 24.
 11 MS. GRAY:
 12 Q. I'm sorry, Mr. Coxworthy, which one?
 13 MR. COXWORTHY:
 14 Q. Undertaking 24. This was an undertaking, a
 15 request that Mr. McDonald, who was the VP HROE
 16 at the time, without qualification in
 17 2012/2013 to provide the allocations of his
 18 time in those years, and you will see that
 19 there was comparatively, compared to 2014,
 20 2015, and 2016, very little time or certainly
 21 a substantially smaller amount of time; 392
 22 hours, 202 hours, directly charged to Hydro.
 23 Again I would put it to you at least in those
 24 years, did Hydro have a VP HROE who was
 25 spending primarily their time addressing Hydro

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1 issues?
 2 MR. HENDERSON:
 3 A. The time charged here, that's the specific
 4 time that he would charge that would be
 5 directly related to Hydro. The Nalcor Energy
 6 time would be of a more general nature, but
 7 would involve the issues of recruitment and
 8 retention for all of Nalcor, and that would be
 9 primarily Hydro because Hydro has the largest
 10 group of employees, and it would also involve
 11 CF(L)Co, which is another fairly large
 12 operation which have the same challenges and
 13 the solutions and challenges would be equally
 14 applicable, but he did not specifically carve
 15 up that general time into those two entities,
 16 he just charged his time into Nalcor, in
 17 general.
 18 MR. COXWORTHY:
 19 Q. And I'm not saying that that's not important
 20 time for him to spend on working on the work
 21 that's done by the non-regulated entities, but
 22 it's a question of whether Hydro is getting
 23 the time devoted to its human resources
 24 issues. From a leadership position and the VP
 25 HR, I would think would be the senior

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1 leadership position that takes on those
 2 challenges -
 3 MR. HENDERSON:
 4 A. And on the Nalcor - on the Hydro leadership
 5 team there are people who are totally focused
 6 and committed to those issues. They work
 7 closely with the VP to address that, but there
 8 is a delegation of work here specific to Hydro
 9 and that person is very much committed, and I
 10 have regular discussions with the people on
 11 the Hydro leadership team with regard to those
 12 specific issues and those challenges to make
 13 sure that they're being addressed, and I'd
 14 also be talking to Mr. Roberts or Mr. McDonald
 15 in the past and they're totally engaged and
 16 very much involved with that.
 17 MR. COXWORTHY:
 18 Q. Thank you, Mr. Henderson. Mr. Henderson, to
 19 ensure accountability and transparency as a
 20 regulated utility, wouldn't Hydro's customers
 21 be better served by Hydro having its own
 22 dedicated leadership team at the senior level,
 23 so its own VP HROE as a Hydro employee, its
 24 own VP Finance as a Hydro employee, its own VP
 25 Corporate Communications as a Hydro employee,

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1 wouldn't that be best from the point of view
 2 of at least transparency and accountability to
 3 the Board and ultimately to the public?
 4 MR. HENDERSON:
 5 A. The organization has been working effectively
 6 in these areas, and this way in which there's
 7 a shared service, there's economies of scale
 8 that the customers will benefit by having
 9 that, and so this has worked well in terms of
 10 bringing value to our customers for these
 11 services by having them share in this manner.
 12 So as long as that continues to bring value, I
 13 would suggest that it's best for the customers
 14 to have that. If at some point that value can
 15 be obtained by it being dedicated, then that
 16 may change in the future, but at this point
 17 and up to this point in time it's been
 18 beneficial to customers to have a shared
 19 services model, and it's a model that's worked
 20 with Hydro for many years. Prior to Nalcor,
 21 Hydro group had CF(L)Co still part of it and
 22 it was a shared services model that worked
 23 there as well. This has always, I'll say in
 24 my experience, been the way - maybe in the
 25 very early years I started, I'm not sure of

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1 CF(L)Co might have been separated out, but for
 2 a long time this model has brought benefit by
 3 having that economies of scale there.
 4 MR. COXWORTHY:
 5 Q. And I don't mean to flippant to provide this
 6 example, but I wanted to provide the contrast.
 7 Certainly economies of scale when we talk
 8 about sharing a building, Hydro Place, or
 9 being a single source supplier in terms
 10 getting all your office supplies purchased at
 11 one point of purchase by Nalcor and then
 12 distributing, you know, those are obvious
 13 economies of scale, no one is disputing that
 14 that makes sense, but would you agree isn't it
 15 a little bit more complicated when you're
 16 trying to determine whether there are
 17 economies of scale when we're talking about
 18 decision making at the senior level, you know,
 19 how do you measure economies of scale in terms
 20 of not just the salary you're paying that
 21 person, but whether that person is spending
 22 the time that needs to be spent on, and the
 23 concern we have here is on the regulated
 24 utility?
 25 (9:45 a.m.)

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1 MR. HENDERSON:
 2 A. Well, the way that we've structured is we have
 3 specific people who are accountable for that
 4 activity for Hydro in the functional areas and
 5 those are the people who are on the Hydro
 6 leadership team and they are providing that
 7 dedicated focus and have that accountability
 8 to provide that service.
 9 MR. COXWORTHY:
 10 Q. Thank you, Mr. Henderson. I have no further
 11 questions.
 12 CHAIRMAN:
 13 Q. Mr. O'Reilly, sir.
 14 MR. ROBERT HENDERSON
 15 MR. DARREN MOORE
 16 MR. TERRY GARDINER
 17 CROSS-EXAMINATION BY O'REILLY, Q.C.:
 18 O'REILLY, Q.C.:
 19 Q. Thank you, Mr. Chairman. Good morning,
 20 gentlemen, my name is Tom O'Reilly, and with
 21 me is Mr. Denis Fleming and Mr. Mel Dean. We
 22 represent the interest of Vale Newfoundland in
 23 this GRA hearing. I just want to continue
 24 very briefly on the general discussion that
 25 Mr. Coxworthy was leading you through, and I

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1 wonder - I'm kind of interested when I see the
 2 witness list, the positions in Operations. Mr.
 3 Henderson is the VP of Newfoundland and
 4 Labrador Hydro. Mr. Henderson, that's the top
 5 position in the regulated part of Hydro,
 6 correct?
 7 MR. HENDERSON:
 8 A. It is.
 9 O'REILLY, Q.C.:
 10 Q. Mr. Gardiner, Manager of Engineering
 11 Transmission and Distribution, and Mr. Moore,
 12 Manager of Transmission and Rural Operations.
 13 I wonder can we just turn up GRA application,
 14 Volume 2, Exhibit 1. I just want to see where
 15 everybody fits into this mosaic. Schedule 1,
 16 page 3. Now we see regulated operations, Vice
 17 President Newfoundland and Labrador, and I
 18 think that's the position you fill, Mr.
 19 Henderson, correct?
 20 MR. HENDERSON:
 21 A. That's correct.
 22 O'REILLY, Q.C.:
 23 Q. Okay. Now in the case of Mr. Moore - I'm
 24 sorry, Mr. Gardiner - sorry, Mr. Moore, where
 25 do you fit in, is your position here on this

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1 Schedule 1?
 2 MR. MOORE:
 3 A. Yes, it is. It's in the bottom lower left
 4 corner, the General Manager, Transmission and
 5 Rural Operations.
 6 O'REILLY, Q.C.:
 7 Q. Okay, yes, I see that. Now Mr. Gardiner, is
 8 your position there?
 9 MR. GARDINER:
 10 A. I don't believe so.
 11 O'REILLY, Q.C.:
 12 Q. So can I go down to page 8. Is your position
 13 indicated on this schematic drawing?
 14 MR. GARDINER:
 15 A. Yes, it is. It's referenced as Manager of
 16 Engineering and Transmission Distribution.
 17 About two years ago, my position title changed
 18 to Manager of Engineering and Project Support
 19 Services.
 20 O'REILLY, Q.C.:
 21 Q. I'm sorry, tell me again where is it?
 22 MR. GARDINER:
 23 A. It's the Manager of Engineering Transmission
 24 and Distribution. It's the third one over from
 25 the -

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1 O'REILLY, Q.C.:
 2 Q. On the second line?
 3 MR. GARDINER:
 4 A. Yes, that's correct.
 5 O'REILLY, Q.C.:
 6 Q. That's your position?
 7 MR. GARDINER:
 8 A. Yes, it is.
 9 O'REILLY, Q.C.:
 10 Q. And you report to the Vice President -
 11 MR. GARDINER:
 12 A. Of Project Execution.
 13 O'REILLY, Q.C.:
 14 Q. Of Project Execution, okay. So can we go up
 15 to - at the Vice President level, can we go up
 16 to page 1.
 17 MS. GRAY:
 18 Q. Page 2, Mr. O'Reilly?
 19 O'REILLY, Q.C.:
 20 Q. Sorry, page 2, I'm sorry, Schedule 1. So this
 21 is above the regulated industry. We're now
 22 into the Nalcor structure, are we not?
 23 MR. HENDERSON:
 24 A. Yes, that's correct.
 25 O'REILLY, Q.C.:

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1 Q. So can you point out where - the position to
 2 which you report, is that indicated in this
 3 drawing?
 4 MR. GARDINER:
 5 A. Yes, it's Vice President of Project Execution
 6 and Technical Services.
 7 O'REILLY, Q.C.:
 8 Q. Okay, so your immediate - you report to a
 9 Nalcor position?
 10 MR. GARDINER:
 11 A. I do.
 12 O'REILLY, Q.C.:
 13 Q. Whereas the other - you report to a Hydro
 14 position?
 15 MR. HENDERSON:
 16 A. Yes, I do.
 17 O'REILLY, Q.C.:
 18 Q. Okay, all right. So is this the matrix for
 19 the secondment that we've heard some
 20 discussion about that your position is
 21 seconded to Hydro?
 22 MR. GARDINER:
 23 A. I guess, the way Project Execution and
 24 Technical Services matrix organization is set
 25 up is that we provide those services to all

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1 lines of business, and being Manager of
 2 Engineering and Support Services, I've been
 3 delegated, I guess, by Mr. MacIsaac to sit on
 4 the Hydro leadership team. I look after the
 5 engineering services for the civil and the
 6 transmission group. I'm also responsible for
 7 a lot of the services that we provide to Hydro
 8 in terms of drafting properties and safety,
 9 and project support. As part of the project
 10 support, I'm also responsible for monitoring
 11 the operations and maintenance budget.
 12 O'REILLY, Q.C.:
 13 Q. Right, but in terms of the organizational
 14 structure, you report to a Nalcor position?
 15 MR. GARDINER:
 16 A. I do, yes. Mr. MacIsaac is Vice President of
 17 Project Execution and Technical Services, and
 18 that is a Nalcor employee.
 19 O'REILLY, Q.C.:
 20 Q. That is a Nalcor position?
 21 MR. GARDINER:
 22 A. That is a Nalcor position, sorry.
 23 O'REILLY, Q.C.:
 24 Q. Okay. I want to have a brief discussion about
 25 asset management, and I don't know who that

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1 could properly go to, but throughout the
 2 hearing we've been hearing issues relating to
 3 the backlog of maintenance on transformers and
 4 circuit breakers. That's been a discussion
 5 that's come up before. I'm sure you're not a
 6 stranger to it. Can I ask you to turn up,
 7 please, Vale NLH-089, Revision 1, and can we
 8 go to Table 1, please. Now this is, I guess,
 9 the record of planned maintenance for
 10 transformers and preventative maintenance that
 11 was completed, planned and completed for
 12 transformers between 2010 and 2015 forecast,
 13 and so on, but - and Table 2 deals with the
 14 circuit breakers, the same sort of basic
 15 information, but it relates to circuit
 16 breakers, and between 2010 and 2013, at no
 17 point has a target or a planned maintenance
 18 been achieved. What was planned, there hasn't
 19 been completion of the planned maintenance in
 20 any of these cases. Agreed?
 21 MR. MOORE:
 22 A. That's right.
 23 O'REILLY, Q.C.:
 24 Q. Okay, all right.
 25 MR. HENDERSON:

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1 A. There was maintenance completed. I'm not sure
 2 - you're saying it wasn't 100 percent
 3 completed?
 4 O'REILLY, Q.C.:
 5 Q. It wasn't 100 percent completed, that's what
 6 I'm saying.
 7 MR. HENDERSON:
 8 A. Yes.
 9 O'REILLY, Q.C.:
 10 Q. All of it, I said, all of it wasn't completed.
 11 MR. HENDERSON:
 12 A. Okay.
 13 O'REILLY, Q.C.:
 14 Q. What was completed, was completed, but all
 15 that was planned was not completed, agreed?
 16 MR. HENDERSON:
 17 A. Everything there was not completed, no.
 18 O'REILLY, Q.C.:
 19 Q. Okay. Now is there a procedure that Hydro has
 20 to track the backlog, you know, is it growing
 21 or is it levelling, are we catching up, is
 22 there some procedure that Hydro has to track
 23 that?
 24 MR. HENDERSON:
 25 A. In general terms, I'll say, yes. I'll speak

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1 to that. If you want to talk specifics,
 2 Darren could talk about what happens in
 3 transmission and rural operations, but we do
 4 have a backlog management where the work
 5 planners and schedulers monitor the work in
 6 the backlog, and what the backlog is, it's
 7 basically a listing of work that has been
 8 identified to be done that needs to be
 9 scheduled, and make sure that you have all the
 10 materials and everything together, the people
 11 identified to do the work. So it goes into
 12 the -
 13 O'REILLY, Q.C.:
 14 Q. That's planning, that's the planning part?
 15 MR. HENDERSON:
 16 A. But it is - that's what the backlog is, it's a
 17 group of work, it could be individual work
 18 orders of work that has been identified to be
 19 done.
 20 O'REILLY, Q.C.:
 21 Q. Okay.
 22 MR. HENDERSON:
 23 A. And so the work schedulers and planners use
 24 that list to determine the work that will be
 25 done when there's an outage on equipment. So

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1 you could end up with a large number of items
 2 on that list, and then when you get to your
 3 annual maintenance for your generators, for
 4 instance, you would then take that backlog
 5 list and schedule that work to be done and
 6 completed during that maintenance, and during
 7 the maintenance the number of work orders in
 8 the backlog will be reduced down to a low
 9 level, and then you move out of the
 10 maintenance period, and then you - there may
 11 be through regular PM inspections and that
 12 sort of thing there will be other items that
 13 would be identified that will then go into the
 14 backlog to be scheduled at the next
 15 opportunity when you can get an outage. So
 16 there's - and it's tracked in terms of hours,
 17 the amount of hours for different trades have
 18 to execute, and it's also tracked in terms of
 19 the number of work items that are being done
 20 and the objective is to manage that over time
 21 down to a level that you can achieve when you
 22 have your maintenance.
 23 O'REILLY, Q.C.:
 24 Q. Is there anybody responsible for oversight
 25 management to make sure that that doesn't grow

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1 or get unacceptable at some level, the growth
 2 of uncompleted planned maintenance doesn't get
 3 done - is there someone who has oversight
 4 responsibility for that?
 5 MR. HENDERSON:
 6 A. Each of the asset managers who would be, like,
 7 the regional managers, or plant managers, have
 8 responsibility and accountability to manage
 9 that work to get it completed. I would like
 10 to clarify that you talk about preventative
 11 maintenance and then there's also corrective
 12 maintenance, and the backlog can have
 13 corrective maintenance work in it and it can
 14 have preventative maintenance. The objective
 15 is to have no preventative maintenance in that
 16 at all, but corrective maintenance, you'd
 17 expect there's always a level of corrective
 18 maintenance in the backlog. So the managers
 19 would have accountability to get the
 20 preventative maintenance completed. Now there
 21 are things that can come up during the course
 22 of a year that may cause preventative
 23 maintenance not to be completed and that could
 24 be the ability to get an outage for a
 25 particular piece of equipment to - because of

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1 what's happening on the power system, if you
 2 have a break down somewhere, that takes
 3 equipment out and you can't take another piece
 4 of equipment out while that one is out while
 5 you're correcting it, you may lose an
 6 opportunity to do your preventative
 7 maintenance, and so at times the manager has
 8 to make judgments as to what they can defer
 9 and not defer, but the objective is to get all
 10 preventative maintenance completed as per the
 11 plan.
 12 (10:00 a.m.)
 13 O'REILLY, Q.C.:
 14 Q. Is there a target or I should say in the case
 15 of planned maintenance which doesn't get
 16 completed, is there a point at which if
 17 there's a backlog of that that it gets from
 18 the level of the manager up the chain? You
 19 know, to say "hey, what's going on? We have
 20 two or three things that were supposed to be
 21 done, we'd planned to get done. They're not
 22 being done. What is the issue and what do we
 23 do to resolve it?" Is there a point at which
 24 that gets up above the manager to someone who
 25 can order or take responsibility to make sure

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1 that it gets done?
 2 MR. HENDERSON:
 3 A. So what we are doing at my level, seeing how
 4 well we're tracking with respect to our annual
 5 work plan. So every year, at the start of the
 6 year, before we get into our main maintenance
 7 season, we have a work plan to execute the
 8 maintenance work during that year, which would
 9 include your corrective and preventative
 10 maintenance. So there's a work plan that's
 11 established with a work plan for each
 12 individual week, if you like, of the year and
 13 what happens is as that work is executed,
 14 there is a report that comes to me every week
 15 and it would go to Darren and others in the
 16 company which would show progress with respect
 17 to the planned completion at that point. So,
 18 that's tracked on a weekly basis.
 19 If there's anything that's slipping, the
 20 manager is responsible for explaining why it
 21 has slipped and what they're doing to correct
 22 it to bring it back into line. And so we look
 23 at that every week to determine how well that
 24 progress is happening and if there is any
 25 adjustments, the resources are deployed or,

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1 you know, adjustments are made so that we can
 2 achieve it to the best of our ability, given
 3 the constraints that we have in ensuring that
 4 we meet customer demand at all time.
 5 O'REILLY, Q.C.:
 6 Q. Is the system of planned or preventative
 7 maintenance, is that tied in any way to the
 8 bonus system, the completion of those things
 9 that are planned or failure to complete those?
 10 Is that somehow reflected in the bonus system?
 11 MR. HENDERSON:
 12 A. Well, in our incentive payments for the
 13 managers who have the responsibility for
 14 execution of the annual work plan, there are
 15 elements in there, incentive payments related
 16 to that work.
 17 O'REILLY, Q.C.:
 18 Q. So if they complete it, there's an incentive?
 19 MR. HENDERSON:
 20 A. Yes.
 21 O'REILLY, Q.C.:
 22 Q. Is there any -- so if it's not completed, then
 23 there's no -
 24 MR. HENDERSON:
 25 A. They don't get the incentive payment.

1 O'REILLY, Q.C.:

2 Q. They don't get the incentive payment, okay.

3 MR. HENDERSON:

4 A. That's correct.

5 O'REILLY, Q.C.:

6 Q. And how far up does that go above the manager

7 line? Is that reflected, for example, in your

8 bonus?

9 MR. HENDERSON:

10 A. Yes.

11 O'REILLY, Q.C.:

12 Q. It does?

13 MR. HENDERSON:

14 A. Yeah.

15 O'REILLY, Q.C.:

16 Q. Okay. Who in Hydro would be responsible for

17 deciding that the level of uncompleted

18 maintenance is unacceptable? Who would have

19 responsibility for that ultimately?

20 MR. HENDERSON:

21 A. Well, ultimately it comes to me.

22 O'REILLY, Q.C.:

23 Q. Comes to you, okay. Now, the other thing,

24 we've had some discussion about the so-called

25 bathtub curve. Is that something that you're

1 O'REILLY, Q.C.:

2 Q. On initial energizing.

3 MR. HENDERSON:

4 A. So the process of bringing a piece of

5 equipment into service, there is a

6 commissioning process that would go, but I'll

7 say before you even put power in, there is an

8 inspection activity that would be done on a

9 transmission line where all of the structures

10 would be inspected and ensure that they're

11 ready for operation. And then once that's

12 confirmed, there's also terminal station

13 equipment that would be on either side of the

14 ends of the line that has to be inspected and

15 proven. So there's a process that you go

16 through in terms of a commissioning process.

17 O'REILLY, Q.C.:

18 Q. Right.

19 MR. HENDERSON:

20 A. Once that is -- you're satisfied with no power

21 on that it's working as it should, you then

22 would go through steps to put power on it, and

23 so then you would energize it and you would

24 expect then that it would -- if any issues

25 were not picked up through the inspection

1 familiar with, that expression?

2 MR. HENDERSON:

3 A. Yes.

4 O'REILLY, Q.C.:

5 Q. You are?

6 MR. HENDERSON:

7 A. We actually provided an example of a bathtub

8 curve in the evidence.

9 O'REILLY, Q.C.:

10 Q. Yeah, so you're familiar with that, right. I

11 have just a few questions. What I'm trying to

12 get at is the -- about the operation and

13 maintenance charges for transmission plant and

14 in the initial period that it goes into

15 operation, okay, you understand, transmission

16 plant for the initial period that it goes into

17 operation. For example, on transmission

18 lines, is it normal to have problems with

19 transmission lines when they are first

20 energized? In other words, new construction

21 I'm talking about, is it usual or unusual to

22 have on transmission?

23 MR. HENDERSON:

24 A. Well, I'll say that it can happen and I'm

25 familiar with certain -

1 process that you would pick them up on initial

2 energization and you would put resources in to

3 correct that and bring it -- put the equipment

4 into service.

5 There can be also other activities which

6 are things that may occur over the course of

7 that initial operation that you go through a

8 range of weather experiences and other things

9 like that that may draw out other weaknesses

10 that weren't picked up on the initial

11 inspection. When the wind blows in a certain

12 way, for instance, on a transmission line, you

13 may find that a jumper length that you had

14 wasn't the right length. It should be

15 adjusted. So, some of those types of things

16 come about in the early service life of a

17 transmission line. But once you get through

18 that sort of initial year or so, those types

19 of things are pretty much resolved and then

20 you'll go through a long period of time where

21 those types of things won't happen until you

22 start to have wear related issues, for

23 instance, from different -

24 O'REILLY, Q.C.:

25 Q. Right. That's farther out in the life of the

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1 transmission line though. I'm not -- I'm
 2 talking, focusing now on the initial period,
 3 okay.
 4 MR. HENDERSON:
 5 A. Right. So what I described is the type of
 6 things that you might get in the initial
 7 period.
 8 O'REILLY, Q.C.:
 9 Q. So to the extent that there's some rework or
 10 something that's identified in the
 11 commissioning phase, would that be considered
 12 a capital cost to get done or a maintenance
 13 cost?
 14 MR. HENDERSON:
 15 A. It would depend on when it occurred. If it
 16 occurred on initial energization, it would be
 17 more than likely capital.
 18 O'REILLY, Q.C.:
 19 Q. Yes, right. Warranty work, for example, that
 20 sort of thing, isn't it? Is that right?
 21 MR. HENDERSON:
 22 A. You can get -- you can have that type of
 23 thing.
 24 O'REILLY, Q.C.:
 25 Q. But once you've gotten through -- as I

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1 understand your evidence, once you've gotten
 2 through that phase, the commissioning, the
 3 bugs are worked out at the beginning, then the
 4 thing will usually function without further
 5 maintenance until you get to later out in life
 6 of the life of the transmission line?
 7 MR. HENDERSON:
 8 A. Barring what things that happen, like I just
 9 suggested, like you know, over the course of
 10 the -- like when you energize a transmission
 11 line, as an example, it may be a nice calm
 12 day, no issues. Then if two months later you
 13 have a windy day, it might reveal a weakness
 14 in that and then you would have -- that would
 15 be corrected under maintenance.
 16 The other types of things that can happen
 17 with new equipment, and I'll say primarily in
 18 the terminal station, but it could happen on a
 19 transmission line. I'm not so familiar with
 20 it happening on a transmission line. Where
 21 you have equipment that may have come with a
 22 weakness that only after being in service for
 23 a period of time that weakness is revealed and
 24 it fails. And so those types of things can
 25 happen as well and then you end up replacing

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1 those types of components, addressing those
 2 issues that may have been a weakness in the
 3 design that only comes about after a period of
 4 operation. So there's those types of things.
 5 So that in the bathtub curve, as an
 6 example, that's the higher failure rates that
 7 you get in the initial period of time and
 8 they're not necessarily capital. They would
 9 be operating but they would be happening in
 10 the very early years of the asset, you know,
 11 I'll say within a year or two of them first
 12 coming into service, and then you'll get into
 13 the longer stable period and then, of course,
 14 as it gets much older, you'll start to see
 15 other age related activities and issues
 16 happening.
 17 O'REILLY, Q.C.:
 18 Q. In the case of new construction, is it usual,
 19 the usual case is that once you get through
 20 the commissioning phase, I'm talking about the
 21 normal case, once you get through the initial
 22 commissioning phase and if there's rework
 23 required, it will be part of the, I guess, the
 24 installation process. Once you get through
 25 that, there's usually a flattening of that as

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1 you go out that there would be very little
 2 maintenance that would be required, after you
 3 get through the -
 4 MR. HENDERSON:
 5 A. After you get through the first -
 6 O'REILLY, Q.C.:
 7 Q. Working out the bugs.
 8 MR. HENDERSON:
 9 A. Yes, after you've been working out the bugs,
 10 but I just wanted to -- because you did
 11 comment earlier that you suggested that it was
 12 capital, but working out the bugs can be
 13 operating costs.
 14 O'REILLY, Q.C.:
 15 Q. And is that the same thing in the case of
 16 transformers, the other part of the plant?
 17 MR. HENDERSON:
 18 A. It can be, because it -- and again -
 19 O'REILLY, Q.C.:
 20 Q. In other words, that after the commissioning
 21 phase, the thing usually functions without any
 22 -- until it gets further out into the life of
 23 the unit?
 24 MR. HENDERSON:
 25 A. That's correct.

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1 O'REILLY, Q.C.:

2 Q. Is that correct?

3 MR. HENDERSON:

4 A. Now, of course, that you require an ongoing

5 inspection program.

6 O'REILLY, Q.C.:

7 Q. Oh yes, yeah.

8 MR. HENDERSON:

9 A. To ensure that there isn't anything there and

10 there's certain levels of maintenance that you

11 have to do because certain items, just

12 particularly items that, I'll say, wear or

13 consume materials, you have to look after them

14 as well, you know, over the whole life of the

15 asset.

16 O'REILLY, Q.C.:

17 Q. And with respect to, for example, Mr. Fagan

18 talked about yesterday, he mentioned about the

19 Teck Resources line which is the line that was

20 put in specifically to service that part of

21 it. I think he described that it was in like

22 new condition. Is there anybody familiar who

23 can comment on that?

24 MR. HENDERSON:

25 A. Well, with respect to the normal life of a

Page 66

1 transmission line, that transmission line is

2 very new, relative to others that we have.

3 You know, it's less than ten years old or in

4 that range.

5 O'REILLY, Q.C.:

6 Q. So I would expect that in terms of the

7 operation, the maintenance costs on that line

8 would be very, very low?

9 MR. HENDERSON:

10 A. At this point, stage in its life, where it's a

11 wood pole line, it would be subject to regular

12 routine inspections.

13 O'REILLY, Q.C.:

14 Q. Inspection.

15 MR. HENDERSON:

16 A. And not likely to see much in the way of a lot

17 of equipment replacements and those types of

18 things.

19 O'REILLY, Q.C.:

20 Q. And that line is what, ten years, inside of

21 ten years, I should say?

22 MR. GARDINER:

23 A. Yes.

24 O'REILLY, Q.C.:

25 Q. Inside of ten years. So would it be fair for

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1 us to conclude from what you said that the

2 bathtub curve, as its been described, is

3 really not representative of new construction,

4 transmission terminal? Would you agree with

5 that?

6 MR. HENDERSON:

7 A. The bathtub curve, that's what I was trying to

8 explain earlier. The bathtub curve has an

9 initial period -- I'll try to explain it

10 verbally without bringing up the evidence, but

11 basically, there's a period that you have

12 higher failures in the initial period of its

13 life and then there's a long stable period.

14 Those initial failures may be operating

15 expenses; they may be capital. If they're

16 picked up on the day of energization or within

17 a very short period of time of it first going

18 into service, it would be picked up in the

19 capital.

20 O'REILLY, Q.C.:

21 Q. Yes.

22 MR. HENDERSON:

23 A. But if it was a year later or six months

24 later, it's more likely to be in operating

25 expense.

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1 O'REILLY, Q.C.:

2 Q. The operation, the maintenance part of new

3 installation, new construction of transmission

4 and, you know, new construction would seem to

5 be transmission line and so on, that would

6 seem to be -- the operation cost of it would

7 be a small portion of the total cost. Most of

8 it would be capital, would you agree, in the

9 early stages? Would you agree with that?

10 MR. HENDERSON:

11 A. I can't say for sure. I guess, it depends on

12 the cost of the asset, how much the two -- how

13 the split works, but it would be generally

14 right that the maintenance during the early

15 years is fairly stable, but it depends on the

16 particular asset as to how much that cost is.

17 I mean, in the -- for instance, if you have a

18 transformer that's heavily loaded, it may

19 require more maintenance than one that's

20 lightly loaded. If you have breakers that are

21 operating a lot, they'll require more

22 maintenance than ones that aren't operating a

23 lot. There's all of those things that come

24 into play, but they generally will be stable.

25 So if you have -- once you get into, you know,

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1 your breaker maintenance, you're going to be
 2 doing routine inspections and testing of your
 3 breakers and that will be more costly than a
 4 transmission line because a transmission line
 5 doesn't have the same type of mechanical wear
 6 and tear that a breaker would have.
 7 O'REILLY, Q.C.:
 8 Q. Now in the case of the Vale assets that were -
 9 - the transmission line and terminal which is
 10 about 20 kilometres, I think, of line and then
 11 there's terminal plant and so on, that was
 12 constructed by Hydro and all the work was done
 13 to get it commissioned and so on and then Vale
 14 paid -- made a payment, essentially completely
 15 indemnified the cost -- Hydro for the
 16 construction costs and so on, including the
 17 commissioning costs. Would you agree with
 18 that?
 19 MR. HENDERSON:
 20 A. That's my understanding. It was, what we
 21 would say, fully contributed. All of the
 22 upfront capital costs were paid for by Vale.
 23 O'REILLY, Q.C.:
 24 Q. Right. All of that was -- and all of the
 25 commissioning costs and working out the

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1 initial bugs or getting it energized and so
 2 on, that would have all been completed before
 3 and paid for by Vale, I take it?
 4 (10:15 a.m.)
 5 MR. HENDERSON:
 6 A. It would have been as long as it was captured
 7 in the capital cost.
 8 O'REILLY, Q.C.:
 9 Q. Yes, in the cap -- not maintenance costs?
 10 MR. HENDERSON:
 11 A. No.
 12 O'REILLY, Q.C.:
 13 Q. It would be in capital, right. And how old is
 14 that? Inside of ten years?
 15 MR. HENDERSON:
 16 A. It is, yeah.
 17 MR. GARDINER:
 18 A. Oh yes.
 19 O'REILLY, Q.C.:
 20 Q. I think that's all. Thank you very much,
 21 gentlemen. Thank you.
 22 CHAIRMAN:
 23 Q. I think we're over to Mrs. Dawson.
 24 MR. ROBERT HENDERSON, DARREN MOORE, TERRY GARDINER,
 25 CROSS-EXAMINATION BY MS. GENEVIEVE DAWSON

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1 MS. DAWSON:
 2 Q. Good morning. My name is Genevieve Dawson and
 3 I represent the Nunatsiavut Government, and
 4 Mr. Henderson, I'm going to give you a break.
 5 Unfortunately, I'm not going to give Mr. Moore
 6 a break. Mr. Moore, I understand that your
 7 title is General Manager of Transmission and
 8 General Operations, correct?
 9 MR. MOORE:
 10 A. Yes, but Transmission and Rural Operations.
 11 MS. DAWSON:
 12 Q. Did I say -- oh, I'm sorry. Transmission and
 13 Rural.
 14 MR. MOORE:
 15 A. Yeah, that's right.
 16 MS. DAWSON:
 17 Q. TRO is the acronym.
 18 MR. MOORE:
 19 A. Yes.
 20 MS. DAWSON:
 21 Q. So I get from your earlier discussions that
 22 you're responsible for Labrador, my part of
 23 this PUB?
 24 MR. MOORE:
 25 A. Yes, that's correct.

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1 MS. DAWSON:
 2 Q. Okay. So you'd be responsible for the diesel
 3 facilities in Nain, Hopedale, Postville,
 4 Makkovik and Rigolet, correct?
 5 MR. MOORE:
 6 A. That's correct.
 7 MS. DAWSON:
 8 Q. All right. Now I also understand that --
 9 well, let me go to my first line of
 10 questioning then. Are you familiar with both
 11 the Acts, the Public Utility Act and the
 12 Electrical Control -- sorry, the Electrical
 13 Power Control Act wherein both these Acts
 14 indicate that if there's a conflict that the
 15 Inuit Land Claims Agreement would take
 16 precedence?
 17 MR. MOORE:
 18 A. I'm somewhat familiar, but not -- I wouldn't
 19 call myself an expert in that area.
 20 MS. DAWSON:
 21 Q. Okay. So you're going to have to tell me
 22 about the somewhat part. Is that something
 23 that the senior management, and I'm
 24 considering you as senior management at Hydro,
 25 is that something that you would have been

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1 familiar with, that particular provision in
 2 those two Acts?
 3 MR. MOORE:
 4 A. That's something that I'm not familiar with
 5 and wouldn't be able to speak to right now.
 6 My role would be as the manager, I guess,
 7 accountable for operation and maintenance of
 8 those facilities, I would be accountable to
 9 ensure those facilities are operated and
 10 maintained, you know, in the least cost manner
 11 for the customers.
 12 MS. DAWSON:
 13 Q. Okay.
 14 MR. MOORE:
 15 A. And fully accountable for the operation and
 16 maintenance of those assets.
 17 MS. DAWSON:
 18 Q. Okay. Would you have any interaction, since
 19 you've taken on this role, with the
 20 Nunatsiavut Government?
 21 MR. MOORE:
 22 A. Yes, I have.
 23 MS. DAWSON:
 24 Q. Okay. And who would you have dealt with
 25 there?

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1 MR. MOORE:
 2 A. Typically what we would do, we do have
 3 interaction with the local communities and
 4 forgive my pronunciation, but it's the
 5 AngajukKak, I think, or the mayors in the
 6 local communities and we also have interaction
 7 with the local Nunatsiavut Assembly. As an
 8 example, we have a project ongoing now in Nain
 9 where we're doing some distribution upgrades
 10 to our distribution lines and a generation
 11 expansion project and our regional manager in
 12 Labrador, who reports to me, Rick Kennedy, had
 13 a conversation I think it was two days ago
 14 with Sara Leo about some of the ongoing work
 15 and some of the reliability improvements we're
 16 hoping to achieve with that upgrade.
 17 MS. DAWSON:
 18 Q. Okay.
 19 MR. MOORE:
 20 A. So that would be one example. Another example
 21 would be back in I'll say January 2013, we
 22 actually met with the Nunatsiavut Government
 23 in Nain to talk about some issues related to
 24 the alternative energy study which is being
 25 done through our system operations group or

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1 system planning group, shall we say.
 2 MS. DAWSON:
 3 Q. So I'll get into that.
 4 MR. MOORE:
 5 A. Okay.
 6 MS. DAWSON:
 7 Q. But so, although you may not -- I guess I'll
 8 put it to you this way, although you may not
 9 be familiar with those two provisions in those
 10 two Acts, from a practical common sense
 11 perspective, you are following through with
 12 the Nunatsiavut Government?
 13 MR. MOORE:
 14 A. Yes, we are fully engaged with the Nunatsiavut
 15 Government with respect to ongoing maintenance
 16 and operation of the plants and future
 17 upgrades and very focused and certainly
 18 encourage our regional manager in Labrador to
 19 have a very close working relationship with
 20 the Nunatsiavut Government with respect to
 21 operation and maintenance of the plants and
 22 any areas where we can improve going forward.
 23 MS. DAWSON:
 24 Q. Okay. So there's been much talk and you might
 25 have missed the much talk, but there has been

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1 much talk about the rural deficit.
 2 MR. MOORE:
 3 A. Yes.
 4 MS. DAWSON:
 5 Q. And I guess, who contributes and who benefits
 6 and who has to pay in. Is there someone
 7 tasked in your particular operation that
 8 focuses on dealing with the Nunatsiavut
 9 Government and reducing the rural deficit with
 10 respect to the diesel generated facilities?
 11 MR. MOORE:
 12 A. Our focus on the rural deficit, we are, as an
 13 operations group, very familiar with the rural
 14 deficit and, you know, very familiar with the
 15 size of the rural deficit and what, I'll say,
 16 contributes towards that. The direct
 17 accountability would be myself in the general
 18 manager role, but through delegation, my
 19 regional manager, Rick Kennedy in TRO Labrador
 20 is very much focused on his contribution
 21 towards the rural deficit or keeping the rural
 22 deficit at a minimum, would be very much
 23 focused on operation and maintenance costs.
 24 So he's tasked with and accountable for
 25 submitting a budget, a least cost budget to

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1 maintain those assets and operate those assets
 2 and then fully accountable to working towards
 3 or working to that budget.
 4 MS. DAWSON:
 5 Q. And is he responsible to you? Does he direct
 6 -- does he work directly under you?
 7 MR. MOORE:
 8 A. Yes, he does.
 9 MS. DAWSON:
 10 Q. How many people are in your outfit that -- and
 11 I'm only interested in my particular
 12 communities -
 13 MR. MOORE:
 14 A. Okay.
 15 MS. DAWSON:
 16 Q. - and I hate -- I don't mean to be so self-
 17 centred, but that's my -- that's what I'm here
 18 for. So those five communities, how many
 19 people work under you and report directly to
 20 you that work in those five communities?
 21 MR. MOORE:
 22 A. The people that work in those five communities
 23 that report directly to me would be in the TRO
 24 Labrador region, which would be Rick Kennedy's
 25 area.

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1 MS. DAWSON:
 2 Q. Yes.
 3 MR. MOORE:
 4 A. So Rick, as the manager of TRO Labrador, his
 5 team would be the team within my group that
 6 would be doing the work in those five
 7 communities.
 8 MS. DAWSON:
 9 Q. And how many people would that be, on or
 10 about? I won't hold you to it. Give or take.
 11 MR. MOORE:
 12 A. I'll say in our TRO Labrador region, the folks
 13 that operate out of our Goose Bay office plus
 14 the diesel plant operators in those
 15 communities, we'll say 20 to 30.
 16 MS. DAWSON:
 17 Q. 20 to 30. Now that's -- 20 to 30, I'll have
 18 to get you to narrow it down. Would it be 30
 19 in peak times?
 20 MR. MOORE:
 21 A. I would say if you added up all five
 22 communities with, I'll say, two operators in
 23 each community roughly, so that's ten
 24 employees, plus two managers that Rick has
 25 reporting to him and his supervisory staff and

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1 maintenance staff, 20 might be the right
 2 number.
 3 MS. DAWSON:
 4 Q. Okay. And I understand that you are directly
 5 accountable to Mr. Henderson?
 6 MR. MOORE:
 7 A. I report directly to the Chief Operating
 8 Officer who reports to Mr. Henderson.
 9 MS. DAWSON:
 10 Q. Okay. And the chief operating officer?
 11 MR. MOORE:
 12 A. The chief operating officer of Hydro, Mr.
 13 Scott Crosbie.
 14 MS. DAWSON:
 15 Q. Mr. Crosbie?
 16 MR. MOORE:
 17 A. Yes.
 18 MS. DAWSON:
 19 Q. Okay. So you don't report directly to Mr.
 20 Henderson?
 21 MR. MOORE:
 22 A. Through the chief operating officer I'm
 23 accountable.
 24 MS. DAWSON:
 25 Q. Yes. No, no, but there is -

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1 MR. MOORE:
 2 A. But not directly, no.
 3 MS. DAWSON:
 4 Q. No. Now also during the discussions before
 5 this Board, there's this idea that you're
 6 responsible or tasked with, you know, less
 7 cost, reliability and safety of customers.
 8 They're the three things that keep coming up.
 9 MR. MOORE:
 10 A. Yes.
 11 MS. DAWSON:
 12 Q. And that is -- I assume that that's sort of a
 13 mantra of Hydro. Would that be correct?
 14 MR. MOORE:
 15 A. Yes, that's right. Our mandate is least cost,
 16 reliable, safe service, electrical service for
 17 our customers.
 18 MS. DAWSON:
 19 Q. And then I put it to then, I guess, would it
 20 be fair to say that the cost deficiency and
 21 reliability of these, the diesel generating
 22 facilities in those five communities, the buck
 23 stops with you on that issue. I mean, you're
 24 the guy who directs this?
 25 MR. MOORE:

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1 A. Yes, I'm fully accountable for least cost
 2 service in those communities.
 3 MS. DAWSON:
 4 Q. And would you also be responsible for the
 5 asset management and what gets spent where,
 6 for example?
 7 MR. MOORE:
 8 A. Yes.
 9 MS. DAWSON:
 10 Q. So if a diesel needed to be -- a diesel
 11 generator needed to be replaced, that's -- is
 12 it your call or would you speak with somebody
 13 about that or would it be your call?
 14 MR. MOORE:
 15 A. That would be my accountability for the
 16 assets. Now having said that, there is
 17 consultation that takes place. For example,
 18 if we had a diesel generator -- like our
 19 program for our diesel generators, if I want
 20 to just take you a little bit through how we
 21 do our maintenance on a diesel generator, it's
 22 basically generated on operating hours. So
 23 what we do in our capital program, we do an
 24 overall on diesel generators every 20,000
 25 hours and then when we reach the 100,000 hour

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1 mark of operation, that's when a decision will
 2 be made to replace that diesel engine.
 3 MS. DAWSON:
 4 Q. Because I understand from some of the
 5 documents here and what I've read, it's about
 6 100,000 hours.
 7 MR. MOORE:
 8 A. Yes.
 9 MS. DAWSON:
 10 Q. Is the life of a generator?
 11 MR. MOORE:
 12 A. Right.
 13 MS. DAWSON:
 14 Q. On or about.
 15 MR. MOORE:
 16 A. Yes.
 17 MS. DAWSON:
 18 Q. So do I take it from you that they are always
 19 replaced after 100,000 or is it they're
 20 sometimes replaced or what's the norm?
 21 MR. MOORE:
 22 A. That would be the norm, that at 100,000 hours,
 23 that's when we look at a decision that, you
 24 know, that's the end of life of that diesel
 25 generator and it's time to replace it in the

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1 capital program. Now having said that, you
 2 know, we monitor the hours very closely as we
 3 execute our maintenance program and execute
 4 our asset management program and then we will
 5 build our capital plan going forward to try to
 6 achieve replacement against those targets,
 7 bearing in mind that somewhere in the year
 8 typically that that engine would be budgeted
 9 for replacement, it would be very close to the
 10 100,000 hours, but there is a window within
 11 that year through the maintenance season when
 12 the replacement would take place.
 13 And there's also a consultation that
 14 would take place as well. Like our system
 15 planning group would look at all of our
 16 communities and monitor load and load growth.
 17 So if they're looking at replacement through
 18 upgrade or diesel generation expansion
 19 projects, then we will be working very closely
 20 with that group to ensure that any of our
 21 replacements, based on our asset management
 22 program are in line with any projects they
 23 have on their plate with respect to load
 24 growth, so that we're all heading in the same
 25 direction, shall we say.

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1 MS. DAWSON:
 2 Q. Okay. The 100,000 -- because I'm no good at
 3 maths, the 100,000 hours gets me about what in
 4 time? How many -- it gets me a year? Does it
 5 get me nine months or two years?
 6 MR. MOORE:
 7 A. I'm trying to think now, to do some very quick
 8 math as to what that would be in years.
 9 MS. DAWSON:
 10 Q. So maybe your math is not good either.
 11 MR. MOORE:
 12 A. If we look at the operating hours in a year, I
 13 mean, I know typically through a year maybe it
 14 may run say 5,000-6,000 hours, depending on
 15 the load factor in the community itself. So,
 16 I look at our overhaul program at 20,000
 17 hours, that probably brings us out about let's
 18 say three years.
 19 MS. DAWSON:
 20 Q. Okay.
 21 MR. MOORE:
 22 A. Rough numbers.
 23 MS. DAWSON:
 24 Q. Yeah.
 25 MR. MOORE:

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1 A. That I can't back up right now, but with data
 2 in front of me, but let's just say three
 3 years. So if we look at a replacement
 4 criteria, you know, you're probably looking at
 5 the, I'll say, ten-year timeframe.
 6 MS. DAWSON:
 7 Q. And each of these communities, I understand,
 8 have different loads, different demands, based
 9 on population, but the biggest one is Nain and
 10 how many generators would be in Nain? How
 11 many diesel generators? Is there five?
 12 MR. MOORE:
 13 A. As of this year, it's four.
 14 MS. DAWSON:
 15 Q. Four, okay.
 16 MR. MOORE:
 17 A. That plant had three generating units up 'til
 18 I'll say this year, but through our system
 19 planning group and looking at load growth in
 20 the community, a decision was made for a
 21 generation expansion project to go into our
 22 capital program to add a fourth unit to
 23 accommodate the load growth in Nain.
 24 MS. DAWSON:
 25 Q. Okay.

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1 MR. MOORE:
 2 A. Which is in service right now, the generator
 3 itself, and fully ready for this winter
 4 season, but we're still continuing on with the
 5 -- there's also a controls upgrade project
 6 that's going alongside that that'll fully
 7 automate the plant, and when we fully automate
 8 our plants, the control system itself also
 9 helps the rural deficit by more efficiently
 10 starting and stopping and loading up the
 11 generators to maximize fuel efficiency and
 12 those type things.
 13 MS. DAWSON:
 14 Q. Well, maybe I'll take you there right now. On
 15 the Nain issue, I understand that in the
 16 capital budget for 2015 there was supposed to
 17 be some work done in Nain and one of my
 18 questions was has that work been done? It was
 19 supposed to -- in a project in the 2015
 20 capital project, it was mentioned, that was
 21 presented to the Board.
 22 MR. MOORE:
 23 A. Right.
 24 MS. DAWSON:
 25 Q. Nain was mentioned and I'm assuming that work

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1 was followed up and done?
 2 MR. MOORE:
 3 A. That work, like I just mentioned, some of it
 4 is still in progress and will be completed
 5 before year end, but the actual generator
 6 itself is installed, in service and fully
 7 ready for service this winter. What's still
 8 in progress, but will be done before the year
 9 end, is the actual control system upgrade that
 10 goes along with that.
 11 MS. DAWSON:
 12 Q. And the control system upgrade, all your --
 13 the new upgrades and all the work that's done
 14 there, I'm assuming it's tendered in the
 15 normal course of dealing? Would I be right
 16 about that?
 17 MR. MOORE:
 18 A. That's correct.
 19 MS. DAWSON:
 20 Q. Okay. And would there be new -- I understand
 21 there's some new technologies as it relates to
 22 diesel generation that deal with analog
 23 versus, I guess, computers.
 24 MR. MOORE:
 25 A. Right.

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1 MS. DAWSON:
 2 Q. And also some emission control, new emission
 3 controls. Would these, the new generator in
 4 particular with Nain, and any other -- I think
 5 Hopedale had some upgrades lately as well?
 6 MR. MOORE:
 7 A. That's right. That's correct.
 8 MS. DAWSON:
 9 Q. So can I take it then that you've use the most
 10 recent technology for the diesel generation?
 11 MR. MOORE:
 12 A. Yes.
 13 MS. DAWSON:
 14 Q. Okay.
 15 MR. MOORE:
 16 A. That would be correct.
 17 (10:30 a.m.)
 18 MS. DAWSON:
 19 Q. So they would be controlled then via computer?
 20 MR. MOORE:
 21 A. That's correct.
 22 MS. DAWSON:
 23 Q. Okay.
 24 MR. MOORE:
 25 A. That's the part of the project that's still in

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1 progress, but will be completed before year
 2 end.
 3 MS. DAWSON:
 4 Q. All right. And that was -
 5 MR. MOORE:
 6 A. Is the control system upgrade and
 7 commissioning.
 8 MS. DAWSON:
 9 Q. Right. And then that, I assume then, goes
 10 straight to what I will eventually get to a
 11 little bit more is a reduction of the rural
 12 deficit or your efforts to reduce the rural
 13 deficit?
 14 MR. MOORE:
 15 A. That's correct. The control system itself
 16 allows for starting and stopping and loading
 17 of the generating units in the most efficient
 18 manner possible, which in turn reduces fuel
 19 consumption and maintenance costs.
 20 MS. DAWSON:
 21 Q. And have you done any sort of feasibility
 22 studies with respect to these plants and how
 23 much you can expect to save as a result of the
 24 latest technology in diesel generation?
 25 MR. MOORE:

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1 A. I'd have to refer back to the actual capital
 2 budget proposals themselves. I don't think in
 3 the capital budget proposal -- Terry may -
 4 MR. GARDINER:
 5 A. I don't think so.
 6 MR. MOORE:
 7 A. - correct me if I'm wrong here now, that there
 8 was actually dollars put to projected savings
 9 in fuel as a result of the automation
 10 projects.
 11 MS. DAWSON:
 12 Q. I didn't see it in the capital. I think it's
 13 Undertaking No. 7, I think, or 8. But, I
 14 didn't see any dollar figures and I guess my
 15 question to you is when you're doing -- let's
 16 say we'll take Nain, because that's where
 17 you've spent some money lately and you've done
 18 some diesel generation upgrades.
 19 MR. MOORE:
 20 A. That's right.
 21 MS. DAWSON:
 22 Q. Before you even get there, before you even go
 23 to tender, do you do any studies, any hard
 24 cost studies that would indicate how much
 25 savings you could do per plant that would

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1 lessen, at the end of the day, the rural
 2 deficit?
 3 MR. GARDINER:
 4 A. We don't have the hard dollar numbers, I'll
 5 say that. But what we do do is focus on
 6 purchasing the assets or the generator itself
 7 that's the most efficient, you know, that we
 8 can buy as per our specs, and we've proven in
 9 other plants that the automation projects that
 10 allow the starting and stopping of the units
 11 and loading at the most efficient level for
 12 the generators themselves do result in less
 13 fuel and less maintenance costs for those
 14 plants. But with respect to Nain, I don't
 15 have say a detailed study as you're talking
 16 about projected savings that will help out the
 17 rural deficit, but we have proven in other
 18 plants that this does help reduce fuel and
 19 maintenance costs and once the plant -- the
 20 new unit is in service now and once we get the
 21 automation project completed this fall, going
 22 into the winter, over time we will be able to
 23 collect data of fuel consumption and
 24 maintenance costs in the Nain plant, for
 25 example, and compare it to past levels. I

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1 guess we can do some backward analysis going
 2 forward, but I don't have the hard analysis as
 3 we just referred to it as showing exact
 4 numbers of what we feel we will save in 2016
 5 and beyond because of the upgrades that we're
 6 doing now in 2015. But we do know anecdotally
 7 that we will save fuel and we will save
 8 maintenance costs with the automation
 9 projects.
 10 MS. DAWSON:
 11 Q. Okay. Now I'm going to refer you to IN-NLH-
 12 069, and Mr. Moore, it actually outlines what
 13 you do do with each of the -- or I should say
 14 you're supposed to do with the diesel
 15 generation generating plants in Labrador, and
 16 I'm assuming that it would be the same
 17 throughout all the diesel generated plants,
 18 but my interest, of course, is Labrador.
 19 MR. MOORE:
 20 A. Okay.
 21 MS. DAWSON:
 22 Q. And all of these different A, B, C, D, I think
 23 there's quite a few, is there anything that
 24 you'd like to add to that or is that about
 25 covers what you are supposed to do on a day to

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1 day basis with respect to the diesel
 2 generating plants?
 3 MR. MOORE:
 4 A. That RFI certainly covers my accountability.
 5 I will say that, if we wanted to just scroll
 6 up again, my accountability is, if we want to
 7 focus in on it, would certainly be item A,
 8 operation and work execution. They're the
 9 folks that operate and maintain the diesel
 10 plants, go out and do the preventative
 11 maintenance work, the corrective maintenance
 12 work and, you know, in a very planned fashion
 13 to ensure that we're executing to our budget.
 14 Item B would fall under my
 15 accountability, short term planning and work
 16 scheduling. They're the folks that develop
 17 our weekly, monthly and annual work plans to
 18 ensure that we're executing our plan and that
 19 it's fully resourced to ensure that we did get
 20 our maintenance done in the most effective
 21 manner possible and then we can, as Rob
 22 described earlier, we track weekly against our
 23 annual work plan to ensure that we're -- our
 24 actuals are the same as our plan and if there
 25 is any deviation, I guess, from plan that

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1 we're fully looking at recovery plans to make
 2 sure that we have a recovery plan in place to
 3 get the maintenance done.
 4 Item C falls under my accountability,
 5 long term asset planning. So, that would be
 6 the folks that are looking at the condition of
 7 the diesel units, how they've been performing,
 8 what maintenance history we've had with the
 9 diesel units, monitoring the operating hours
 10 such that we're developing long term capital
 11 plans to ensure that we're overhauling and
 12 replacing our diesel engines and any other
 13 assets in those plants in an efficient manner
 14 in our capital planning program.
 15 And the support services function also
 16 falls under my accountability. So those would
 17 be the folks that provide support services to
 18 the diesel communities. For example, any
 19 operation and maintenance budget monitoring,
 20 reporting and control falls under my
 21 responsibility. We also have some support
 22 services folks in Bishop Falls who are
 23 accountable for all of TRO and provide support
 24 to those communities as equally as any other
 25 parts of TRO, such as safety, health and

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1 environment, fleet, those type of services
 2 throughout TRO.
 3 When we move onward to customer services,
 4 I'm very much linked in with our customer
 5 services group and have lots of communication
 6 with our customer services group to ensure
 7 that, you know, our customer services strategy
 8 and communication with our customers is as
 9 best as it can be and that we continually
 10 improve on that relationship.
 11 And then when we move into project
 12 execution and technical services, that falls
 13 under Mr. Gardiner's realm, but I'm very much
 14 in continual communication with Mr. Gardiner
 15 to ensure that we're planning and executing
 16 our capital program in the most effective
 17 manner possible. I'm not sure what's next on
 18 the list here.
 19 MS. DAWSON:
 20 Q. System planning is next.
 21 MR. MOORE:
 22 A. Okay. Human Resources. Human Resources is a
 23 function, is a corporate service that's
 24 provided to, as Rob described, to all of Hydro
 25 and we very much do receive very good support

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1 from Human Resources on the safety side of
 2 things, for corporate programs, environmental
 3 supports, recruitment, support for our
 4 apprenticeship programs.
 5 In particular for our diesel communities,
 6 our Human Resources have been working with us
 7 to ensure that our diesel plant operators have
 8 a very full training program and we've just
 9 implemented a program through the College of
 10 the North Atlantic to ensure that, you know,
 11 all our representatives in the diesel
 12 communities are fully trained and they provide
 13 a variety of services in the diesel
 14 communities such that they can take care of
 15 customer services type work and very limited
 16 line work and some limited electrical and
 17 mechanical work with an effort to ensure that
 18 they can take of, I'll say, routine
 19 maintenance items and customer service items
 20 that come up in the community, such that if
 21 there is an outage or an issue with our
 22 customers, they can deal with it initially,
 23 rather than wait for someone say to have to
 24 fly in from Goose Bay to deal with it.
 25 MS. DAWSON:

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1 Q. Two questions come out of the Human Resource
 2 issue. One is I understood from other
 3 witnesses and I don't think it was you, other
 4 witnesses, that there was an issue about human
 5 resources and I guess the plants themselves
 6 and maintenance, such that you, as part of the
 7 rural reducing costs, decided to put local
 8 people in these plants and train and put local
 9 people in these plants, as opposed to having
 10 people flown in. Is that -

11 MR. MOORE:

12 A. Yeah. I can add to that. I just talked about
 13 the -- I say DSR, it's our diesel system
 14 representatives in the communities. We just
 15 implemented over the last couple of years a
 16 very structured and formalized training
 17 program for our diesel system representatives
 18 and the whole focus of that program is that
 19 they're equipped with a skill set to be able
 20 to deal with the majority of the running
 21 maintenance, customer service type issues that
 22 may arise locally and that helps such that we
 23 don't have to transport somebody in every time
 24 an issue like that comes up, which is costly,
 25 because there's airfare involved and travel

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1 expenses and the like to get people in say
 2 from Goose Bay to any of the communities to
 3 provide that service. So we're very focused
 4 and Human Resources have been integral in
 5 helping us put this program in place such that
 6 our diesel system representatives are equipped
 7 to do some of those limited duties to provide
 8 customer service and running maintenance.

9 MS. DAWSON:

10 Q. Mr. Moore, there was great discussion, and I
 11 found it rather fascinating, about the vacancy
 12 rates and how high they were, and I'm not sure
 13 how you can plan any -- have any budget based
 14 -- any budget and have an effective budget
 15 based on the vacancy rates that we looked at.
 16 But in any event, I'll leave that to the MBA
 17 people to analyze. But seems a little odd to
 18 me, but are you faced with the same problem
 19 with vacancy rates or are you fully -- I guess
 20 from a human resource perspective, are you all
 21 right with respect to the management and
 22 operations of the diesel facility at least in
 23 the five communities I'm interested in?

24 MR. MOORE:

25 A. I'll say that recruitment and retention and

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1 ensuring that we do fill our vacancies for
 2 our, in particular the skilled employees who
 3 do work in the diesel systems and on all of
 4 our assets, that we're very active in
 5 recruitment to ensure that we get those
 6 positions filled when they do become vacant
 7 for whatever reason, whether it be through
 8 retirements or someone moves along or whatever
 9 the case may be.

10 MS. DAWSON:

11 Q. So you're not plagued with the same vacancy
 12 rate that Mr. Henderson seems to be?

13 MR. MOORE:

14 A. Yes, we do have that challenge, but I will say
 15 up in Labrador, we did have some of those
 16 challenges, but as you just alluded to, very
 17 strong focus on active recruitment locally. I
 18 know we've hired some very good electricians,
 19 mechanics, recently from the Labrador area
 20 into our Goose Bay office and that's working
 21 out very well, very strong active recruitment
 22 in our diesel communities any time we have a
 23 DSR position that may become vacant. So we
 24 are plagued with it, and we do have pockets of
 25 it where we do struggle to fill positions in

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1 some of our more remote areas, but I would say
 2 in Labrador, we've -- it's a challenge, but
 3 we're working through it.

4 MS. DAWSON:

5 Q. And would Nain be the most remote or would
 6 some of the other communities I'm interested
 7 in be more remote as far as you're concerned?

8 MR. MOORE:

9 A. I use the word "remote" but I'm not sure we --
 10 we don't necessarily have a definition of
 11 remote.

12 MS. DAWSON:

13 Q. Hard to get to.

14 MR. MOORE:

15 A. Right.

16 MS. DAWSON:

17 Q. How does that sound?

18 MR. MOORE:

19 A. Nain would probably be -- I know there's an
 20 airfare service from Goose Bay to get to Nain
 21 and there's certainly a ferry service in the
 22 summer season, and we do have helicopter
 23 available -- a helicopter contract available
 24 from Goose Bay to get into Nain, but I would
 25 agree Nain is a very remote area to get to and

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1 can certainly challenge us with weather when
 2 it comes to travel into Nain.
 3 MS. DAWSON:
 4 Q. One of my questions then, based on that, is
 5 what -- how do you get the diesel to Nain in
 6 particular?
 7 MR. MOORE:
 8 A. The diesel fuel itself?
 9 MS. DAWSON:
 10 Q. Yes.
 11 MR. MOORE:
 12 A. It's a contract that we have with Woodward's
 13 who supply it by ship.
 14 MS. DAWSON:
 15 Q. And is that shipped all the time, except when
 16 it can't be?
 17 MR. MOORE:
 18 A. It wouldn't be shipped in the winter season.
 19 MS. DAWSON:
 20 Q. No.
 21 MR. MOORE:
 22 A. When there's -- when the shipping season is
 23 shut down, but we're fully focused on ensuring
 24 that when the shipping season is happening
 25 that the tanks are stocked up to the level

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1 that's needed for the winter operation.
 2 MS. DAWSON:
 3 Q. Okay. So that's a matter of storage, I
 4 assume?
 5 MR. MOORE:
 6 A. Yes.
 7 MS. DAWSON:
 8 Q. And then so you store -- I assume you don't
 9 fly in diesel. That sounds a bit crazy. So I
 10 assume it's all shipped through Woodward's or
 11 whatever. It's shipped up?
 12 MR. MOORE:
 13 A. That's correct.
 14 MS. DAWSON:
 15 Q. Okay. And then you just store enough to get
 16 you through winter?
 17 MR. MOORE:
 18 A. Yes. There's fairly detailed analysis to make
 19 sure that we got adequate reserves, but the
 20 idea is during the shipping season to make
 21 sure that we're fully stocked and secure for
 22 the winter season.
 23 MS. DAWSON:
 24 Q. So any of the outages or reliability issues
 25 that I might see are not related to the

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1 availability of diesel?
 2 MR. MOORE:
 3 A. No, not to my knowledge.
 4 MS. DAWSON:
 5 Q. And I guess that segues into then how reliable
 6 are the generators generally?
 7 MR. MOORE:
 8 A. I would say our service with the generators on
 9 the north coast of Labrador have been -- the
 10 reliability has been very good. I don't have
 11 the actual numbers in front of me now to
 12 compare data to other plants, but I will say
 13 our service has been very good. I know we're
 14 very focused on the areas where we see we
 15 needed improvement, such as the generation
 16 expansion in Hopedale and in Nain, and I know
 17 that -- this is not necessarily a generation
 18 issue, but I know in Nain we were also --
 19 we're also in the process now of installing a
 20 second distribution feeder which will improve
 21 reliability to the customers in Nain and also
 22 flexibility in doing maintenance such that you
 23 could leave one feeder in, take the other out
 24 and be able to perform planned maintenance and
 25 corrective maintenance with less interruption

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1 to customers. So I'll say we've had good
 2 performance, but we're always looking to
 3 improve.
 4 (10:45 a.m.)
 5 MS. DAWSON:
 6 Q. I'm going to take you now to the rural deficit
 7 annual report, which is Information No. 8, and
 8 if we could scroll down to -- there's a line -
 9 - there's a part that we talk about and I've
 10 forgotten the page now. Just keep going if
 11 you would, Ms. Gray. Where it talks about
 12 reduction on the rural deficit. So that --
 13 hold on, go back a bit.
 14 MS. GRAY:
 15 Q. Sorry.
 16 MS. DAWSON:
 17 Q. Okay. No, that's right. "In addition to, as
 18 previously reported" that line. "In addition,
 19 as previously reported, Hydro continues with
 20 its ongoing control measures which also
 21 contribute to limiting the rural deficit as
 22 follows:" and Mr. Moore, there are a variety
 23 of undertakings indicated in this list and it
 24 goes on to the next page, but I want to start
 25 with the -- I'll start with the first one,

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1 "continuing to capture waste heat". I won't
 2 ask you the details of that, because it sounds
 3 a little too technical.
 4 MR. MOORE:
 5 A. Okay.
 6 MS. DAWSON:
 7 Q. But what I want to ask you is each one of
 8 these items that are named here with respect
 9 to diesel upgrading and so on, have any of
 10 those been undertaken or done within the last
 11 let's say two or three years as it relates to
 12 any of the five communities that I'm
 13 interested in?
 14 MR. MOORE:
 15 A. If I look at -- would you like to step down
 16 through them one by one?
 17 MS. DAWSON:
 18 Q. Yes, please.
 19 MR. MOORE:
 20 A. Or just in general? Okay. So "continuing to
 21 capture waste heat in more than half of
 22 Hydro's diesel plants", I'll say that that's
 23 happening in all five communities. Like in
 24 particular, like when a diesel generator is
 25 operating in a plant, it generates heat. So

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1 the plant itself obviously and the workbench
 2 area in the plant, that's certainly heated by
 3 the diesel unit itself such that you don't
 4 need to install electric heaters in the plant
 5 because the diesel itself is providing the
 6 heat. So, that's happening in all five
 7 communities.
 8 When it comes to planning diesel unit
 9 replacement size to maximize -- to optimize
 10 fuel efficiency, that certainly applies to the
 11 generation expansion projects that are taking
 12 place now in Hopedale and in Nain, and also in
 13 -- I'll just check my notes now. It's in
 14 Rigolet actually. We're installing a new
 15 generator. There's two parts to a diesel
 16 generator set. There's the diesel engine,
 17 which is the prime mover, and there's the
 18 electrical generator itself. So we're
 19 actually installing a larger generator on an
 20 existing diesel engine in Rigolet right now as
 21 well. So we would look at that to ensure that
 22 we're doing that upgrade as well to optimize
 23 fuel efficiency.
 24 "Monitoring diesel system fuel efficiency
 25 to identify poor performers". That's an

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1 ongoing effort of our -- as I mentioned
 2 earlier, our long term asset planning
 3 department, they look at the asset condition
 4 and how the asset has been performing, so they
 5 can plan future capital upgrades. So those
 6 folks would be monitoring certainly fuel
 7 efficiency there as well. It's also monitored
 8 through our system planning department who
 9 monitor the operation and supply for all of
 10 our customers and look at future load growth
 11 projects. So they would be involved as well.
 12 MS. DAWSON:
 13 Q. And that would be ongoing again in the five
 14 communities, the fuel efficiency -
 15 MR. MOORE:
 16 A. Yes, it would.
 17 MS. DAWSON:
 18 Q. Okay. And then the next one?
 19 MR. MOORE:
 20 A. The next one, "utilizing commercial air
 21 flights during regular work hours, where
 22 practical". Essentially what we're referring
 23 to there is as we talked about the execution
 24 of our planned maintenance program, which is
 25 monitored on a weekly basis, our focus is to

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1 be fully on top and executing our planned
 2 program such that we can utilize commercial
 3 air flights. Typically helicopter travel ends
 4 up happening if you have a breakdown type
 5 thing and you need to get in there quickly or
 6 more quickly than the scheduled flight. So by
 7 focusing and measuring on a weekly basis our
 8 planned maintenance program, we can utilize
 9 commercial air flights as much as possible to
 10 get work done and obviously the prices are
 11 much better than helicopter travel to the
 12 coast.
 13 And "having operators choose the most
 14 fuel efficient mix of engines when possible,"
 15 that's being done in all five plants, but
 16 we're at a point now with the automation
 17 projects such that, as we talked about, a
 18 computer controlled plant automation type
 19 project, we can actually program the starting,
 20 stopping and loading of the units to be the
 21 most efficient use of fuel possible, rather
 22 than relying on the operator to make that
 23 decision. So it's much more effective.
 24 Automation has been done now in Rigolet and
 25 Makkovik and we're in the process now, before

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1 year end, of installing automation in Nain and
 2 Hopedale. The only plant remaining in
 3 Nunatsiavut where the operator will still be
 4 starting, stopping and loading the units will
 5 be in Postville.
 6 MS. DAWSON:
 7 Q. So then do you have any sense of when all of
 8 this is done and maintained and followed
 9 through, any sense of how much that
 10 contributes to the amount of savings to the
 11 bottom line for those five communities?
 12 MR. MOORE:
 13 A. What we do on a monthly basis, between myself
 14 and the regional manager in Labrador, the
 15 regional manager who reports to me in Labrador
 16 provides a monthly report and he's very
 17 focused on working towards his operating
 18 budget. That would be our focus to ensure
 19 that we execute our planned maintenance
 20 program but still, keeping with our mandate of
 21 least cost reliable service to our customers,
 22 we make sure that we execute our planned
 23 program within our operating budget and that
 24 would be the focus of our regional manager and
 25 on a weekly basis, he reports, as we talked

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1 about, how he's doing against his planned
 2 maintenance program and on a monthly basis
 3 would report how he's doing with respect to
 4 his operating budget, and we'd make sure any
 5 variances are dealt with and that recovery
 6 plans are in place to ensure budget targets
 7 are met. So that would be our focus with
 8 respect to keeping the rural deficit at the
 9 level it needs to be, shall we say.
 10 MS. DAWSON:
 11 Q. Would the major -- the major expense for the
 12 diesel plants, would it be operation and
 13 maintenance or would it be fuel?
 14 MR. MOORE:
 15 A. The fuel would be the biggest driver.
 16 MS. DAWSON:
 17 Q. Although when you look at the rural deficit by
 18 year, I mean, we're up to 64 million now, it
 19 seems to be -- everybody seems to agree that
 20 it's getting out of control, and I'm wondering
 21 how much effort is put into actually trying to
 22 save on expenses as it relates to the isolated
 23 communities.
 24 MR. MOORE:
 25 A. Our regional manager would be tasked with

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1 always looking at his operating budget and
 2 always ensuring that he takes a least cost
 3 approach to execution of our maintenance
 4 program. So that would always be the focus,
 5 and as I mentioned, he's required to report on
 6 that on a monthly basis and also through, we
 7 talked about a little bit earlier, our
 8 performance management program. Developing
 9 and working to a budget is certainly measured
 10 through a performance management program for
 11 him as well.
 12 MS. DAWSON:
 13 Q. Would your bonus or his bonus be linked to
 14 cost savings?
 15 MR. MOORE:
 16 A. Yes, it would be.
 17 MS. DAWSON:
 18 Q. I don't want to get heavy into this report,
 19 but there is a report that I had a look at
 20 under PR-PUB-014 under the Prudence Review,
 21 and although I'm not involved -- I won't be
 22 involved in the Prudence Review, there is an
 23 interesting study done by Hatch on "Fire
 24 Suppression in the Diesel Communities" and I'm
 25 interested in why that was put off 'til so

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1 late in the game, the Hatch report of 2012
 2 with respect to fire suppression. There seems
 3 to be a lot of fires in the different -- well,
 4 Nain was the biggest one in 2008.
 5 MR. MOORE:
 6 A. Right.
 7 MS. DAWSON:
 8 Q. I'm wondering why that was put off. It seems
 9 to me common sense that one would make sure
 10 that your source of energy didn't burn down
 11 and that you would have some fire suppressants
 12 already there, and apparently there was none
 13 at all in any of the facilities run by Hydro,
 14 and I'm kind of fascinated on why that wasn't
 15 done and why it took 'til 2012. So my first
 16 question is why it wasn't done in the first
 17 place and second, why did it take until 2012
 18 that you would have to do that and why you'd
 19 have to pay someone to tell you to do it?
 20 Those are just common sense that I just wanted
 21 to ask you about as it relates to Hydro and
 22 its cost efficiency and I guess focus on rural
 23 diesel generation. Do you have any insight as
 24 to, first of all, why there was no fire
 25 suppressant in any of the Hydro diesel plants,

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1 at least in 2012?

2 MR. MOORE:

3 A. I will say that was -- my understanding of why

4 we didn't have fire suppressant in diesel

5 plants up 'til that point in time, that would

6 have been the original design of the plant,

7 when the plants were designed and built in the

8 beginning, and I'd be honest, I wasn't

9 involved with that process in the beginning.

10 I do know that, as you just alluded to, that

11 we have had fires in diesel plants and because

12 of that, as we were going through an analysis

13 of the cause of the fires, we initiated a

14 study with Hatch to look at our diesel plants

15 and make recommendations as to what we should

16 be doing with respect to fire suppression,

17 what some of the options -- what the least

18 cost option would be or could be for each

19 plant to provide the effective protection, and

20 prioritize the plants going forward so that we

21 could build a capital plan to begin to start

22 to install fire suppression in our diesel

23 plants, because, you know, based on history of

24 fires, it's been recognized that it is a

25 significant risk.

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1 So what we wanted to do was an analysis

2 of the fires we had, what we could do going

3 forward to install fire protection and

4 prioritize the plants, come up with a suitable

5 solution that would be least cost and provide

6 the effective fire suppression and then move

7 forward in a capital plan to start to install

8 some of these systems in the highest priority

9 plants first.

10 MS. DAWSON:

11 Q. Any idea why it took until 2012 to come up

12 with this idea?

13 MR. MOORE:

14 A. To comment on why it took 'til 2012, I don't

15 have any insight into that other than I do

16 know that it was a result of the analysis we

17 did on the past fires and felt that it was a

18 risk we certainly have to mitigate going

19 forward.

20 MS. DAWSON:

21 Q. And have fire suppressant systems been put in

22 all of these five communities as of to date?

23 MR. MOORE:

24 A. They're not in all communities yet, but we do

25 have I'll say a multi-year plan to install

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1 fire suppression. I'm trying to remember off

2 the top of my head now, but I think Hopedale

3 actually has the system installed right now.

4 MR. GARDINER:

5 A. I think so.

6 MR. MOORE:

7 A. And Nain will be the next.

8 MR. GARDINER:

9 A. Yeah.

10 MS. DAWSON:

11 Q. And the rest will be over time?

12 MR. MOORE:

13 A. Yes. I don't have the plants and the years in

14 front of me right now for that plan.

15 MS. DAWSON:

16 Q. I think we'll break, if we would, and then I

17 have some -

18 CHAIRMAN:

19 Q. Certainly.

20 MS. DAWSON:

21 Q. I'll have some more after, but we might be

22 finished with diesel.

23 CHAIRMAN:

24 Q. Okay.

25 (BREAK 11:00 a.m.)

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1 (RESUME 11:30 a.m.)

2 CHAIRMAN:

3 Q. I was told I was allowed to bring this in, but

4 I wasn't allowed to put anything in it. So we

5 are back to you, Madam Dawson.

6 MS. DAWSON:

7 Q. Thank you, Mr. Chair. Mr. Moore, I do have

8 just a few more questions on diesel.

9 MR. MOORE:

10 A. Okay.

11 MS. DAWSON:

12 Q. And to be fair to you, we were looking at PR-

13 PUB-NLH-014.

14 CHAIRMAN:

15 Q. Excuse me, I think we have trouble with your

16 audio. So can you make sure you're addressing

17 the mic.

18 MS. DAWSON:

19 Q. It's not -- very rarely do people say that

20 they can't hear me, very rare.

21 CHAIRMAN:

22 Q. Well, we treasured the moment.

23 MS. DAWSON:

24 Q. I learned a long time ago that you should

25 never lead with your chin, and I think I just

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1 -

2 CHAIRMAN:

3 Q. That's why I had a following at City Hall.

4 MS. DAWSON:

5 Q. Fair enough. Fair enough. Anyway, I'll get -

6 - I got to get focused. So, Mr. Moore, you

7 probably appreciated that comment. On the

8 014, PR-014, there are in that, which attaches

9 the Hatch report -- I'm not going to go to the

10 Hatch report. I'm just going to go straight

11 to the actual worded document of the RFI. And

12 below, so you -- I think you wanted to have a

13 look at this. Below it indicates when the

14 fire suppression systems were going to be

15 installed and so my question is Hopedale is

16 complete? Is that correct?

17 MR. MOORE:

18 A. Yes, Hopedale is done now this year. That's

19 correct.

20 MS. DAWSON:

21 Q. Okay. So it's not finished yet?

22 MR. MOORE:

23 A. Hopedale is complete as far as I know, as part

24 of the generation expansion project.

25 MS. DAWSON:

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1 Q. Okay. And what about Nain? Is Nain done?

2 MR. MOORE:

3 A. Nain was planned to be done this year, but

4 what happened with Nain apparently, the

5 pricing came -- the price that we had in the

6 budget for the fire suppression system and the

7 actual bids that we received were much higher

8 than our budget amount. So we're refocusing

9 on Nain and looking at plans going forward

10 into next year.

11 MS. DAWSON:

12 Q. And Cartwright is not done yet, nor Postville?

13 MR. MOORE:

14 A. No.

15 MS. DAWSON:

16 Q. And Makkovik is not done?

17 MR. MOORE:

18 A. No.

19 MS. DAWSON:

20 Q. I don't see Rigolet here anywhere.

21 MR. MOORE:

22 A. That would be further out in the plan. As I

23 said, we're looking at a multi-year plan based

24 on the -- as indicated in the RFI there, the

25 risk matrix that Hatch put together as to

Page 119

1 which plants we should focus on first. So the

2 plants beyond what's listed in the RFI here

3 would be further out in our long term plan.

4 MS. DAWSON:

5 Q. I guess my concern is that Hatch, at least in

6 its report, recognized several fires

7 throughout the years, at least since 2007 on,

8 and it seems to be an ongoing issue. I mean,

9 there's more fires than one would like to

10 acknowledge. So I guess, then that comes to

11 the issue of -- let me speak plainly, because

12 I don't have any other words -- whether

13 anybody really cares, A, and B, if it does --

14 if things -- if it does burn down, there isn't

15 any kind of backup. When your generator -- I

16 mean, we live in a world where generation or

17 diesel generator is a backup, right. That's

18 the whole -- that's my life. I don't have

19 one, but I know people that do. So when Dark

20 NL happened, I was in the dark, but there are

21 people who use them as backup. In our case,

22 we're not using them as backup. We're using

23 them as the main source of our energy, our

24 heat, our light, our survival, and if they

25 burn down, there isn't much else around, is

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1 there?

2 MR. MOORE:

3 A. In most cases, or I'll say in all cases,

4 typically there wouldn't be extra generation

5 on site if the plant did burn down. But now

6 we do have a very extensive emergency plan and

7 mobile is available in our fleet, plus mobiles

8 that can be readily accessed through third

9 parties, such as Toromont Cat that we could

10 certainly expediently bring to a community if

11 we were faced with that unfortunate situation

12 of a plant fire to get service back as quickly

13 as possible. But you're right, there is --

14 the diesel plant is the prime source of power

15 for the community and there is no second

16 plant, I'll say, sitting there just in case.

17 MS. DAWSON:

18 Q. Mr. Moore, I'd like to bring you to the key

19 performance indicator and it's Undertaking No.

20 2.

21 MS. GRAY:

22 Q. What year, Ms. Dawson?

23 MS. DAWSON:

24 Q. Pardon me?

25 MS. GRAY:

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1 Q. What year?
 2 MS. DAWSON:
 3 Q. Oh, 2014. And page -- Appendix E, page E22.
 4 MS. GRAY:
 5 Q. Undertaking No. 2 just has two pages.
 6 MS. DAWSON:
 7 Q. Pardon me?
 8 MS. GRAY:
 9 Q. Undertaking No. 2 just has two pages.
 10 MS. DAWSON:
 11 Q. It's the 2014 Annual Report.
 12 MS. GRAY:
 13 Q. Okay.
 14 MS. DAWSON:
 15 Q. Sorry, you'd like to know which one. On key
 16 performance indicators. I know it went in
 17 through Mr. Johnson, I know.
 18 MS. GRAY:
 19 Q. It's Exhibit 2 in Volume 2?
 20 MS. DAWSON:
 21 Q. Yes, it would be a supplement to Exhibit 2,
 22 that's right, in the GRA. But there should be
 23 a 2014, and I understand that the 2014 was
 24 disclosed in Undertaking No. 2.
 25 MS. GRAY:

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1 Q. Oh, Information No. 2?
 2 MS. DAWSON:
 3 Q. Did I say undertaking, I'm sorry.
 4 MS. GRAY:
 5 Q. Information No. 5, I believe? No? Is that
 6 it?
 7 MS. DAWSON:
 8 Q. I know it went in through Mr. Johnson. It's
 9 Information No. 5, is it? I'm so sorry. No,
 10 sorry, Ms. Gray, it's Information No. 5.
 11 MS. GRAY:
 12 Q. 5, yes.
 13 MS. DAWSON:
 14 Q. And so E22, page E22.
 15 MS. GRAY:
 16 Q. I'm not sure if it's entered, but I'll -
 17 MS. DAWSON:
 18 Q. Is it that perhaps only parts of the document
 19 were entered? I don't know if Ms. Pennell can
 20 help us or not.
 21 MS. GLYNN:
 22 Q. It's in the 2014 Annual Report? Is that where
 23 you're -
 24 MS. DAWSON:
 25 Q. Well, see, what I understand happened was the

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1 annual report only gives us 2013 performance
 2 indicators and Mr. Johnson put to Mr. Martin
 3 and other witnesses the 2014 annual report on
 4 performance indicators. So it went in through
 5 Mr. Johnson and I understood -
 6 MS. GLYNN:
 7 Q. Yeah, that is in that -- the actual 2014
 8 annual report which would have contained the
 9 KPIs is not on the record, but the KPIs that
 10 were in that annual report are in Information
 11 No. 5.
 12 MR. O'BRIEN:
 13 Q. I think it's possible I circulated it as a
 14 possible cross-examination document.
 15 MS. GLYNN:
 16 Q. Yes.
 17 MR. O'BRIEN:
 18 Q. That never went in. That might be what it
 19 was.
 20 MS. GRAY:
 21 Q. I have it, if we want to enter it as an
 22 information. Sorry, I do have it as
 23 (inaudible).
 24 MS. GLYNN:
 25 Q. That would have come from Newfoundland Power,

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1 Liam?
 2 MR. O'BRIEN:
 3 Q. Yeah, I think so, and from Mr. Martin. I
 4 might have circulated it as a possible cross-
 5 examine -
 6 MS. DAWSON:
 7 Q. There you are.
 8 GREENE, Q.C.:
 9 Q. It was circulated. It's just not -
 10 MR. O'BRIEN:
 11 Q. But it may not have gone in.
 12 MS. GLYNN:
 13 Q. So now we'll enter it on the record. Now I've
 14 lost my list of what number we are at.
 15 Information No. 13.
 16 MS. DAWSON:
 17 Q. I apologize for that. I thought -- I have it
 18 as part of the GRA, but I put it in my GRA
 19 because that's where it should be, so I would
 20 remember. So I apologize to everybody about
 21 that.
 22 MS. GRAY:
 23 Q. So E22?
 24 MS. DAWSON:
 25 Q. E22, please. Now, Mr. Moore, I may not

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1 understand this document. I'm hoping you do.
 2 But the way I read it is that with respect to
 3 the Labrador Isolated Communities, and it
 4 doesn't break it down, there's some issue, I
 5 would take it, as to reliability. Would that
 6 be fair when I look at this document? It
 7 seems to be that there's some issues with
 8 respect to power interruption.
 9 MR. MOORE:
 10 A. If I -- I can explain the numbers a little
 11 bit. If we look at the way this chart is put
 12 together, we look at our three areas of TRO,
 13 central, northern and Labrador, and it's also
 14 broken down by the Interconnected system and
 15 the Isolated system.
 16 MS. DAWSON:
 17 Q. Um-hm.
 18 MR. MOORE:
 19 A. And the measure of SAIFI, if you look over on
 20 the top right or anywhere along there, SAIFI,
 21 that's actually a measure of the frequency of
 22 interruptions or I'll say the number of
 23 interruptions.
 24 MS. DAWSON:
 25 Q. Yes.

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1 MR. MOORE:
 2 A. And SAIDI is a measure of the -- the average
 3 measure of the duration of interruptions. And
 4 the way the chart is broken down, it shows the
 5 2014 numbers and it also shows -- these are
 6 the 2014 -- it says fourth quarter only.
 7 MS. DAWSON:
 8 Q. Right.
 9 MR. MOORE:
 10 A. So that would be the fourth quarter of 2014
 11 and it shows scheduled and unscheduled and the
 12 total for all those six areas.
 13 MS. DAWSON:
 14 Q. So this is for just one quarter only?
 15 MR. MOORE:
 16 A. Yes.
 17 MS. DAWSON:
 18 Q. And I'm wondering why the Labrador Isolated
 19 seems to be -- the numbers here are
 20 significantly higher than anything that's
 21 above them. Is there a reason for that?
 22 MR. MOORE:
 23 A. There are a number of reasons why we, in the
 24 Labrador Isolated system, that we do see the
 25 numbers a little higher than our other

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1 systems. Typically, it's the -- if we look at
 2 duration of outages, most of the sites, if not
 3 all the sites, require airfare or ferry travel
 4 to get to the site. So, when we do get
 5 interruptions or outages, they can tend to be
 6 a little longer than in other areas just
 7 because of the time required for travel to get
 8 to site to tend to the issue.
 9 Now we are doing things like I mentioned
 10 earlier to improve that going forward. One
 11 would be our training program that we've
 12 implemented for our diesel system
 13 representatives, so they can deal with a
 14 number of these issues that come up, rather
 15 than someone being required to travel to site
 16 to deal with the issue. We're also doing some
 17 upgrades to the system such as in Nain we
 18 talked about, we're installing a second
 19 distribution feeder, which will improve
 20 performance, and also the generation expansion
 21 projects in Nain and Hopedale.
 22 But I would agree, looking at the
 23 numbers, they are higher than the northern and
 24 the central areas. Another big driver that we
 25 do find in the Labrador system itself, and

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1 like I say, we're addressing that through
 2 generation expansion projects, is that the
 3 communities in the north coast of Labrador in
 4 particular are growing, vibrant communities
 5 and as a result of that, the loading on our
 6 generating units are much higher and run much
 7 longer than any other units in the other areas
 8 of the Province. So that tends to require
 9 more maintenance and possibly more issues may
 10 come up. But again, like I just mentioned
 11 some things that we're doing to improve that
 12 going forward, but the fact that the load on
 13 the units is higher and running longer in some
 14 of these communities has -- does result in
 15 more maintenance and more issues with these
 16 units than in some of our other communities.
 17 MS. DAWSON:
 18 Q. Can I take it then from your answer that at
 19 least as I look at this, as it relates to the
 20 fourth quarter of 2014 -
 21 MR. MOORE:
 22 A. Right.
 23 MS. DAWSON:
 24 Q. - the undertakings that you mentioned, the
 25 general undertakings that you just mentioned,

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1 at least as to this date, had not been carried
 2 out?
 3 MR. MOORE:
 4 A. That's right. What I just mentioned are
 5 capital projects that are being done now in
 6 2015, which will have a very strong focus on
 7 improved reliability in those communities.
 8 MS. DAWSON:
 9 Q. So when it comes then to the concept of cost
 10 efficiency, reliability and customer safety,
 11 I'm going to put it to you on the issue of
 12 reliability that perhaps Hydro has some
 13 shortfall there?
 14 MR. MOORE:
 15 A. If I -- we are very focused on reliability and
 16 very focused on the rural deficit as well and
 17 maintaining costs. Maintaining cost to budget
 18 is very much a very strong focus of the
 19 regional management in the Labrador area and I
 20 would agree that the reliability numbers
 21 there, as presented in the fourth quarter, are
 22 higher than some of our other areas, and there
 23 are programs in the 2015 capital program that
 24 we're doing to help address that. So, it's a
 25 very strong focus on balance between cost and

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1 reliability and service to our customers.
 2 (11:45 a.m.)
 3 MS. DAWSON:
 4 Q. Now Mr. Moore, I'm going to take you onto
 5 another area that I'm interested in, and that
 6 is wind power and alternative energy sources,
 7 and again, with the focus first and foremost
 8 of reducing costs in the isolated communities
 9 and reducing emissions generally, but mostly
 10 reducing costs. So I want to ask you first,
 11 I'm going to suggest to you that with respect
 12 to Ramea and the wind generation there, at
 13 least as it relates to the GRA, is a success
 14 story. At least you call it a world-class
 15 facility in your GRA. Is that correct?
 16 MR. YOUNG:
 17 Q. Mr. Chair, I'm not trying to interfere with
 18 the answer being given by Mr. Moore to the
 19 extent he understands it, but just for Ms.
 20 Dawson's benefit, there's another panel coming
 21 up after this one, the system operations and
 22 planning panel, and they're much more involved
 23 in this area. So just thinking, you know,
 24 this question I'm sure Mr. Moore might have
 25 some feedback, but that panel is much better

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1 able to deal with it efficiently and
 2 effectively.
 3 MS. DAWSON:
 4 Q. Well, I could be wrong, but I understood that
 5 Mr. Moore was responsible for Labrador and the
 6 facilities in Labrador and so I guess I got to
 7 get to my question before I can be overruled
 8 on a question.
 9 MR. YOUNG:
 10 Q. No, no, I'm not suggesting to overrule. I'm
 11 just trying to suggest to you that there will
 12 be another panel who can deal with this in
 13 much more depth.
 14 CHAIRMAN:
 15 Q. We're certainly not going to overrule you.
 16 MR. YOUNG:
 17 Q. No.
 18 MS. DAWSON:
 19 Q. Mr. Moore -
 20 MR. MOORE:
 21 A. Yes.
 22 MS. DAWSON:
 23 Q. - with respect to wind generation and any
 24 feasibility studies, would you be involved in
 25 any wind generation in your area in northern

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1 Labrador in the isolated communities?
 2 MR. MOORE:
 3 A. I'd be very aware of the studies and what
 4 were, you know, the progress of the study
 5 along the way and maybe some of the results
 6 that's coming out of the study, but the study
 7 itself is led by our system planning group
 8 within Hydro to look at alternative sources of
 9 generation and how that generation could be
 10 possibly incorporated into our electrical
 11 system in the future.
 12 MS. DAWSON:
 13 Q. Do you have any direct involvement then with
 14 any of the feasibility studies that have been
 15 undertaken or I understood there was one in
 16 2009 and I thought there was -- and I
 17 understand there was another one in 2013. Did
 18 you have any direct involvement in any of
 19 these studies for wind power generation in
 20 Labrador isolated communities?
 21 MR. MOORE:
 22 A. I would be involved from the perspective of
 23 being, I guess, consulted and informed on the
 24 progress of the study along the way and maybe
 25 how that may affect our system going forward,

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1 but I wouldn't be involved in the direct
 2 decision making on the results of the study
 3 and what the future plans would be.
 4 MS. DAWSON:
 5 Q. Okay.
 6 MR. MOORE:
 7 A. But I would certainly be very well informed
 8 along the way.
 9 MS. DAWSON:
 10 Q. All right. So then I'm assuming if I have any
 11 questions about wind generation and the
 12 alternative sources of either solar or wind or
 13 a combination thereof, because they'd have to
 14 be connected to the diesel facility -
 15 MR. MOORE:
 16 A. That's correct.
 17 MS. DAWSON:
 18 Q. As sort of an off an on.
 19 MR. MOORE:
 20 A. Right.
 21 MS. DAWSON:
 22 Q. I understand all that. So are my questions
 23 then best focused on the operations people?
 24 MR. MOORE:
 25 A. They would be best focused on our system

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1 planning panel.
 2 MS. DAWSON:
 3 Q. The system planning. I'm not sure I get all
 4 the different -
 5 MR. MOORE:
 6 A. Okay.
 7 MS. DAWSON:
 8 Q. - and what everybody -- everybody's hat, but
 9 you know, I guess it's whether you do criminal
 10 law or you do corporate commercial, kind of
 11 like that. Okay. That's my world.
 12 JOHNSON, Q.C.:
 13 Q. Same category.
 14 MS. DAWSON:
 15 Q. Same category.
 16 MR. HENDERSON:
 17 A. Is there a difference?
 18 MR. MOORE:
 19 A. Which one is the criminal?
 20 CHAIRMAN:
 21 Q. Criminals please stand.
 22 MS. DAWSON:
 23 Q. So if I want to ask somebody about the
 24 feasibility studies, where they are, the
 25 results and why they have not been -- and why

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1 these different undertakings have not been put
 2 in place and looking at Ramea and the success
 3 story or lack thereof, as Hydro may say, is
 4 that best directed towards the systems people?
 5 MR. MOORE:
 6 A. Yes, it would be.
 7 MS. DAWSON:
 8 Q. Okay. Then on the tie-in that this may make
 9 to -- or not may, will make, because you have
 10 to have the generators for backup to wind
 11 power, that would be under your -- so at some
 12 point, you would have to deal with these
 13 people, but those enterprises are not yours?
 14 MR. MOORE:
 15 A. No, when -- if we were to do a wind project,
 16 or like there have been wind projects done in
 17 the past, like you mentioned in Ramea, that
 18 work, the feasibility study and decision
 19 making going forward, how much of that
 20 generation source could be beneficial and
 21 incorporated into our existing electrical
 22 system, that study and decision making and
 23 analysis would be done by our system planning
 24 folks. We'd be informed along the way. I
 25 mean, we wouldn't not know anything about it,

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1 shall we say. We would be informed along the
 2 way, but our involvement would come in, you're
 3 right, when it comes time then to interconnect
 4 that system with our existing electrical
 5 system to ensure that -- and our engineering
 6 folks in Terry's group would be involved at
 7 that point as well to make sure that the --
 8 you know, all the design is done for that
 9 interconnection and, you know, the control
 10 systems were adequate and whatever needed to
 11 be done to integrate that into the existing
 12 electrical system, and then at the point of
 13 when the work, I guess, starts and needs to be
 14 commissioned and put in service, that's when
 15 our folks would get involved to make sure that
 16 it's interconnected, tested and fully accepted
 17 as the operator to be working properly.
 18 That's when we would become intimately
 19 involved.
 20 MS. DAWSON:
 21 Q. Fair enough. Then I will put to you though, I
 22 have a concern, and this is a concern that I
 23 don't know why it keeps coming to the back of
 24 my mind. In that a hydro electrical facility
 25 such as Hydro whose focus is on mostly hydro

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1 electrical and in particular with respect to
 2 the oncoming Muskrat Falls undertaking,
 3 because it's a huge undertaking. I'm going to
 4 put it to you that with respect to conflicts,
 5 I see an inherent conflict, and I'm going to
 6 ask you to comment on it, and maybe Mr.
 7 Henderson can comment on it, an inherent
 8 conflict for people who might advocate
 9 alternative sources of energy as it relates to
 10 hydroelectric and I see a conflict because
 11 you're more interested in hydroelectric and
 12 that's the whole point of your enterprise.
 13 That's the whole point of Hydro, and the whole
 14 point of Nalcor and Muskrat Falls is
 15 hydroelectric, and you're not remotely
 16 interested in wind power as it relates to
 17 these isolated communities. So I'm going to
 18 put to you that that to me is -- there's a
 19 conflict there and it bothers me somewhat and
 20 I'd like you to comment on that. You can
 21 comment on it, Mr. Moore, or you can leave it
 22 to Mr. Henderson.
 23 MR. HENDERSON:
 24 A. I'll speak to that in terms of the conflict.
 25 I don't see any conflict at all. Our mandate

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1 is to provide least cost, reliable power to
 2 our customers and that does not exclude any
 3 alternatives. Our -- and I guess the proof is
 4 the fact that we have implemented wind in
 5 Ramea and we are studying that for other
 6 systems. The other thing on the Island
 7 Interconnected system, we purchase power from
 8 wind generating facilities on the Island
 9 Interconnected system, and our system planning
 10 team are charged with looking at the least
 11 cost options for supplying reliable
 12 electricity over the long term for each of our
 13 -- each of the areas which we supply, and all
 14 options are on the table. There's no --
 15 nothing is excluded.
 16 MS. DAWSON:
 17 Q. Do the systems people, the systems panel
 18 that's going to come up, are they responsible
 19 to you? Do they answer to you, the people
 20 that run the systems?
 21 MR. HENDERSON:
 22 A. The system operations and planning panel, Mr.
 23 Humphries -
 24 MS. DAWSON:
 25 Q. Yes.

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1 MR. HENDERSON:
 2 A. - is a Vice-President of Hydro and with regard
 3 to these activities, Mr. Humphries, I'll say
 4 he doesn't report to me in terms of a solid
 5 line, but as a dotted line, Mr. Humphries and
 6 I are in discussion all the time about these
 7 various options and what we should be doing,
 8 so that in that regard, he does report to me.
 9 MS. DAWSON:
 10 Q. You see, I'll tell you where my scepticism
 11 comes from is that there's a report done in
 12 2009 which is where I was going to take Mr.
 13 Moore to, but I'll take someone else there, a
 14 report done in 2009 that clearly indicates
 15 that wind power would be a very good
 16 alternative energy source for three
 17 communities of my five and that it would be
 18 very cost efficient. And yet, that report now
 19 is how many years old? Is that six years old?
 20 And I'm wondering where we are and why hasn't
 21 that been put in place? And I'm going to
 22 suggest to you that it's because everybody is
 23 way too busy with Muskrat Falls to care about
 24 alternative energy sources for the five
 25 isolated communities that I represent in

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1 Labrador.
 2 MR. HENDERSON:
 3 A. I'll disagree with you, and I think when you
 4 speak to that panel, you'll understand the
 5 efforts that are going on there and why it is,
 6 in terms of timing right now, where it is.
 7 MS. DAWSON:
 8 Q. Okay. And Mr. Henderson, I'm going to finish
 9 with you. I only have one question for you
 10 that I've put to others. With respect to the
 11 two Acts, the Public Utilities Act and the
 12 Electrical Power Act, again both these Acts
 13 make specific reference to the Inuit and Land
 14 Claims Agreement and that the Land Claims
 15 Agreement take precedence over anything in
 16 both those Acts as it relates to any
 17 conflicts. As a VP and in the senior
 18 management at Hydro, were you familiar with
 19 those two Acts as it relates to those
 20 particular provisions and the Inuit Land
 21 Claims Agreements?
 22 MR. HENDERSON:
 23 A. That particular aspect had not been pointed
 24 out to me, but I was aware -- I was here when
 25 you asked Mr. Martin and became aware of that

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1 at that time.

2 MS. DAWSON:

3 Q. And that is your first understanding that that

4 Act had those two particular clauses -- those

5 two Acts had that particular clause in them,

6 and that's your first understanding of that or

7 first awareness of that was when you -

8 MR. HENDERSON:

9 A. Well, whatever actions we take, we rely on our

10 legal department to ensure everything is in

11 compliance with the Act and they would let me

12 know if there was any issues with respect to

13 that. So I'm not intimately familiar with the

14 terms of the Act and the legal group would be

15 the ones who would advise us on anything with

16 that, and so as I said, that was when I --

17 it's the first I heard of it and I'm not sure

18 that there -- what the implications are with

19 regard to that, but that's when I became

20 aware.

21 MS. DAWSON:

22 Q. I think though, Mr. Henderson, you might agree

23 with me there's a big difference between the

24 letter of the law or black letter of the law

25 and how it's read and the spirit and intent of

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1 a particular piece of legislation and what --

2 I guess why the government put it there in the

3 first place. The spirit and intent would be

4 that people should be aware of the Land Claims

5 Agreement and what it means to the people of

6 Nunatsiavut. So I guess if you weren't aware

7 of it, then it probably would not be first and

8 foremost in your mind.

9 MR. HENDERSON:

10 A. I'm aware that there were agreements, but I

11 did not know -- I don't know the detail with

12 respect to how it influences that Act.

13 MS. DAWSON:

14 Q. Thank you. They're all my questions.

15 CHAIRMAN:

16 Q. I think Mr. Johnson, we're over to you for

17 some matters which arose.

18 MR. ROBERT HENDERSON, MR. DARREN MOORE, MR. TERRY

19 GARDINER, RE-CROSS-EXAMINATION BY THOMAS JOHNSON, Q.C.

20 JOHNSON, Q.C.:

21 Q. Yes. Yes, Mr. Chairman. Good day, gentlemen,

22 again. Mr. Henderson, on October 5th when Mr.

23 Fagan started providing testimony before the

24 Board, I understood that he had -- that he

25 adopted the written evidence in the areas of

Page 143

1 the Amended Application that he was

2 responsible for and I took that to include the

3 specifically assigned charges as put forward

4 in the rate schedule. And of course, we've

5 heard evidence of the rate schedule in terms

6 of what it was setting out for each of the

7 Industrial Customers. But, on October 6th, he

8 appeared no longer to adopt the application as

9 regards specifically assigned charges as had

10 been applied for in connection with OM&A.

11 You're aware of that?

12 MR. HENDERSON:

13 A. I'm generally aware, yes.

14 JOHNSON, Q.C.:

15 Q. Okay. Mr. Henderson, can you confirm that

16 Hydro is in fact no longer adopting its

17 application relating to specifically assigned

18 charges as regards to OM&A for these various

19 customers who receive specifically assigned

20 charges?

21 MR. HENDERSON:

22 A. My understanding of the issue is that I think

23 the -- what has been put forward has merit and

24 warrants a review, I believe, in the further

25 cost of service evaluations.

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1 JOHNSON, Q.C.:

2 Q. So, you're saying what's been put forward by

3 whom warrants a review?

4 MR. HENDERSON:

5 A. I think there was the -- my understanding was

6 that Vale had put forward an alternative

7 mechanism. I'm not -- I don't know any of the

8 details. I'm just aware that that had

9 happened and that Mr. Fagan had indicated that

10 there was some merit to that approach. I'm

11 not sure what else that was said in that

12 regard.

13 JOHNSON, Q.C.:

14 Q. So can you state, you know, does Hydro have an

15 official position here that in fact the

16 application as regards responsibility for OM&A

17 charges for specifically assigned assets, that

18 Hydro is now not seeking what it applied for,

19 but is seeking something else? Is that

20 Hydro's official position?

21 MR. HENDERSON:

22 A. My understanding of it, it was an area that

23 was under discussion. I had not -- nothing

24 had come to me to say that we've changed our

25 position, but I think what I'm aware of is

Page 145

1 that there was merit there and I understood
 2 that it would be part of a review of the cost
 3 of service and how costs are allocated to the
 4 specifically assigned charge was under
 5 consideration at this hearing.
 6 (12:00 p.m.)
 7 JOHNSON, Q.C.:
 8 Q. Okay. So you were not aware, had no
 9 involvement in the change, in any change in
 10 Hydro's position as regards the relief it was
 11 seeking in the application?
 12 MR. HENDERSON:
 13 A. It was not brought to me to say that we were -
 14 - you know, are we going to categorically
 15 change it. I just was aware that we saw the
 16 merit in the suggested change. That's the way
 17 it was presented to me, that there was value
 18 in that approach.
 19 JOHNSON, Q.C.:
 20 Q. We were advised yesterday that the issue of
 21 whether Hydro would be filing a further
 22 application or amended application was under
 23 advisement. Can you advise whether there's
 24 been any developments in that regard since
 25 yesterday?

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1 MR. HENDERSON:
 2 A. No, there has not. I have not been in any
 3 discussions. You know, once Mr. Fagan came
 4 off the stand yesterday, we were on, and there
 5 has not been anything discussed.
 6 JOHNSON, Q.C.:
 7 Q. Okay.
 8 MR. CASS:
 9 Q. Sorry, Mr. Chair, I might add that counsel
 10 have not been in communication with Mr.
 11 Henderson about the evidence because he has
 12 been under cross-examination since many days
 13 ago. So we have not been communicating with
 14 Mr. Henderson about the evidence.
 15 JOHNSON, Q.C.:
 16 Q. Okay. Just turning to the merits, if I could,
 17 Mr. Henderson. Has the -- we've heard that,
 18 through other witnesses, that -- I think it
 19 was Mr. Greneman and Mr. Fagan who told us
 20 that Hydro has not determined the actual O&M
 21 costs of transmission facilities on the basis
 22 of age. For example, we've been told so far
 23 that Hydro has not done any studies, at least
 24 to their knowledge, comparing what O&M costs
 25 of facilities would be from, you know, age one

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1 to five or five to ten or ten to 15, et
 2 cetera. They weren't aware of any such
 3 studies undertaken by Hydro. Can you confirm
 4 that that's the case as well?
 5 MR. HENDERSON:
 6 A. I can confirm that there has been no studies.
 7 There's just the, I'll say, general experience
 8 as assets age, you end up having -- you know,
 9 that is our experience. As they age, they
 10 require additional corrective maintenance
 11 until the time that the asset reaches the end
 12 of its life and it's replaced.
 13 JOHNSON, Q.C.:
 14 Q. Okay. And Mr. Henderson, when you were
 15 testifying back in September on the 23rd, you
 16 were talking in terms of the bathtub curve and
 17 maybe we could just bring up the transcript in
 18 case we need to go there. September 23rd,
 19 page 71, Jennifer. It's page 71, around line
 20 ten. This was a discussion in relation to
 21 some of the issues that were being experienced
 22 with relation -- in relation to the new CT at
 23 Holyrood, and you mentioned at line one and
 24 two, that "it would not be unusual in the
 25 first start-up year of a new unit, I think

Page 148

1 we've -- I think in evidence there, there's a
 2 bathtub curve that shows typical operation of
 3 new facilities or any generation facilities
 4 and how in the very early days of their
 5 operation, there can be and it's typical that
 6 there are operating challenges", et cetera.
 7 Now just to clarify, Mr. Henderson, you
 8 weren't implying that that bathtub curve
 9 phenomenon only applies to a new combustion
 10 turbine or a new generation assets, were you?
 11 MR. HENDERSON:
 12 A. No. And as I discussed with Mr. O'Reilly
 13 earlier, I was indicating that there are -- it
 14 can happen with any type of equipment.
 15 JOHNSON, Q.C.:
 16 Q. Yes. And so that bathtub curve, to your
 17 knowledge and the knowledge within Hydro, is
 18 that would apply to such things as
 19 transformers, insulators, switch gear, et
 20 cetera?
 21 MR. HENDERSON:
 22 A. It would be, I would say, more prone to those
 23 facilities that may have moving parts and that
 24 sort of thing. Different types of facilities
 25 would have different results, I would suggest

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1 to you.

2 JOHNSON, Q.C.:

3 Q. So just if we could bring up IN-NLH-114,

4 Revision 1, and specifically, if I could

5 direct you to Attachment 2, page three of

6 five. Mr. Henderson, as I understand it,

7 these are -- starting at page three of five in

8 this attachment, here's a complete listing of

9 all of the specific assets that are in

10 connection -- if you scroll up a little bit,

11 you can see the customers name there being

12 Vale.

13 MS. GRAY:

14 Q. Page four, Mr. Johnson.

15 JOHNSON, Q.C.:

16 Q. I'm sorry, page four of five, okay. So this

17 is all the associated equipment, so everything

18 from batteries, chargers, distribution panels,

19 breakers, bus work, bushings, and if you could

20 keep on going down, Jennifer, disconnects,

21 fire protection, grounding, heat light

22 ventilation, security, I presume, HV

23 arresters, more arresters, neutral ground

24 resistors I'm assuming, keep on going,

25 protection A, tap changers, et cetera. So to

Page 150

1 make no mistake, there's more to this than

2 just a tower configuration heading down to the

3 Vale site, right?

4 MR. HENDERSON:

5 A. Well there's a lot of different material

6 that's used in the service to Vale.

7 JOHNSON, Q.C.:

8 Q. Yeah. Now, and incidentally, this line would

9 have insulators I take it?

10 MR. HENDERSON:

11 A. Yes.

12 JOHNSON, Q.C.:

13 Q. And in fact, a number of years ago, as I

14 understand it, Hydro had a problem with new

15 insulators, I believe, on its transmission

16 lines arising from salt contamination. Is

17 that correct?

18 MR. HENDERSON:

19 A. Well, we've had issues with salt contamination

20 in certain areas. I'll say on the Northern

21 Peninsula, salt contamination has been an

22 issue on the lines. That's the most

23 predominant place where salt contamination was

24 an issue. There was a time that we went

25 through significant insulator replacement

Page 151

1 program related to certain type of insulator

2 that had to be replaced and that was all done

3 under a capital program, I recall. You know,

4 certainly remember the line from Happy Valley-

5 Goose Bay to Labrador City had all of -- or to

6 Churchill Falls had all of the insulators

7 replaced on it through that kind of a program

8 which was a defective insulator.

9 JOHNSON, Q.C.:

10 Q. I see. So in terms of the items that we see

11 listed for the Vale line, these would be

12 subject -- just to confirm for the record,

13 these would be subject to bathtub curve,

14 right?

15 MR. HENDERSON:

16 A. The insulators themselves, it is not my

17 experience that we have much in the way of

18 early failures. The insulators tend to last

19 quite a while before you end up with troubles

20 with them, which could come from environmental

21 conditions that are causing perhaps

22 deterioration to the porcelain or the glass or

23 the connectors, that sort of thing.

24 JOHNSON, Q.C.:

25 Q. But to answer my question, the list of items

Page 152

1 that we see, and you've made an exception for

2 insulators, but the rest of the list would be

3 subject to the bathtub curve considerations?

4 MR. HENDERSON:

5 A. Well, they all do, but as I was saying

6 earlier, the type of equipment -- each type of

7 equipment would be more prone than others and

8 then, you know, it depends on the complexity

9 of the equipment and how much design work and

10 interconnection, you know, how much all the

11 facilities have to work together to come up

12 with a result. All of those things impact on

13 how reliable and what type of failures you may

14 get in early operation.

15 JOHNSON, Q.C.:

16 Q. So what sort of equipment do you see in the

17 list here that could be subject in particular

18 to those types of concerns?

19 MR. HENDERSON:

20 A. Well, I would say -- I don't think, you know,

21 I think it's worthwhile going down through all

22 of them, but I would say that there's a number

23 of them that would be and a number of them

24 would be less prone, and it's just that it's

25 on a full spectrum for all different

Page 153

1 equipment.

2 JOHNSON, Q.C.:

3 Q. So the number of them that would be, what sort

4 of items would they be or components?

5 MR. HENDERSON:

6 A. Well, as I've -- not sure that I can -- say

7 like in terms of as examples, you may end up

8 with issues with I'm going to say protection

9 and control systems that maybe have settings

10 to be adjusted or their electronic components

11 that may have failures because just the

12 various manufacturing effects, and that can

13 generally happen to a lot of different

14 components, but some would be more prone to an

15 early failure than others.

16 JOHNSON, Q.C.:

17 Q. Okay. Now you -

18 MR. HENDERSON:

19 A. And it depends -- and it also would vary from

20 manufacturer to manufacturer. There's a lot

21 of different aspects to that.

22 JOHNSON, Q.C.:

23 Q. You indicated that with certain equipment, it

24 may come with a weakness that gets revealed

25 and would you agree that sometimes it takes

Page 154

1 longer than a minimal period for it to become

2 revealed, depending upon operating conditions

3 and the like?

4 MR. HENDERSON:

5 A. It depends on the particular component,

6 because it depends on how much the component

7 is used. For instance, if you have a facility

8 that has a large capability and it's only

9 using a small amount of its capability and you

10 bring it to its full capability, you may

11 reveal things at that time. So for instance,

12 if you put something in service in the summer

13 when the load is low and then during the

14 winter when the load is higher, you may reveal

15 something because the equipment is being used

16 more intensively, those types of things.

17 JOHNSON, Q.C.:

18 Q. Okay. And you stated in your answers to

19 questions from Mr. O'Reilly that if you have

20 heavy loading on transformers or breakers, I

21 believe I tried to capture you correctly, you

22 can expect more O&A. Do you want to elaborate

23 on that?

24 MR. HENDERSON:

25 A. Well, what I was trying to explain is if you

Page 155

1 have something that has moving parts and a

2 breaker is a good example where it has moving

3 parts, if that's used more often, it can have

4 more wear than one that is hardly ever used.

5 JOHNSON, Q.C.:

6 Q. Yes.

7 MR. HENDERSON:

8 A. And that would cause it to require more

9 maintenance.

10 JOHNSON, Q.C.:

11 Q. And in terms of putting the Vale operation,

12 and it's still not up to full operation, but

13 this will be the Province's largest or the

14 Island's largest industrial customer by quite

15 a margin, right. In terms of the type of load

16 and requirements that that infrastructure is

17 going to have to meet, would you care to

18 comment on, you know, the challenge of that

19 operation environment on the assets?

20 MR. HENDERSON:

21 A. Well, in terms of challenges, I would say that

22 most of the equipment, most of the electrical

23 equipment, once you put power on it, it will

24 prove itself as to how well it's running. But

25 some elements of it, if you've never loaded it

Page 156

1 all the way up, you may not reveal something

2 until you've fully loaded it up. And so that

3 would be perhaps, in their circumstance, it

4 would probably be the transformers would be

5 the one thing that I would think would have

6 that kind of -- the big power transformers

7 would have that particular difference. The

8 rest of it, I don't think it would matter so

9 much, but because of the nature of the

10 equipment, but the transformers themselves,

11 they have not been loaded to their full extent

12 yet, because the load isn't there yet.

13 JOHNSON, Q.C.:

14 Q. And like comparing the load, for instance,

15 that this infrastructure will be tasked with

16 serving versus say the Teck load, can you put

17 those in some sort of perspective for us, even

18 the Teck load when it was fully ramped up?

19 MR. HENDERSON:

20 A. There's a difference in load, but there's a

21 much -- there's a greater difference in the

22 infrastructure too. The Teck infrastructure

23 would be much -- would be designed for the

24 size of that load versus the equipment that's

25 in place for Vale is much larger because of

Page 157

1 the larger loads.
 2 JOHNSON, Q.C.:
 3 Q. Yes. So for instance, like the transformer
 4 infrastructure for Vale, would Teck have had
 5 similar transformer situation, similar
 6 substation as Vale has?
 7 MR. HENDERSON:
 8 A. It would be similar, but not identical.
 9 There's differences in configuration in those
 10 stations.
 11 JOHNSON, Q.C.:
 12 Q. In terms of like let's say putting Teck as a
 13 percentage of what Vale is going to be, in
 14 terms of a customer, would they be one-tenth,
 15 one-fifth, in terms of the load that they're
 16 going to be bearing? I'm comparing now Vale
 17 at full and Teck at full.
 18 MR. HENDERSON:
 19 A. Well, in terms of megawatts delivered, Teck
 20 I'll say is just around ten megawatts or under
 21 ten and Vale, I'm not sure yet where they're
 22 going to end up, but I'll say 70 or 80
 23 megawatts in that range. So, you know, one
 24 might be -- the Vale load is perhaps seven
 25 times what the Teck load is.

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1 (12:15 a.m.)
 2 JOHNSON, Q.C.:
 3 Q. And you referred as well, I tried to take it
 4 down as you were asking questions or answering
 5 questions. You were talking about where on
 6 consumable type items. I think that was the
 7 word you used. I wasn't quite sure what you
 8 were saying. IF you could just elaborate on
 9 that a bit.
 10 MR. HENDERSON:
 11 A. So there are certain components of equipment
 12 that will be consumed, used on the equipment
 13 that have to be replaced. There wouldn't be
 14 very much in terms of the infrastructure here,
 15 but there'd be components. I'll say there's
 16 certain components of the transformer related
 17 to filters and that sort of thing that may
 18 have to be replaced. But there's not a lot of
 19 those types of things in the context of
 20 electrical infrastructure that serves a
 21 customer directly like that. You have more
 22 consumables in a generating plant, for
 23 instance, with a lot of rotating equipment,
 24 than you would with the type of equipment
 25 there that's stationary.

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1 JOHNSON, Q.C.:
 2 Q. If I could just draw your attention to page
 3 1.11 of Hydro's evidence which shows the
 4 bathtub curve. I'm sorry, 1.11.
 5 MS. GRAY:
 6 Q. Sorry, is it -
 7 JOHNSON, Q.C.:
 8 Q. Page 1.11.
 9 MS. GRAY:
 10 Q. Oh, 1.11, sorry.
 11 JOHNSON, Q.C.:
 12 Q. That's that bathtub curve, and we see it there
 13 before us now when we see the early failure
 14 period. Do you know how long in terms of - I
 15 know this comes from the National Institute of
 16 Standards, it looks to come from there, do we
 17 know, Mr. Henderson, how long it takes to get
 18 down to where it starts flattening out?
 19 MR. HENDERSON:
 20 A. I would suggest to you that that's highly
 21 variable by different equipment.
 22 JOHNSON, Q.C.:
 23 Q. Highly variable, okay.
 24 CHAIRMAN:
 25 Q. And used, I guess, too?

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1 MR. HENDERSON:
 2 A. It would, yes, that's correct.
 3 JOHNSON, Q.C.:
 4 Q. And do you know, Mr. Henderson, and some of
 5 this you mightn't know and that's fair, but do
 6 you know if when Hydro undertook construction
 7 of the Vale connection facilities, an estimate
 8 of the specifically assigned capital and O & M
 9 cost would have been provided to Vale?
 10 MR. HENDERSON:
 11 A. What I know is that when we were reviewing the
 12 power contract with Vale, they had questions
 13 regarding what was involved with the
 14 specifically assigned charge, and we would
 15 have provided to them - our folks who work in
 16 our rates department who understand the
 17 details of the calculation to explain it to
 18 them, I don't know what detail they were given
 19 in terms of estimates, but I would expect that
 20 they were given an explanation so that they
 21 understood what was involved with coming up
 22 with the specifically assigned charge, and,
 23 you know, that the specifically assigned
 24 charge gets set at a general rate application,
 25 and it would be fixed then for a period of

Page 161

1 time until the next general rate application.
 2 JOHNSON, Q.C.:
 3 Q. And if Vale had asked Hydro for some sort of
 4 estimate of its O & M costs, would Hydro have
 5 been able to provide some sort of estimate to
 6 Vale if they had asked for it?
 7 MR. HENDERSON:
 8 A. I would expect we would have been able to give
 9 some kind of general estimate because it does
 10 require a cost of service study and all the
 11 things involved with that, but certainly we'd
 12 be able to give them a ball park indication of
 13 around what it would be.
 14 JOHNSON, Q.C.:
 15 Q. Okay, and do you know who at Hydro would have
 16 been having the direct dealings with Vale on
 17 the matter?
 18 MR. HENDERSON:
 19 A. Well, there was - when the initial discussions
 20 with Vale started, I was involved, but I
 21 wasn't there right through to the end, but I
 22 do know that the people in our rates group
 23 were asked to attend the meetings to be able
 24 to explain those types of things to them.
 25 JOHNSON, Q.C.:

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1 Q. Mr. Henderson, are you able to walk us through
 2 what Hydro's procedure would be relating to a
 3 new customer connection such as a Vale type
 4 customer or would that be someone better -
 5 would that be better for Mr. Humphries?
 6 MR. HENDERSON:
 7 A. I can do it in the sense that I was there with
 8 Vale when they came, so I can give a sense of
 9 what happened.
 10 JOHNSON, Q.C.:
 11 Q. Yeah, the procedure?
 12 MR. HENDERSON:
 13 A. Initially, there would have been some contact
 14 made with Hydro to indicate that they were
 15 looking for service, and that could have come
 16 through a number of different avenues in terms
 17 of notifying the company, but once that had
 18 happened and it was identified where the
 19 customer is in the system, and generally the
 20 size of the load, then you'd know whether
 21 they're going to be a general service customer
 22 or an industrial customer. Once they're
 23 identified to be an industrial customer, then
 24 what we would do is we would have our system
 25 planning people and system operations, our

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1 rates people, and our legal people would then
 2 meet with the customer to explain to them
 3 different aspects of the service that they'll
 4 get, and that would include giving them, for
 5 instance, a pro forma power contract which,
 6 you know, the - the industrial contracts are
 7 not all identical, but they're very similar.
 8 So there would be sort of a pro forma contract
 9 that would be provided and there would be a
 10 discussion then starting about what the terms
 11 of the contract mean and how they've been used
 12 over the years, and whether they have
 13 particular meaning to that customer. So it
 14 would be around that, and talking about the
 15 cost. We would also have the system planning
 16 people who would be looking at how the
 17 customer will be connected, whether they're
 18 going to be on one transmission line, two
 19 transmission lines to the site, multiple
 20 transformers, so there would be a discussion
 21 of exactly what kind of electrical connection
 22 there would be, and then we would involve our
 23 technical services group from the project
 24 execution and technical services to give
 25 estimates of cost. We would move down a road

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1 then of a series of meetings and discussions
 2 on all of those aspects of the service, so
 3 that they fully understood all of the elements
 4 and were satisfied they understood what was
 5 involved with obtaining service from Hydro.
 6 JOHNSON, Q.C.:
 7 Q. Okay, and would Hydro have - are you satisfied
 8 that Hydro fully followed its procedure when
 9 Vale submitted its connection request to you
 10 folks?
 11 MR. HENDERSON:
 12 A. Yes.
 13 JOHNSON, Q.C.:
 14 Q. Okay, and is there - do you have a copy or
 15 does Hydro have a written policy as regards
 16 connection procedures?
 17 MR. HENDERSON:
 18 A. Not to industrial customers because they are
 19 each in themselves pretty unique, so there's a
 20 certain group of people that are involved, as
 21 I said, as I just went through. A number of
 22 different people in Hydro that we brought
 23 together to meet with the customer.
 24 JOHNSON, Q.C.:
 25 Q. Okay. Would Vale have had to provide like a

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1 formal connection request to you folks?
 2 MR. HENDERSON:
 3 A. There would have been some formal agreements
 4 before we would have started any construction.
 5 There would have to be certain commitments
 6 from them before we would start construction
 7 of the facilities, so there were a number of
 8 steps that we went through there with them. I
 9 wasn't real close to all the detail on it, but
 10 there was discussion certainly around the fact
 11 that they were going to pay the capital cost
 12 rather than have it - they were going to pay
 13 the capital cost upfront, if you like, or as
 14 the capital work was completed, they would
 15 have made payments for it. There would have
 16 been agreement in place before we start to
 17 incur any cost with them to make sure that
 18 that was all - that the commitment was there.
 19 JOHNSON, Q.C.:
 20 Q. Is there a record at Hydro of Vale's
 21 connection request and - I presume there's a
 22 file indicating the back and forth between
 23 Vale and Hydro?
 24 MR. HENDERSON:
 25 A. There would be a level of communications that

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1 would be in a number of different means; some
 2 written, some email, some - there's a lot of
 3 different matters of communications that would
 4 have occurred.
 5 JOHNSON, Q.C.:
 6 Q. And are you familiar with the communications
 7 yourself?
 8 MR. HENDERSON:
 9 A. I'm familiar with them up to a certain point
 10 when I became less involved.
 11 JOHNSON, Q.C.:
 12 Q. I wonder if Hydro could undertake to provide
 13 any communications pertaining to the OM & A,
 14 any estimates that were provided to Vale along
 15 those lines, any requests that Vale had sought
 16 in relation to OM & A estimates
 17 responsibility, those type of things.
 18 MR. YOUNG:
 19 Q. Mr. Chair, we could look into that. A couple
 20 of points arise, I think, from that. One is
 21 that depending on the nature of the - the
 22 question that actually came there at the end,
 23 I was concerned it was going to get into some
 24 confidential communications from the customer
 25 and there may be some of that involved, which

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1 we wouldn't have expected ever to divulge to
 2 anybody, and that wouldn't have been the basis
 3 we received it. I'm not sure exactly of the
 4 value of this. We can have a look to see if
 5 an estimate had been provided, etc, you know,
 6 as Mr. Henderson has alluded. The evidence is
 7 right here that it's most likely to have been
 8 provided in a meeting, so I'm not sure we can
 9 provide something meaningful. We can look
 10 into it.
 11 JOHNSON, Q.C.:
 12 Q. Okay, yes.
 13 MS. GLYNN:
 14 Q. Noted on the record.
 15 JOHNSON, Q.C.:
 16 Q. So an undertaking to look into it or an
 17 undertaking to -
 18 MR. YOUNG:
 19 Q. Well, if we have it, we'll provide it if
 20 you're happier with a document. My point is
 21 there may not be one. There may have been a
 22 discussion.
 23 JOHNSON, Q.C.:
 24 Q. Okay. Mr. Henderson, were any upgrades
 25 required to the island's transmission system

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1 beyond those relating to the connection itself
 2 in order to reliably serve the Vale load?
 3 MR. HENDERSON:
 4 A. There was specifically assigned equipment,
 5 upgrades that were done to connect to them.
 6 I'm not aware that there was anything else
 7 specific to Vale other than the transmission
 8 line that goes down there, the transformers,
 9 breakers related to the line, the things that
 10 we saw here.
 11 JOHNSON, Q.C.:
 12 Q. Now just to clear up something, you indicated
 13 a few moments ago that Vale paid for all of
 14 the costs, and I noticed that Mr. Dean had
 15 indicated just - if we could go to October
 16 1st, page 3, line 16 to 18. I noticed this
 17 when I was preparing for today. That's
 18 October 1st, at page 3, lines 16 to 18. Oh,
 19 I'm sorry, it must be October 5th, is it? When
 20 did Mr. Dean testify? Sorry about that, was
 21 it the 5th?
 22 MS. GRAY:
 23 Q. Was it the 5th?
 24 JOHNSON, Q.C.:
 25 Q. Sorry, Jennifer. I'm not even sure if it was

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1 the 5th here now. I want to be careful. I
 2 don't want to send you on a -
 3 MS. GLYNN:
 4 Q. It was October 1.
 5 MS. GRAY:
 6 Q. It was on page 3, though, Mr. Johnson.
 7 JOHNSON, Q.C.:
 8 Q. Okay, well, in any event, the reference that I
 9 took as a quote was he said, "As Vale paid for
 10 most of the transmission line and terminal
 11 station serving the Vale plant, the
 12 depreciation and return on debt and equity is
 13 low". That was the quote I took, and I just
 14 want to clarify whether, in fact, Vale paid
 15 for most of the transmission and terminal
 16 station serving the Vale plant or whether they
 17 paid for all of it?
 18 MR. HENDERSON:
 19 A. I'll say that I'm not certain whether it was
 20 all, but it would have been most. I may have
 21 made a mistake, but I just knew that the
 22 discussion was around the incremental cost,
 23 but there certainly were facilities there that
 24 pre-existed them that they wouldn't have paid
 25 for.

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1 JOHNSON, Q.C.:
 2 Q. But in terms of whatever was constructed now,
 3 whatever was constructed and is now considered
 4 a specifically assigned asset of Vale, I want
 5 to know did Vale pay for all of it?
 6 MR. HENDERSON:
 7 A. I guess, I'll have to say I'd have to check
 8 that because there could have been aspects of
 9 it that were there that weren't part of that
 10 upfront payment, but the bulk of it certainly
 11 was.
 12 JOHNSON, Q.C.:
 13 Q. Okay, can you undertake or can Hydro undertake
 14 to advise us if they paid for all of what's
 15 been specifically assigned to them, and if
 16 not, who ended up paying for it.
 17 MR. YOUNG:
 18 Q. Just so we understand - that sounds like a
 19 reasonable undertaking. I just want to make
 20 sure I understand it. So it's the capital cost
 21 that you're -
 22 JOHNSON, Q.C.:
 23 Q. That's correct.
 24 MR. YOUNG:
 25 Q. Understood. We can look into that, we can

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1 undertake for that.
 2 (12:30 p.m.)
 3 MS. GLYNN:
 4 Q. Noted on the record.
 5 JOHNSON, Q.C.:
 6 Q. Thank you. Mr. Henderson, is it your
 7 understanding that Hydro's connection
 8 procedure is consistent with that used in
 9 other Canadian and American jurisdictions?
 10 MR. HENDERSON:
 11 A. I'm not familiar with what happens in other
 12 Canadian jurisdictions in this regard.
 13 JOHNSON, Q.C.:
 14 Q. Okay. The order that the Board made in
 15 approving the power service agreement with
 16 Vale, obviously it's provided for the Board as
 17 a draft agreement and the Board approved it,
 18 that's an attachment to PU-6-2012, just for
 19 the record. Do you know who signed the
 20 service agreement on behalf of Vale, Mr.
 21 Henderson?
 22 MR. HENDERSON:
 23 A. No, I don't.
 24 JOHNSON, Q.C.:
 25 Q. Would you undertake to provide that as well,

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1 the signatories on behalf of Vale?
 2 MR. HENDERSON:
 3 A. Yes.
 4 MR. YOUNG:
 5 Q. To the extent that we -
 6 O'REILLY, Q.C.:
 7 Q. That's part of the record, isn't it?
 8 MR. YOUNG:
 9 Q. Yes, I think it is part of the record. It's
 10 in PU-12, it's an attachment.
 11 JOHNSON, Q.C.:
 12 Q. I'm sorry, but that's not signed, that's just
 13 a draft agreement.
 14 MR. YOUNG:
 15 Q. Oh, that's a draft. Oh, I see, the final
 16 agreement?
 17 JOHNSON, Q.C.:
 18 Q. Right.
 19 MR. YOUNG:
 20 Q. Mr. Chair, I'm not sure what the relevance of
 21 that would be. I mean, Vale may have just
 22 some officer to sign an agreement. We're
 23 getting into minutia here. I'm just not sure
 24 where this is going.
 25 JOHNSON, Q.C.:

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1 Q. Well, Mr. Chairman, Mr. Dean testified on
 2 behalf of Vale, of Vale's surprise as to
 3 charges, and we've heard now evidence from Mr.
 4 Henderson as to the process that was followed,
 5 the communications going back and forth, and I
 6 think it's material to ask, like, who signed
 7 this on behalf of Vale, and it's not clear on
 8 the record who did, and I don't think it's
 9 irrelevant.
 10 MR. YOUNG:
 11 Q. Is it in the - I mean, I can see the relevance
 12 if there's something in the agreement that
 13 deals with this specific issue, but if the
 14 agreement deals with other matters, I don't
 15 see how it's relevant.
 16 JOHNSON, Q.C.:
 17 Q. Well, if we can go to -
 18 CHAIRMAN:
 19 Q. This is a legal document that actually exists,
 20 isn't it?
 21 MR. YOUNG:
 22 Q. Oh, it is, it's a signed legal document. I
 23 mean, we can get the information. I'm just
 24 wondering about the relevance of this level of
 25 exchange.

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1 JOHNSON, Q.C.:
 2 Q. 101(b) actually deals with how specifically
 3 assigned charges are handled, so it does refer
 4 to specifically assigned charges in relation
 5 to O & M costs, just to answer Mr. Young's
 6 query in that regard. I don't plan to go
 7 through it.
 8 O'REILLY, Q.C.:
 9 Q. I'm sorry, what was the reference again, Mr.
 10 Johnson?
 11 JOHNSON, Q.C.:
 12 Q. 101(b). It means the payment made by the
 13 customer in each month calculated according to
 14 a method approved by the Board for use of
 15 specifically assigned plant.
 16 MR. YOUNG:
 17 Q. Mr. Chairman, we can dig out that document if
 18 it's executed, and one of the other things
 19 about these documents incidentally, and this
 20 is another conversation, we're getting off the
 21 track here, but these agreements, because we
 22 don't have complete freedom of contract, we
 23 provide them to the Board, we have some of
 24 these that aren't even signed. I will check
 25 to see if there's a signature on what we

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1 received from Vale.
 2 JOHNSON, Q.C.:
 3 Q. Okay.
 4 MS. GLYNN:
 5 Q. Noted on the record.
 6 CHAIRMAN:
 7 Q. I mean, it's a legal document, but I'm not
 8 sure how relevant who signed it is? I mean, I
 9 don't know, but, anyway, you said you can get
 10 it, so -
 11 MR. YOUNG:
 12 Q. I will certainly look to see.
 13 JOHNSON, Q.C.:
 14 Q. Okay. Mr. Fagan testified yesterday, Mr.
 15 Henderson, on - that would have been October
 16 6th, actually. If we could bring up page 62,
 17 lines 3 to 13. Actually, if you go up a
 18 little bit further onto the previous page, at
 19 the bottom - line 20, 21, in that vicinity.
 20 Here we go. He says, "Because actually the
 21 approach that Mr. Dean is proposing is
 22 consistent with the approach used and approved
 23 by the Board for determining the charges for
 24 Newfoundland Power that they use", and he goes
 25 on to say, "They indexed the cost on the Handy

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1 Whitman Index to the original cost of the
 2 distribution asset", and then he goes on to
 3 say, "so because the approach that Hydro uses
 4 now for specifically assigned charges is
 5 consistent with what was used in Newfoundland
 6 Power's CIAC policy up to, I think, September
 7 of 1997, and there was a change in the policy
 8 at that time to move to the indexing
 9 approach", and he goes on to say, "It was
 10 determined that it should be changed, so it
 11 was changed in 1997 for Newfoundland Power",
 12 and, I guess, Mr. Henderson, I'll just ask you
 13 why would Hydro on October 6th give us notice
 14 that it was now preferring or seeking this
 15 other methodology and referring to the
 16 Newfoundland Power CIAC policy change in 1997?
 17 I mean, we learned of Hydro saying they want
 18 this new policy as of October 6th, 2015, when
 19 Newfoundland Power has had a change to their
 20 CIAC policy since September of 1997, and I'm
 21 curious about the timing here. Can you shed
 22 any light on that at all?
 23 MR. HENDERSON:
 24 A. I can't shed any light on that other than, you
 25 know, I can see what Mr. Fagan was exchanging,

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1 and the only thing I can say is that I
 2 understood from a high level discussion that
 3 the approach Mr. Fagan had mentioned to me
 4 that there is merit in it.
 5 JOHNSON, Q.C.:
 6 Q. Okay, and are you familiar with whether or not
 7 Hydro's CIAC policy is similar to Newfoundland
 8 Power's at this point?
 9 MR. HENDERSON:
 10 A. My understanding is our contribution in aid
 11 construction policy is the same as
 12 Newfoundland Power's.
 13 JOHNSON, Q.C.:
 14 Q. It's the same as Newfoundland Power's, okay.
 15 To your knowledge, Mr. Henderson, has any
 16 witness in this proceeding been able to
 17 identify a single jurisdiction that actually
 18 uses Mr. Dean's or Vale's alternative
 19 methodology for calculating these O & M
 20 charges?
 21 MR. HENDERSON:
 22 A. I don't have any knowledge in that regard.
 23 JOHNSON, Q.C.:
 24 Q. Mr. Henderson, yesterday - on October 6th, Mr.
 25 Fagan testified that with regard to the

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1 alternative methodology proposed by Mr. Dean,
 2 he said it's probably not a bad starting
 3 point, and the reference for that is at page
 4 69 on line 19. It's probably not a bad
 5 starting point, that was in connection with
 6 Mr. Dean's methodology. In your opinion, Mr.
 7 Henderson, is it good regulatory practice to
 8 implement a new methodology that is probably
 9 not a bad starting point when the current
 10 methodology is, from what we've heard,
 11 consistent with regulatory practice elsewhere
 12 and where none of the witnesses can point to a
 13 single jurisdiction that actually uses the
 14 alternative methodology?
 15 MR. HENDERSON:
 16 A. I really can't comment on what the practice
 17 is. These types of things are usually dealt
 18 with in a general rate application, so I would
 19 have thought that this would be the right
 20 proceeding to deal with it.
 21 JOHNSON, Q.C.:
 22 Q. So you don't have a view as to whether it
 23 would constitute good regulatory practice to
 24 just implement it now when our current
 25 methodology appears to be consistent with

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1 other places?
 2 MR. HENDERSON:
 3 A. I don't know what's happening in other
 4 jurisdictions. I can't really pass any comment
 5 on that.
 6 JOHNSON, Q.C.:
 7 Q. Can you pass comment on whether you believe it
 8 will be good regulatory practice to implement
 9 a new methodology when it's probably not a bad
 10 starting point, as Mr. Fagan termed it, when
 11 it transfer \$350,000.00 from a single
 12 customer, being Vale in this instance, who I
 13 would submit to you knew or ought to have
 14 known full well what it was signing on for,
 15 and transferring that responsibility to other
 16 customers?
 17 MR. HENDERSON:
 18 A. I would suggest that the regulatory process -
 19 that's the type of thing that the Board would
 20 be asked to make a decision on, what is the
 21 appropriate thing and a fair thing to do.
 22 JOHNSON, Q.C.:
 23 Q. Would you think, Mr. Henderson, that it would
 24 be a better idea to look at this more
 25 carefully and thoroughly within the context of

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1 the coming, and I'm sure you're aware of this,
 2 there's a cost of service methodology hearing
 3 coming in 2016, would you think it would be
 4 better sense to go easy and study that fully
 5 then?
 6 MR. HENDERSON:
 7 A. Well, I would suggest that that would be one
 8 of the considerations that the Board will take
 9 into account with all the evidence that's been
 10 provided. I don't know what else I can say
 11 there.
 12 JOHNSON, Q.C.:
 13 Q. So you're not believing, I take it, that there
 14 would be merit in waiting?
 15 MR. HENDERSON:
 16 A. I would think that if there's an issue of
 17 fairness or appropriateness in the rate design
 18 and it can be resolved in a general rate
 19 application, it would make sense to resolve it
 20 in a general rate application.
 21 JOHNSON, Q.C.:
 22 Q. Does it cause you any concern, Mr. Henderson,
 23 that we've been told that this is going to
 24 result in a transfer of \$480,000.00 to
 25 Newfoundland Power, this change that Vale is

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1 wishing to have, and we're also told that our
 2 practice appears to be consistent with other
 3 practices elsewhere in Canada and the United
 4 States, and very few - no real indication
 5 where it's being implemented along the lines
 6 as proposed by Vale, does that cause you pause
 7 for concern about rushing into it here now?
 8 MR. HENDERSON:
 9 A. Well, I'd really be repeating myself. I think
 10 this is an item that would be judged by the
 11 panel with regards to the merits of it.
 12 JOHNSON, Q.C.:
 13 Q. Mr. Henderson, do you know what does Hydro's
 14 annual O & M on its transmission system
 15 represent as a percentage of capital invested
 16 in a transmission system? Do you know that
 17 figure?
 18 MR. HENDERSON:
 19 A. No, I'm not familiar with that detail.
 20 JOHNSON, Q.C.:
 21 Q. You're not familiar with that detail. Is that
 22 a detail that - is that a figure that would be
 23 - is that a question that you folks would ask
 24 yourself from time to time in terms of trying
 25 to get a sense of the ratio between annual O &

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1 M expense, and the capital invested?
 2 MR. HENDERSON:
 3 A. It's not something that I've been involved
 4 with or done anything with. I would think, if
 5 anything, that might be something that the
 6 rates people may do with respect to
 7 determining cost of service issues, but it's
 8 not something that I have looked at in terms
 9 of the cost of O & M versus capital cost of
 10 our infrastructure.
 11 JOHNSON, Q.C.:
 12 Q. And would that same thing go for Mr. Gardiner
 13 and -
 14 MR. GARDINER:
 15 A. Yes.
 16 JOHNSON, Q.C.:
 17 Q. And yourself, Mr. Moore?
 18 MR. MOORE:
 19 A. Yes.
 20 MR. GARDINER:
 21 A. That's correct.
 22 JOHNSON, Q.C.:
 23 Q. Okay, and Mr. Henderson, I take it that it's
 24 well understood that any equipment and
 25 facilities that are specifically assigned by

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1 nature, by definition, that these are to serve
 2 the specific customer only, and that these are
 3 not assets of any use to any other customer,
 4 is that correct?
 5 MR. HENDERSON:
 6 A. That's why they're specifically assigned, yes.
 7 JOHNSON, Q.C.:
 8 Q. Exactly. Now do you believe, Mr. Henderson,
 9 that under a specifically assigned costing
 10 methodology, that customers who don't benefit
 11 from the specifically assigned assets should
 12 be protected or save harmless from the cost
 13 associated with these assets?
 14 MR. HENDERSON:
 15 A. I guess, I understand that specifically
 16 assignment of cost is specifically to do that
 17 so only the customer - since it's there for
 18 only one customer, that's the customer that
 19 pays for it.
 20 JOHNSON, Q.C.:
 21 Q. Yes, so you would agree that, you know, an
 22 costing methodology should assure that
 23 customers who receive no benefit from these
 24 assets are not asked to pick up charges or
 25 costs in relation to them, right?

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1 MR. HENDERSON:
 2 A. If they're specifically assigned.
 3 JOHNSON, Q.C.:
 4 Q. Right, and are you able, or is your panel able
 5 to provide assurance to the Board that the
 6 alternative methodology favoured by Vale saves
 7 small customers harmless and protects them
 8 from having to pay these amounts when we were
 9 told that this methodology will be
 10 transferring \$480,000.00 in costs to
 11 Newfoundland Power?
 12 MR. HENDERSON:
 13 A. I'm not sure I got your question.
 14 (12:45 p.m.)
 15 MR. YOUNG:
 16 Q. Mr. Chair, I'm not sure I understand the
 17 question. If I can jump in for a second, I
 18 think this line of questioning is going to
 19 cost of service methodology issues, and there
 20 have been appropriate cross-examinations on
 21 this issue, in fact, quite a bit, and there's
 22 RFIs on the record on this also. I just
 23 wonder if it's worthwhile to pursue this line
 24 of questioning further with Mr. Henderson. I
 25 mean, he's conceded the fact this particularly

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1 assigned means that customer pays. Then the
 2 real subject matter here, I think it's fair
 3 for me to say, is in the methodology as to
 4 exactly what years you use to base those,
 5 whether it's nominal dollars or real dollars.
 6 I mean, that's the nature of the dispute here.
 7 I'm not sure I follow the line of questioning
 8 here, and it's taking a fair bit of time.
 9 JOHNSON, Q.C.:
 10 Q. I'll end my questions there. That was my last
 11 question, in any event, and thank the panel.
 12 CHAIRMAN:
 13 Q. Okay. I think we're over to you, Madam
 14 Greene.
 15 GREENE, Q.C.:
 16 Q. Yes, Mr. Chair, and I'm in the hands of the
 17 panel. It is most unlikely I will finish by
 18 1:30, so I'm quite willing to start, but I
 19 doubt that I will finish by - it depends on
 20 the answers, of course, but I doubt that I
 21 will finish by 1:30.
 22 CHAIRMAN:
 23 Q. Why don't we charge ahead and see what
 24 happens.
 25 GREENE, Q.C.:

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1 Q. Okay.
 2 MR. ROBERT HENDERSON
 3 MR. DARREN MOORE
 4 MR. TERRY GARDINER
 5 CROSS-EXAMINATION BY GREENE, Q.C.:
 6 GREENE, Q.C.:
 7 Q. So with that direction, I might lead a little
 8 bit more than I might otherwise. I do have
 9 some questions first on the corporate - good
 10 afternoon.
 11 MR. GARDINER:
 12 A. Good afternoon.
 13 MR. MOORE:
 14 A. Good afternoon.
 15 MR. HENDERSON:
 16 A. Good afternoon.
 17 GREENE, Q.C.:
 18 Q. The end is in sight for us all for this panel.
 19 I do have a few questions on the structure,
 20 the current matrix organizational structure,
 21 and we've had a lot of discussion about it.
 22 One area that I did want to ask some questions
 23 on is the relationship between the Vice
 24 President of Hydro and the CEO and the Vice
 25 President of Hydro and the Board of Directors,

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1 and the Vice President of Hydro and the
 2 shareholder. So it's looking up as opposed to
 3 the discussions about looking down. Mr.
 4 Henderson, what are the types of issues or
 5 matters that you are required to go to the CEO
 6 for, for a final approval with respect to
 7 Hydro?
 8 MR. HENDERSON:
 9 A. The types of issues would be around
 10 significant investments, operating budget,
 11 significant changes with regard to operating
 12 budget, capital budget. Some items that would
 13 have broad implications to the company with
 14 respect to, I'll say, perhaps reputational,
 15 and those types of issues, items that have a
 16 broader implication for the company.
 17 GREENE, Q.C.:
 18 Q. Okay, and how - in those cases such as the
 19 operating budget, how is the direction sought
 20 and received?
 21 MR. HENDERSON:
 22 A. So with respect to the operating budget, there
 23 is an approval process that we go through in
 24 which after I have reviewed the budget, and
 25 worked through the budget with our finance

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1 team and everybody else within Hydro with
 2 budget responsibility, that would be brought
 3 to Mr. Martin, the CEO, to review and discuss
 4 and determine whether there was adjustments to
 5 be made or clarity, whatever information Mr.
 6 Martin may need before he is satisfied that
 7 it's appropriate, and once we've gone through
 8 that review process, then we would take that
 9 budget to the Hydro board for approval before
 10 it becomes the official budget for the year.
 11 GREENE, Q.C.:
 12 Q. So with respect to the operating budget, there
 13 appears to be a formal process. With respect
 14 to other matters, you have mentioned
 15 significant capital investment, that would
 16 also result in the budget, I assume?
 17 MR. HENDERSON:
 18 A. Yes, there's a capital budget approval process
 19 which would be very very similar and it just
 20 has a different time line as to when it goes
 21 to the Board of Directors, and that type of
 22 thing.
 23 GREENE, Q.C.:
 24 Q. What about less formal issues, other than
 25 budgets?

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1 MR. HENDERSON:
 2 A. The less formal issues are - that's more -
 3 it's just a regular discussion that I would
 4 have with the CEO, that we would talk about
 5 those types of things. There isn't a
 6 structure like a budgeting process around
 7 those. They just may - are items that come up
 8 from time to time.
 9 GREENE, Q.C.:
 10 Q. So it's a less formal process, I take it?
 11 MR. HENDERSON:
 12 A. Yes.
 13 GREENE, Q.C.:
 14 Q. We've had a lot of discussion around the
 15 decision to instruct TL-267, and the use of
 16 staff from Lower Churchill to actually do
 17 that, and your evidence related to your
 18 discussions with Mr. MacIsaac, Mr. Martin also
 19 gave evidence with respect to his role, and I
 20 won't go there again in the interest of time,
 21 but it appeared that Mr. Martin was involved
 22 in the actual decision of what resources to
 23 use on that project, based on his testimony.
 24 Would you agree with - can you explain how
 25 that arose?

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1 MR. HENDERSON:
 2 A. Well, it was - basically we were looking at
 3 this project and the time line that was
 4 required, that it was tightly tied to the
 5 Lower Churchill project. As people are
 6 probably aware, it's a component related to
 7 providing system stability and reliability
 8 when the HVDC connection comes in, so there
 9 was scheduling and, I guess, elements to that
 10 that the two had to work together. So we
 11 would have discussed that, myself, Mr.
 12 MacIsaac, Mr. Martin, and I would say that Mr.
 13 Humphries may have been involved with it, and
 14 we would have talked about how that could be
 15 done, and looking at what was the project
 16 execution technical service people had on
 17 their plates, and it appeared that this was a
 18 good opportunity to be able to utilize that to
 19 be the most effective in executing the
 20 project.
 21 GREENE, Q.C.:
 22 Q. So in that particular case, the CEO was
 23 involved in the decision making with respect
 24 to the use of resources for a certain project?
 25 MR. HENDERSON:

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1 A. Yes, in that particular case, because that
 2 would be an unusual case, and most of the time
 3 it's done strictly by the project execution
 4 technical service, but where this was going
 5 beyond that to involve Lower Churchill folks,
 6 then that was - you know, it involved Mr.
 7 Martin.
 8 GREENE, Q.C.:
 9 Q. Is there any guidance given to the types of
 10 issues that might arise - you characterized
 11 that one as unusual. Is there any guidance
 12 given as to when you must seek direction from
 13 the CEO other than the normal accounting ones
 14 with respect to when there's signing
 15 authority?
 16 MR. HENDERSON:
 17 A. There are no specific items, but I would - you
 18 know, from my relationship with Mr. Martin, I
 19 guess, that's become clear as to which are the
 20 ones that he needs to be involved with and
 21 which ones are not, and most of the day to day
 22 Hydro things would not involve Mr. Martin, but
 23 something that may touch on other lines of
 24 business such as that one, TL-267, certainly
 25 would.

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1 GREENE, Q.C.:
 2 Q. And what about the outages that occurred in
 3 January, 2014?
 4 MR. HENDERSON:
 5 A. So in January, 2014, that had significant
 6 impact on our customers, and impact on, I'll
 7 say, the province, and certainly Mr. Martin
 8 was involved with that right upfront. I know
 9 just - discussions around the situation would
 10 have begun fairly early once we started to
 11 have generation supply issues, that in around
 12 Christmas time in 2013, I would have been in
 13 discussion with Mr. Martin, and generally
 14 speaking, anything that has a - if there's a
 15 major system reliability risk, I would be
 16 informing Mr. Martin.
 17 GREENE, Q.C.:
 18 Q. This morning you were asked a question with
 19 respect to who would be accountable for the
 20 asset management performance for Hydro, and
 21 your response was that you would be, but can
 22 you put that in the context of your
 23 relationship at Hydro with the CEO and the
 24 Board?
 25 MR. HENDERSON:

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1 A. For asset management?
 2 GREENE, Q.C.:
 3 Q. Yes.
 4 MR. HENDERSON:
 5 A. So I report to the Board and to Mr. Martin our
 6 performance, our asset performance. I also
 7 report on our capital program execution, our
 8 maintenance program execution, all elements
 9 that are involved with operating the power
 10 system are reported to the Board and to Mr.
 11 Martin. Mr. Martin would be getting it
 12 monthly through - generally through the Nalcor
 13 leadership team, a report on what's happening
 14 at Hydro in all regards, and then the Board of
 15 Directors meetings are not as frequent as
 16 monthly, and they would also get the latest
 17 information with regard to those areas.
 18 GREENE, Q.C.:
 19 Q. But in terms of accountability overall for
 20 performance at Hydro, it would be the CEO and
 21 the Board of Directors, and you're accountable
 22 to them, was that the context of your answer?
 23 MR. HENDERSON:
 24 A. Yes, that's right. I mean, I'm accountable to
 25 the CEO, but I do attend the Hydro Board

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1 meetings and report.
 2 GREENE, Q.C.:
 3 Q. And I was going to ask that question. So you
 4 attend every Hydro Board meeting?
 5 MR. HENDERSON:
 6 A. I may not get to every one, but generally I
 7 do.
 8 GREENE, Q.C.:
 9 Q. And are you ex officio member or are you there
 10 on invitation?
 11 MR. HENDERSON:
 12 A. I would be there on invitation.
 13 GREENE, Q.C.:
 14 Q. So with respect to what is required to be
 15 moved up at CEO for final approval, other than
 16 the formal ones for the budget and capital
 17 investments, I take it that it is based on
 18 your judgment as to what needs his approval?
 19 MR. HENDERSON:
 20 A. Well, let's say it's a combined judgment
 21 because Mr. Martin - when I moved into the
 22 role, you know, I understand the areas where
 23 he has strongest interest and wants to be
 24 involved, and areas that he doesn't, and
 25 others where I'm not sure, I'll probably go to

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1 him regardless.
 2 GREENE, Q.C.:
 3 Q. You've described yourself as the single point
 4 of accountability for Hydro, all Hydro
 5 regulated operations. Does that include with
 6 respect to this general rate application and
 7 strategic policy decisions that were made in
 8 the application?
 9 MR. HENDERSON:
 10 A. I was involved with the discussions on all of
 11 those, and, yes - the answer is yes to the
 12 question.
 13 GREENE, Q.C.:
 14 Q. You would be the person to sign off on that?
 15 MR. HENDERSON:
 16 A. I would, but I would - there would be
 17 consultation with Mr. Martin on most
 18 significant issues.
 19 GREENE, Q.C.:
 20 Q. So Mr. Martin, the CEO, would also be involved
 21 and have to approve the final positions being
 22 put forward for the GRA?
 23 MR. HENDERSON:
 24 A. Not all issues, but if they were - I'll say
 25 the most significant ones he would be involved

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1 and informed on.
 2 GREENE, Q.C.:
 3 Q. And with respect to the issue of the
 4 calculation of specifically assigned charge, I
 5 understand that you would be the person as the
 6 single point of accountability for Hydro who
 7 would approve what Hydro's position is?
 8 MR. HENDERSON:
 9 A. Yes, that would be brought to my attention and
 10 we would discuss that.
 11 GREENE, Q.C.:
 12 Q. And as you've already testified, you're not
 13 aware that Hydro is changing its position with
 14 respect to the calculation of the specifically
 15 assigned charge as laid out in its
 16 application?
 17 MR. HENDERSON:
 18 A. There's been nothing brought to my attention
 19 to say we would. All that was brought to my
 20 attention was that the approach had merits and
 21 worthy of further discussion.
 22 GREENE, Q.C.:
 23 Q. Mr. Gardiner, you've testified that you were
 24 an employee of Hydro before you were
 25 transferred to Nalcor in 2011, is that

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1 correct?

2 MR. GARDINER:

3 A. 2012.

4 GREENE, Q.C.:

5 Q. 2012. Prior to your transfer, what percentage

6 of your time was spent for Hydro business

7 versus non-Hydro business?

8 MR. GARDINER:

9 A. I would say - so from Hydro versus non-Hydro?

10 GREENE, Q.C.:

11 Q. Uh-hm.

12 MR. GARDINER:

13 A. Probably 20 percent maybe, subject to check,

14 of course.

15 GREENE, Q.C.:

16 Q. And when you say 20 percent, you mean 20

17 percent non-Hydro?

18 MR. GARDINER:

19 A. Yes, between, say, 15 and 20 percent.

20 GREENE, Q.C.:

21 Q. So 15 to 20 percent?

22 MR. GARDINER:

23 A. Yes, that's what I'm thinking. That would be

24 to do - yeah, that would be around, like, CF

25 issues and things like that.

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1 GREENE, Q.C.:

2 Q. So you were primarily -

3 MR. GARDINER:

4 A. Engaged in Hydro work, yes.

5 GREENE, Q.C.:

6 Q. Right, and in 2014, what percentage of your

7 time would have been Hydro work?

8 MR. GARDINER:

9 A. 70 percent.

10 GREENE, Q.C.:

11 Q. So there hasn't been a significant change, has

12 there?

13 MR. GARDINER:

14 A. No. My function as an Engineering Manager and

15 Project Support, a lot of my time is spent in

16 Hydro supporting Hydro activities.

17 GREENE, Q.C.:

18 Q. How do you record your time, the 70 percent of

19 your time that you do for Hydro?

20 MR. GARDINER:

21 A. I complete a weekly time sheet. I track what

22 I do mostly online. Previous to that, it was

23 paper, but now every week, I submit a time

24 sheet. I record where I work, and I submit a

25 time sheet weekly.

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1 GREENE, Q.C.:

2 Q. And who do you submit that time sheet to?

3 MR. GARDINER:

4 A. Normally to Mr. MacIsaac.

5 GREENE, Q.C.:

6 Q. Mr. Henderson, you testified yesterday that

7 the supervisors are responsible for reviewing

8 the amount of time charged to a work order

9 that may involve time that gets back charged

10 to Hydro. Do you look at the time that Nalcor

11 managers spend on Hydro work, such as Mr.

12 Gardiner, to review whether their time charge

13 is appropriate?

14 (1:00 p.m.)

15 MR. HENDERSON:

16 A. No, I don't receive the time sheets. I would

17 only be alerted if there was something very

18 unusual happening.

19 GREENE, Q.C.:

20 Q. So with respect to the reasonableness of the

21 times charged in Mr. Gardiner's example, that

22 would be signed off on by Mr. MacIsaac, a

23 Nalcor employee, is that correct?

24 MR. HENDERSON:

25 A. That would be right.

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1 GREENE, Q.C.:

2 Q. And would that be the same situation with the

3 other managers in the same role as Mr.

4 Gardiner, a Nalcor manager reporting to a

5 Nalcor manager?

6 MR. HENDERSON:

7 A. Yes.

8 GREENE, Q.C.:

9 Q. Or even a Nalcor employee reporting to a

10 Nalcor manager who does work for Hydro?

11 MR. HENDERSON:

12 A. That's correct.

13 GREENE, Q.C.:

14 Q. I think here we do need to go to the

15 transcript. It's the transcript of September

16 24th, page 16. Page 16, lines 14 to 19, and

17 this was touched on a little bit this morning

18 by Mr. Coxworthy. The question was the

19 secondment of people from Hydro to the Lower

20 Churchill Development Corporation, and the

21 question was from Mr. Johnson, "to estimate

22 the numbers", and Mr. Gardiner answered,

23 starting at line 14, "There's approximately 15

24 engineering design", and I stand to be

25 corrected, but I understand there's about 15

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1 people that would be integrated, and this was
 2 a response to the question about how many were
 3 seconded, if you want to go back - that was
 4 how the conversation started. I do want to
 5 clarify with you how many people from Hydro,
 6 because this morning, Mr. Gardiner, you
 7 mentioned three -
 8 MR. GARDINER:
 9 A. In transmission there was - I think there was
 10 four overall, I stand to be corrected, but -
 11 GREENE, Q.C.:
 12 Q. Pardon?
 13 MR. GARDINER:
 14 A. I think there was four overall. There was
 15 another transmission engineer, Maria Veitch,
 16 that went over as well, and in those numbers
 17 there would have been some PNC engineering
 18 resources.
 19 GREEN, Q.C.:
 20 Q. First, on the 15 people that's there.
 21 MR. GARDINER:
 22 A. Okay.
 23 GREEN, Q.C.:
 24 Q. And it does, in fairness, it does say about
 25 being reintegrated.

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1 MR. GARDINER:
 2 A. Yes.
 3 GREEN, Q.C.:
 4 Q. I didn't know if there was a disconnect
 5 between you're going to take more people back
 6 that hadn't left you or, whatever. So how
 7 many people did--there was more than three
 8 that you mentioned this morning, wasn't there?
 9 MR. GARDINER:
 10 A. Yes.
 11 GREEN, Q.C.:
 12 Q. So let's go through. How many people first
 13 from engineering, from transmission, actually
 14 did get seconded from Hydro to Lower
 15 Churchill?
 16 MR. GARDINER:
 17 A. I don't have that number right now, Ms. Green.
 18 I can certainly get it, I mean I think there's
 19 four that I am aware of, that from our shop,
 20 from transmission, that went over.
 21 GREEN, Q.C.:
 22 Q. Okay, and the 15 that you had said was
 23 engineering design, that would have been four
 24 plus not engineering design?
 25 MR. GARDINER:

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1 A. No, no, there would have been engineering
 2 design, like for example, I'm not sure how
 3 many PNC resources went over and how many
 4 electrical resources went over and there's
 5 also a--they staffed up as well, some of them
 6 would have been Nalcor employees that they
 7 advertised and had positions that were
 8 required to support the project and those
 9 people were hired, I guess by Nalcor to
 10 support the project, and we would look at
 11 certainly, with the expertise that they have
 12 there now in particularly the DC line and the
 13 DC station, we would certainly look at
 14 probably looking at reintegrating those people
 15 back into the Hydro system, so that the
 16 expertise that they have on a go-forward basis
 17 will enable us to operate that system the best
 18 way we can.
 19 GREEN, Q.C.:
 20 Q. And I don't know if you can help us, Mr.
 21 Henderson, what I'd like to know is how many
 22 people were seconded from any department
 23 within Hydro to the Lower Churchill project,
 24 how many in total were, from the period that
 25 the project has started until now, and then

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1 the next question would be when we know the
 2 numbers, do you have any--do you know the
 3 answer to that question at this point?
 4 MR. HENDERSON:
 5 A. I don't and I know that this has been, the
 6 project really has been a live project for
 7 many years and it just didn't start with the
 8 sanction of it, there was people involved with
 9 engineering on this going back quite awhile,
 10 and so there was people there that were
 11 involved with that who have since retired. So
 12 there's been a lot of that happening over that
 13 time and there's also been positions that were
 14 advertised and people applied for, so there is
 15 a mixture of, you know, like when I hear the
 16 word "secondment", I'm not sure how many would
 17 have been said we want you to go over, as
 18 opposed to they applied, there was a vacancy
 19 and they went over.
 20 GREEN, Q.C.:
 21 Q. And I guess the issue before the--one of the
 22 issues before the Board that we're all trying
 23 to grapple with is whether the current
 24 structure provides the right resources for the
 25 regulated utility. One of the issues that has

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1 come up in the hearing is that has the
 2 specialized skills required for the regulated
 3 operations been taken out of the regulated
 4 operations and go to this Muskrat Falls
 5 project and was that a considered decision and
 6 how those skillsets were filled behind, so
 7 that's the reason I'm asking the questions and
 8 what I'm looking for would be some level of
 9 concrete information as to the specific
 10 skillsets that left Hydro that went to Lower
 11 Churchill. And then my next question would be
 12 those resources, what were they doing at
 13 Hydro? I'm sure they weren't sitting on their
 14 thumbs, and then how were those skillsets
 15 filled, so the Board can make an assessment as
 16 from the regulated operations' perspective has
 17 there been any impact on the regulated
 18 structure from that particular project, as one
 19 example of the Nalcor organizational
 20 structure. So just to put it in context
 21 because I saw Mr. Young looking quite--at me
 22 as though I--why was I asking the question.
 23 MR. YOUNG:
 24 Q. It was the level of detail I didn't think Mr.
 25 Henderson had his fingertips and that was my

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1 concern, but anyway.
 2 MR. HENDERSON:
 3 A. But what I would say is this is high level
 4 without any detailed numbers, but there aren't
 5 that many that would have been moved over.
 6 Just knowing the people that are involved, I
 7 think most of them were people who, there was
 8 job postings and they applied and they may
 9 have come from outside the company or they may
 10 have come from inside. I know there's some
 11 people who took jobs on the project and then
 12 subsequently took jobs back because they, for
 13 whatever personal reasons, decided they
 14 weren't going to stay there. There's all of
 15 those things and so there's been a lot of job
 16 postings that would enable people to, you
 17 know, look at the opportunity and take, but I
 18 think most of the folks who are over there are
 19 younger people. There's a lot of younger
 20 people, certainly younger than me, but they
 21 may have been within the first ten years of
 22 their career and are over involved with that
 23 and a lot of the more senior people remained,
 24 you know, and continue to remain in Hydro.
 25 GREEN, Q.C.:

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1 Q. All right, I will ask Hydro for an undertaking
 2 if they could provide information with respect
 3 to the people who have left Hydro to go to the
 4 Lower Churchill project, either being seconded
 5 directly or those who took another position at
 6 the time, because I understand that Mr.
 7 Henderson doesn't have the information at this
 8 fingertips.
 9 MR. HENDERSON:
 10 A. No, and the other thing I would like to say is
 11 that, you know, any vacancy that occurred was
 12 filled with qualified people, so there is, you
 13 know, that process was ensuring that we had
 14 the right qualified people to carry on the
 15 work in the area where these people may have
 16 left and most of them were in the project
 17 execution technical services area. I'm right
 18 now drawing a blank as to anybody from
 19 operations that went in.
 20 GREEN, Q.C.:
 21 Q. I think it's best if we have the information
 22 first because when you look at the numbers
 23 with the change and the complement, we also
 24 see the Hydro complement going down
 25 significantly over the period of time that

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1 Lower Churchill was--staff were ramping up, so
 2 it's a question, I think it's best if we have
 3 the information, so I would ask Hydro if they
 4 could at least review and see what information
 5 they can provide with respect to this issue.
 6 MR. YOUNG:
 7 Q. Just to be clear, if I could, Ms. Green, is
 8 the question--because it arose out of
 9 transmission and engineering people and I'm
 10 not sure whether the question is limited to
 11 that or if it's everything because this could
 12 include clerical people, totally unrelated.
 13 GREEN, Q.C.:
 14 Q. And I guess part of the problem was we heard
 15 this morning three people from engineering,
 16 previous testimony was it was 15, so -
 17 MR. YOUNG:
 18 Q. Well it was three going in one direction and
 19 15 integrated back, as I read the transcript.
 20 GREEN, Q.C.:
 21 Q. Yes, and that's what I was trying to clarify.
 22 MR. GARDINER:
 23 A. And I was talking, just for clarity, in my
 24 shop, when I was there, when Lower Churchill,
 25 I know there were three people specifically

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1 that I mentioned and there was another one
 2 that was a junior person, so I was talking
 3 specifically and I know that the list that I
 4 talked about for 15 was there's a possible 15
 5 to be reintegrated back.
 6 GREEN, Q.C.:
 7 Q. And when you read the transcript, as I said in
 8 fairness and maybe I should have done it
 9 prior, rather than save time, it wasn't clear
 10 as to whether they had left or whether they
 11 had come back because it was in context of
 12 this issue. So I would like an undertaking,
 13 if possible, at least for Hydro to review
 14 whether they can advise the Board the number
 15 of positions that were, I'll start with
 16 seconded from Hydro and you're saying that
 17 there weren't too many seconded, I gather they
 18 actually applied for positions and again, I
 19 don't know the level of difficulty in you
 20 getting this information from your records.
 21 MR. YOUNG:
 22 Q. Just to be clear that's regardless of the area
 23 in which a project they were--if they came
 24 from Hydro and went to the project?
 25 GREEN, Q.C.:

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1 Q. Yes.
 2 MR. YOUNG:
 3 Q. Okay. We can look to see if we can do that.
 4 MS. GLYNN:
 5 Q. And we will note it on the record.
 6 GREEN, Q.C.:
 7 Q. Thank you. So as I said, we may have to come
 8 back to that when we see the information.
 9 MR. GARDINER:
 10 A. I am sorry about the confusion.
 11 GREEN, Q.C.:
 12 Q. But that's the reason for the questions on
 13 this. Also with respect to resources, perhaps
 14 if we could go through the application,
 15 Hydro's application at page 2.33. If you
 16 scroll down the page, it's actually 7, line 7.
 17 We're talking about the salary budget here and
 18 changes in FTEs and we see at line, starting
 19 at line 7, an increase of 44 FTEs in 2014 over
 20 2007 and then when we go down to the next
 21 paragraph, we see for 2015, there is an
 22 increase of, in 2015 over 2007 of 78 FTEs. So
 23 that's an increase in two years of 78
 24 positions and now I wonder if we could go to
 25 RFI NLH-092, Revision 2.

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1 MR. GRAY:
 2 Q. I'm sorry, Ms. Green, can you say that again?
 3 GREEN, Q.C.:
 4 Q. It was a question from NP, sorry, NP NLH-092.
 5 MS. GRAY:
 6 Q. Thank you.
 7 GREEN, Q.C.:
 8 Q. And here this was a question that asked Hydro
 9 to break down the increase in salaries year
 10 over year from an increase in the number of
 11 positions versus the change in the salary and
 12 the benefits. So this is done in terms of
 13 salary dollars and you can see the change year
 14 over year and when you read through the
 15 wording, it does talk about how there are
 16 decreases in positions, et cetera. And if you
 17 read through, there's some explanation as to
 18 the related salaries related to the new
 19 position and what, because of the increase on
 20 the impact on the 2014 and 2015 test years, I
 21 wonder, again I'm asking Hydro for an
 22 undertaking as to whether they could provide a
 23 breakdown of the net, I guess, 78 positions
 24 that were shown in your application by
 25 position, so that there will be some

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1 indication of the areas in which the new
 2 resources were added because 78 positions is
 3 fairly significant in a test year over -
 4 MR. HENDERSON:
 5 A. We can do that.
 6 MR. YOUNG:
 7 Q. I believe we can do that, yes.
 8 MS. GLYNN:
 9 Q. Noted on the record.
 10 GREEN, Q.C.:
 11 Q. The last question with respect to the issue of
 12 resources is a request for another undertaking
 13 if the salary budget in the 2014 and 2015 test
 14 years can be broken down between union and
 15 non-union, please?
 16 MR. HENDERSON:
 17 A. Yes.
 18 MS. GLYNN:
 19 Q. Again, noted on the record.
 20 GREEN, Q.C.:
 21 Q. Turning to another topic which is the existing
 22 combustion turbines, not Stephenville and
 23 Hardwoods. If you look at the transcript on
 24 September 27th at page 130 and I don't know
 25 that you need to go there, but at that time,

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1 Mr. Henderson, you advised or stated how
 2 important the CTs are until the Muskrat Falls
 3 infeed, do you recall that discussion?
 4 MR. HENDERSON:
 5 A. Yes.
 6 GREEN, Q.C.:
 7 Q. And one of the reasons you put in a new
 8 manager with specific responsibility for the
 9 gas -
 10 MR. HENDERSON:
 11 A. That's right.
 12 (1:15 p.m.)
 13 GREEN, Q.C.:
 14 Q. In the Generation Planning Report that was
 15 filed with PR, the prudence review PUB-7, the
 16 last report that we have is a report from
 17 November 2012 and we can go to it if you would
 18 like to, but at page 31 of that report, it
 19 includes the hardwoods gas turbine until, for
 20 generation planning purposes to be available
 21 to meet load until 2025, do you recall that,
 22 Mr. Henderson?
 23 MR. HENDERSON:
 24 A. That sounds right.
 25 GREEN, Q.C.:

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1 Q. So subject to check -
 2 MR. HENDERSON:
 3 A. Sure.
 4 GREEN, Q.C.:
 5 Q. And with respect to Stephenville, Stephenville
 6 is in the generation expansion plan to be
 7 available for planning purposes until 2028,
 8 does that sound right to you?
 9 MR. HENDERSON:
 10 A. It does.
 11 GREEN, Q.C.:
 12 Q. Now I'd like to go to information item No. 9
 13 in this proceeding. So you would agree that
 14 the combustion turbines continue to be
 15 significant assets for Hydro, even beyond the
 16 interconnection with Muskrat Falls, is that
 17 correct? Is that how I am to understand that
 18 November 2012 planning report?
 19 MR. HENDERSON:
 20 A. They are basically being maintained out to
 21 that period in time, the work that we were
 22 doing through the capital investment and
 23 ongoing capital investment would see that they
 24 continued to operate reliably out to that
 25 point in time.

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1 GREEN, Q.C.:
 2 Q. Because they are being used when they do
 3 generation adequacy and to determine when the
 4 reserve criteria is coming close to being
 5 exceeded, is that correct?
 6 MR. HENDERSON:
 7 A. That's right. The only reason I just, when we
 8 get out past the interconnection of the, with
 9 Labrador, with the island, we will be
 10 reviewing our generation planning criteria and
 11 I think that's something that we've indicated
 12 previously to the Board and so whether those
 13 two combustion turbine plants continue or the
 14 need to be replaced into the future, will all
 15 be determined based on that review of what's
 16 the appropriate criteria we should be applying
 17 once we're interconnected.
 18 GREEN, Q.C.:
 19 Q. And when do you hope to have that criteria
 20 finalized?
 21 MR. HENDERSON:
 22 A. I'd have to defer you to Mr. Humphries, I'm
 23 not recalling, but prior to the
 24 interconnection, but I'm not sure which year,
 25 whether it was 2016 or '17 that commitment was

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1 made, but it's certainly before, well in
 2 advance of the interconnection so we can make
 3 a determination of the things we should be
 4 planning for.
 5 GREEN, Q.C.:
 6 Q. Okay. So if we look at information item No.
 7 9, are you familiar with this report, Mr.
 8 Henderson?
 9 MR. HENDERSON:
 10 A. Yes.
 11 GREEN, Q.C.:
 12 Q. It was filed in September of this year in
 13 response to one of the Board's directions in
 14 its interim report. Could we please go to
 15 page 10? So this report talks about the
 16 performance of all of your generation units on
 17 the interconnected system for the year, July
 18 1, 2014 to June 30, 2015 in comparison to the
 19 previous year and in comparison to what you
 20 refer to in that table as base planning
 21 assumptions as your five year average of
 22 performance for the units, is that correct?
 23 MR. HENDERSON:
 24 A. That's correct.
 25 GREEN, Q.C.:

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1 Q. The sensitivity planning assumption, can you
 2 explain what that is?
 3 MR. HENDERSON:
 4 A. In order to determine, I guess, how sensitive
 5 our needs are with regard to performance of
 6 these units, we've--first of all, on a base
 7 case situation we would apply those base
 8 planning assumptions on the reliability of the
 9 units. And then we would do a second run, if
 10 you like, or modelling of the power system if
 11 the performance of those units are at that
 12 higher level. So that if the Holyrood plant
 13 was 11.64 forced outage rate and the Hardwoods
 14 and Stephenville gas turbines were 20.62 on a
 15 UFOP and the Holyrood combustion turbine was
 16 at 10. You would run that to see if that, if
 17 we get to that sensitivity level, whether that
 18 would drive a need for generation. And if it
 19 hit that sensitivity area, then that would
 20 cause us to--with those sensitivities, the
 21 results indicated that we were not going to
 22 meet the criteria, in particular with this
 23 would be the 2.8 hours per year LOLH. Then we
 24 would be looking at what actions we should be
 25 taking to perhaps add additional generation or

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1 other actions that we might taken in order to
 2 bring the reliability level down below the 2.8
 3 hour target.
 4 GREEN, Q.C.:
 5 Q. And if we look just at the gas turbines for a
 6 moment, we see that their performance in the
 7 12 month period ending June 30, 2015 is not
 8 consistent with its performance the year
 9 before. In fact, it's doubled and nor--
 10 similarly it's more than two times what the
 11 five year average was, is that correct?
 12 MR. HENDERSON:
 13 A. The base planning assumption, I'm not sure if
 14 that's a five year average, but that's an
 15 assumption that's been used, but it may have
 16 been generated from a five year average from
 17 some time in the past.
 18 GREEN, Q.C.:
 19 Q. And it does say when it goes down to explain
 20 base planning assumptions the way I understood
 21 it, it was a five year average. If you look
 22 here--you just had it, Ms. Gray and you sent
 23 up again--base planning assumptions are
 24 indicators used. It's a historic average of
 25 the actual performance of the unit over five

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1 years, 2008 - 2012. So, it's a five year
 2 historic average, as I understood it from your
 3 document.
 4 MR. HENDERSON:
 5 A. Right, but my only reason for saying that it
 6 was a choice of 2008 - 12. It isn't like the
 7 most recent five year average. I just wanted
 8 to point that difference. It was from a point
 9 in time that that number was picked.
 10 GREEN, Q.C.:
 11 Q. And you're counting the most recent year which
 12 ended June 30 with the previous year's
 13 performance.
 14 MR. HENDERSON:
 15 A. Yes.
 16 GREEN, Q.C.:
 17 Q. Okay. And in looking at the report, I would
 18 like to ask you your level of comfort that
 19 these two gas turbines, given their
 20 performance in the last two years in
 21 particular, and given the increasing age and
 22 level of comfort or reassurance that you can
 23 give to the Board that these units, at least
 24 for now, are being planned to be in existence
 25 for 2025 and 2028?

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1 GREEN, Q.C.:
 2 Q. Well, I guess first of all, we've put in the
 3 position that Ms. Green mentioned, the general
 4 manager responsible for the gas turbines,
 5 along with engineering support and specialist
 6 support to address the needs of these units to
 7 ensure their ongoing reliability. So, there's
 8 been a large amount of work done in the last
 9 year in addressing critical spares, repeat
 10 failures that we've had. Identifying the
 11 problems that we've experienced with these
 12 units to make sure that we're addressing them
 13 appropriately, in both our maintenance program
 14 and in our capital program. And so there's
 15 been a number of enhancements made there in
 16 the spares, in the completion of maintenance
 17 and also with regard to both of those unites,
 18 they both have had significant capital
 19 investment in the last while. And
 20 Stephenville gas turbines currently in that
 21 capital refurbishment stage and it's in a
 22 three year program which I think 2016 is the
 23 last year of that three year period of
 24 refurbishment for it. The Hardwoods unit has
 25 had that refurbishment. And so all of those

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1 efforts are going to make a difference in the
 2 experience, performance that we've had with
 3 those in the last few years. And we've
 4 specifically addressed the specific issues
 5 that we've had with those to indeed address
 6 those particular problems. In the last year
 7 there was significant issues with respect to
 8 the fuel lines that were put in place as part
 9 of the refurbishment program of the units.
 10 There were new fuel lines brought in and those
 11 fuel lines did not prove adequate. And so
 12 they have been replaced and we've implemented
 13 a much more robust fuel line, type of fuel
 14 line for the units to ensure that they will
 15 operate reliably and take care of that issue.
 16 We, recently, had an issue with a--we also had
 17 a problem with the fuel control valves. And
 18 again with those, they were new valves that
 19 were brought in part of the refurbishment
 20 program and they had operating issues which
 21 we've addressed and dealt with. So, they
 22 were, again, you know, in terms of--you
 23 suggest that these are more like the bathtub
 24 curves, but there were issues with the new
 25 equipment that we have investigated and

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1 addressed. So, it's both the fuel lines and
 2 the fuel control valves, were the items that
 3 were causing the significant amount of impact
 4 that we have addressed. And what we've
 5 learned from that work at Hardwoods, we've
 6 certainly have applied to Stephenville so that
 7 we won't have a repeat of some of the issues
 8 that we have had at Hardwoods and the
 9 Stephenville unit. So, all those items
 10 combined will address the reliability concerns
 11 that we've had and we'll continue to be
 12 monitoring the units and addressing any age
 13 related issues to ensure that they are
 14 addressed before they become a problem in
 15 terms of these units performing when they're
 16 required.
 17 GREEN, Q.C.:
 18 Q. Are both units now fully operational at their
 19 maximum capacity?
 20 MR. HENDERSON:
 21 A. The Stephenville gas turbine right now is out
 22 on the capital project for its refurbishment.
 23 And it will--I think the latest I have is it
 24 would be back in service the 14th or 13th or
 25 November. The Hardwoods plant right now is

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1 not available today because we're doing work
 2 on the electrical interconnection
 3 infrastructure there at the Hardwoods station,
 4 but the unit itself, the turbine itself, those
 5 are available once that electrical connection
 6 work is completed. There's two engines in
 7 each plant. At Hardwoods we have one of the
 8 engines right now is out for overhaul and this
 9 was just approved by the Board last week to
 10 proceed with that overhaul and that unit is
 11 now on its way to Scotland for an overhaul.
 12 And it will be back before--again around the,
 13 I think it's around the 20th of November we
 14 expect to have it back, but we do have a
 15 loaner turbine that we have borrowed and are
 16 paying for so we have that capability in the
 17 Hardwoods unit. So, it's a 19 megawatt
 18 turbine as opposed to the 25 megawatt turbine
 19 that we normally have in place. So, we do
 20 have de-rating on that plant while that one is
 21 there, but we'll retain that turbine in place
 22 until the refurbished one comes back. That
 23 particular turbine was damaged in a fire that
 24 we had related to a part of the fuel system on
 25 Hardwoods, I'm not recalling the exact

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1 element, but that happened back on May 1st and
 2 that has been basically corrected and we've
 3 looked into the issue there in terms of
 4 finding the problem and we've corrected the
 5 problem with that particular--again, it was a
 6 valve in the fuel system.
 7 GREEN, Q.C.:
 8 Q. So I take it from your answer that the litany
 9 of woes that Hydro has experienced with these
 10 gas turbines and it is quite a litany of woes
 11 over the past two years are all behind us?
 12 Murphy's law is done with respect to the gas
 13 turbines?
 14 MR. HENDERSON:
 15 A. I guess there's no sure things certainly, so
 16 there's no guarantees, but what I can assure
 17 you is there's been a large amount of work
 18 done on these units. The general manager has
 19 been very, very relentless in making sure that
 20 everything is done and done right, very, very
 21 committed employee that we've put on this and
 22 so I'm confident that the work that she's
 23 doing is going to make a difference.
 24 CHAIRMAN:
 25 Q. You forgot O'Brien's law.

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1 GREEN, Q.C.:

2 Q. Oh, I'm not familiar with that one, you'll

3 have to explain -

4 CHAIRMAN:

5 Q. Murphy was an optimist.

6 GREEN, Q.C.:

7 Q. I should have used O'Brien then with respect

8 to the gas turbines. I have to finish one

9 topic which was back to the organizational

10 structure. Your interaction with the

11 shareholder with government, you're the vice-

12 president responsible for Hydro, can you--and

13 I should ask the Chair, it's now 1:30.

14 CHAIRMAN:

15 Q. Well I guess it's a good--do you want to

16 finish this question or is this -

17 GREEN, Q.C.:

18 Q. Yes, I should have asked ahead, I'm sorry. We

19 could finish this area of the structure

20 probably.

21 CHAIRMAN:

22 Q. Sure.

23 (1:30 p.m.)

24 GREEN, Q.C.:

25 Q. How you interact with the shareholder, the

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1 government, with respect to Hydro matters?

2 MR. HENDERSON:

3 A. With respect to Hydro matters I don't have a

4 lot of interaction with the provincial

5 government, it's on a more of an exceptional

6 basis, for instance when we had the major

7 outages, I went over and I spoke to the deputy

8 minister of Natural Resources and talked about

9 what was involved with that. We went over

10 jointly with Newfoundland Power. There was

11 other items of that nature that they may

12 inquire about that I would be involved with

13 where a minister may get inquiries about

14 something, they would put the question over to

15 us and we would provide some clarity on those

16 types of things. That would be--most of my

17 involvement would be that type of interaction.

18 GREEN, Q.C.:

19 Q. We heard evidence from Mr. Fagan yesterday

20 that there are regular meetings with

21 government on a very regular basis that he

22 attends when rates are discussed and that an

23 individual from shareholder relations attends.

24 Are you familiar with those meetings?

25 MR. HENDERSON:

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1 A. I'm aware that those meetings are happening.

2 I wasn't aware that they were that regular,

3 but I know that there have been--there's

4 ongoing updates in terms of some of the work

5 that would be going on with respect to the

6 integration. This would be the areas where

7 the, sort of the rates aspect of that.

8 GREEN, Q.C.:

9 Q. And the purpose of the meetings, do you know

10 what the purpose of the meetings is? Do they

11 report back to you, for example?

12 MR. HENDERSON:

13 A. The purpose of the meetings is to keep the

14 government informed, those activities that are

15 related to the ongoing planning and

16 integration work because with the change in

17 the power system with the interconnection,

18 it's going to significantly change the way the

19 power system operates and the way that the

20 company will interact externally and so

21 there's items that the provincial government

22 needs to say informed with, because they are

23 looking at this in terms of the changes and

24 what it may mean that they might have to

25 implement with respect to legislation and that

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1 sort of thing around the Lower Churchill. So

2 they want to be kept informed of the work that

3 we're doing in regards to that and so there

4 are those meetings, you know, and that jogged

5 my memory is that there is a periodic meeting

6 that I would be intending where somebody from

7 Natural Resources would be there, which is

8 around the integration activities.

9 GREEN, Q.C.:

10 Q. So those meetings, to your knowledge, that Mr.

11 Fagan was discussing that he attends when

12 there's a rates' issue, are to do with the

13 integration of the new Muskrat Falls project,

14 is that correct?

15 MR. HENDERSON:

16 A. That would be an aspect of it.

17 GREEN, Q.C.:

18 Q. Thank you, Mr. Henderson. I am going to

19 another line of questioning, so I leave it in

20 your hands if I carry on or finish.

21 CHAIRMAN:

22 Q. I think we want to adjourn, don't we? How

23 much longer do you expect to be with your--in

24 total? Can you give us an estimate?

25 GREEN, Q.C.:

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1 Q. I'm going to the area of asset management
 2 reliability.
 3 VICE-CHAIR WHALEN:
 4 Q. 10 minutes.
 5 CHAIRMAN:
 6 Q. I was told you got 10 minutes.
 7 GREEN, Q.C.:
 8 Q. To finish up or just available now?
 9 CHAIRMAN:
 10 Q. Well you can take it up with the Vice-
 11 Chairman, not with me.
 12 GREEN, Q.C.:
 13 Q. Well let's see, we'll have a go, I'll talk
 14 faster. I found out earlier, though, that
 15 that didn't help when I tried to short-cut.
 16 In your previous evidence, Mr. Henderson, you
 17 did talk about asset, the preventative
 18 maintenance and the corrective maintenance and
 19 the role of your asset managers and your work
 20 execution people. I wonder if we could go to
 21 the transcript of September 23rd, please. At
 22 page 47, first you acknowledge in response to
 23 a question from Mr. O'Brien that there are no
 24 existing guidelines for the asset managers and
 25 the execution people to use in making a

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1 decision as to whether something should be
 2 deferred or not. That's at lines 21 to 24, is
 3 that--then the next discussion, I'd like to
 4 take you to page 58, and there were some
 5 questions to you and there was back and forth
 6 as to how they exercised their judgment, you
 7 advise that these are very knowledgeable
 8 people who know the equipment, they know what
 9 they're looking at because they're familiar
 10 with the equipment. And if you look at page
 11 58, lines 12 to 19, you were asked, the
 12 question was why there wouldn't be guidelines
 13 and you explained that they're familiar with
 14 it, and then you go down to talk about how
 15 they would be expected to make the decision
 16 and again if you want to take time to refresh
 17 your memory, but subject to check, you said
 18 that they would be expected to do a full
 19 analysis and assessment of the risks involved
 20 in delaying the preventative maintenance in
 21 the context of other work that was required
 22 and to make an informed decision. My question
 23 is, with respect to the analysis that you
 24 expect your managers to do, because you
 25 phrased it in terms of an expectation, to your

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1 knowledge do they take minutes or record the
 2 decisions of the analysis of the risk of the
 3 assessment when they agree to defer
 4 maintenance, preventative maintenance?
 5 MR. HENDERSON:
 6 A. What I would say is that what the expectation
 7 is, is for them to document it in a form which
 8 would explain why the change is being
 9 proposed, what the risks are associated with
 10 the proposed change, so that there is a
 11 written record of that decision. That wasn't
 12 being done. Before it was done on the basis,
 13 as I explained with these people getting
 14 together and making the decision and then
 15 going ahead and executing that, but what we've
 16 been looking for now is getting a document
 17 with those changes so that there is a record
 18 of the changes. And, you know, this goes back
 19 to we are now tracking on a weekly basis how
 20 well things are going with respect to the
 21 maintenance and getting it, following in
 22 accordance with the plan. We also and through
 23 the chief operating officer in his role, is he
 24 is working with them to ensure good
 25 documentation of any changes, so that on a go-

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1 forward basis, it's documented and a proper
 2 risk assessment is done, the risks are
 3 identified and understood.
 4 GREEN, Q.C.:
 5 Q. So it wasn't clear from the transcript I took
 6 you through that this is a new requirement, so
 7 at the time we had the--before the outages in
 8 2014, was there any written--I understood from
 9 your answer just then there was no written
 10 record of this decision-making process by the
 11 asset manager in the plan or in deferring?
 12 MR. HENDERSON:
 13 A. No, it would just be the results would have
 14 been put into the maintenance management
 15 system, the results of it, and that would be
 16 it. There was no meeting--the meetings were
 17 held, but not documented.
 18 GREEN, Q.C.:
 19 Q. Okay. And you've mentioned there is a
 20 template now for them to record their
 21 assessment?
 22 MR. HENDERSON:
 23 A. There is, the chief operating officer, Mr.
 24 Crosbie, is working with us, so right now
 25 those types of--anything, those kinds of

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1 decisions now would be documented in a form
 2 that would ask the right questions in terms of
 3 the impacts and risks.
 4 GREEN, Q.C.:
 5 Q. So a form has been developed and it is in use?
 6 MR. HENDERSON:
 7 A. Well I'm not sure, I haven't seen the form
 8 because there hasn't been any brought forward
 9 to me at this point, in terms of deferring
 10 maintenance, but I'm going to ask Darren, he
 11 might--because he would be one of the people
 12 that would be right on the frontline in terms
 13 of assuring that's documented, so maybe you
 14 can just explain where we are with that.
 15 MR. MOORE:
 16 A. Yes, that's correct, there is a form under
 17 development, I'll say the form is draft right
 18 now, but would be utilized if, like I say,
 19 there is no, we've been tracking our
 20 maintenance on a weekly basis and identifying
 21 any areas of, where we may not have met the
 22 plan for a particular week, but would
 23 implement a recovery plan, you know, before
 24 the winter ready date or before year end to
 25 insure we recover. So as it stands right now,

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1 there is no change on the annual work plan
 2 that would need to be documented on that form,
 3 but we have an asset owner's technical council
 4 in place which are all the managers throughout
 5 Hydro who are accountable for, you know, their
 6 portion of the assets for managing those
 7 assets and we are, we do have a form and a
 8 draft procedure in place now through that
 9 council that we'll all use consistently
 10 throughout Hydro, but we haven't had the
 11 opportunity yet or the requirement, shall we
 12 say, to document any such decisions on that
 13 form.
 14 GREEN, Q.C.:
 15 Q. And has it been sent out to these people and
 16 have they been trained on it?
 17 MR. GARDINER:
 18 A. All the people that are accountable for those
 19 changes would be well informed with respect to
 20 what would be required for documentation, if
 21 required, if there was a change that needed to
 22 be documented.
 23 GREEN, Q.C.:
 24 Q. So it's actually out with your staff for use,
 25 if needed?

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1 MR. GARDINER:
 2 A. The managers, themselves, who are accountable
 3 for the asset are aware of the form.
 4 MR. HENDERSON:
 5 A. Just the, there's no changes happening without
 6 the managers knowing.
 7 MR. GARDINER:
 8 A. Right.
 9 GREEN, Q.C.:
 10 Q. And I get that, I'm just wondering is the form
 11 actually out there for use and I'm still now
 12 sure. They're aware of it, but are they going
 13 to be required to use it and is it out and
 14 readily available?
 15 MR. HENDERSON:
 16 A. They are required to use it.
 17 GREEN, Q.C.:
 18 Q. Okay, now prior to the outages in 2014, there
 19 was no record kept for deferral of
 20 maintenance--for the analysis of the decision
 21 to defer and I understood from your previous
 22 testimony, Mr. Henderson, that you received
 23 prior to 2014, monthly reports on the status
 24 of annual work plan items, is that correct?
 25 MR. HENDERSON:

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1 A. So it was a verbal update that I was getting
 2 with respect to the maintenance, execution and
 3 any issues or concerns were tabled at that
 4 time.
 5 GREEN, Q.C.:
 6 Q. And when was the practice changed to from a
 7 verbal update monthly to -
 8 MR. HENDERSON:
 9 A. We changed that in 2014.
 10 GREEN, Q.C.:
 11 Q. Okay, after the outages?
 12 MR. HENDERSON:
 13 A. Yes.
 14 GREEN, Q.C.:
 15 Q. I wonder if we could go, please, to PR-PUB-
 16 169, Revision 1. This was the backlog for the
 17 prevention of maintenance for terminal station
 18 transformers. I understood from your prior
 19 evidence that in about 2010 or so, Hydro had
 20 developed a five-year plan to catch up with
 21 this maintenance, is that correct?
 22 MR. HENDERSON:
 23 A. Sorry, I'll defer to Darren.
 24 MR. MOORE:
 25 A. That's correct, yes, six-year plan starting in

1 2010.
 2 GREEN, Q.C.:
 3 Q. Okay, and am I correct in the reading of this
 4 that with respect to transformers, that in
 5 fact your performance would have deteriorated
 6 from the time you developed a plan to, we see
 7 in 2013 there was 27 backlogged?
 8 MR. MOORE:
 9 A. The numbers there are the actual numbers that
 10 were backlogged each year.
 11 GREEN, Q.C.:
 12 Q. So instead of catching up with your backlog,
 13 it increased after you developed your plan?
 14 MR. MOORE:
 15 A. In 2013 which was year four of the six-year
 16 recovery program and we're still, I'll say
 17 we're in late 2015 right now and will be fully
 18 recovered at the end of this year as per our
 19 six-year plan, but in 2013, I agree that
 20 number is higher than we would have liked four
 21 years into our plan with respect to catching
 22 up on the backlog or our recovery program for
 23 transformers. Now having said that, in 2013
 24 we were faced with a huge volume of break-in
 25 work that took away our existing resources to

1 committed to achieving our six-year objective
 2 by the end of 2015.
 3 GREEN, Q.C.:
 4 Q. And then, of course, we had the outages in
 5 2014 with Liberty's report and the Board's
 6 report and the Board's direction for you to
 7 catch up your maintenance, which in fact you
 8 were pretty much on target to have it all
 9 completed for the hiring of additional
 10 resources, including internal and external, is
 11 that correct?
 12 MR. MOORE:
 13 A. That's correct, the June 2nd reports that we
 14 submitted to the Board in 2014 outlined a very
 15 specific plan to finish off the overdue
 16 maintenance by the end of 2015.
 17 GREEN, Q.C.:
 18 Q. Which included additional resources being
 19 hired?
 20 MR. MOORE:
 21 Q. That's right.
 22 GREEN, Q.C.:
 23 Q. But you didn't see fit to do that prior to
 24 2013?
 25 MR. MOORE:

1 focus on more higher priority work for our
 2 customers. Some examples would be the winter
 3 storm out in Holyrood in January 2013, which
 4 took away resources from working on
 5 transformers that are indicated there. There
 6 was some issues that came out of that storm
 7 that we had to work on to ensure that we,
 8 ensure the integrity of the Holyrood terminal
 9 station after that outage, such as recoating
 10 some of the components to make them more
 11 resilient to, if any future storms come. We
 12 also had an unbudgeted capital project happen
 13 that year to completely replace the alternator
 14 at the Hardwoods gas turbine, it drew upon
 15 similar resources. That's a couple of
 16 examples of the very big work items, I guess,
 17 that drew upon our existing resources that we
 18 determined at the time, as a considered
 19 decision, were of a higher priority and more
 20 important for our customers at that time.
 21 Recognizing that we were four years into our
 22 six-year plan, we knew our resources had to
 23 move to that more higher priority, more
 24 important work, but, you know, still fully
 25 recognize that we were wanting to and fully

1 A. Prior to that year we were very committed to
 2 the most highest priority work for our
 3 customers and I had just explained some of the
 4 significant items that we were faced with in
 5 2013 and being very conscious of being, you
 6 know, committed to least cost service as well,
 7 we prioritized the work and looked at what was
 8 most important, being very conscious of
 9 budget, as well as completion of work at the
 10 same time and getting the right balance and
 11 making a decision that well those high
 12 priority items, some of which I just
 13 mentioned, needed the attention of our
 14 resources for our customers.
 15 GREEN, Q.C.:
 16 Q. But Hydro was unable to provide any written
 17 documentation of the analysis, was it, with
 18 respect to that assessment of priority?
 19 MR. MOORE:
 20 A. There were very, you know, considered
 21 decisions which involved all the key managers
 22 and consultation with our engineering group
 23 and with our system operations' group, but
 24 they weren't documented on a--documentation is
 25 not on a specific form prior to that time, no.

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1 GREEN, Q.C.:

2 Q. Okay, and just to put this in context, you

3 have 105 transformers, don't you?

4 MR. MOORE:

5 A. That's right.

6 GREEN, Q.C.:

7 Q. Okay, so the last question, or I think the

8 last area for certain is PR-PUB-167, the same

9 information for the breakers. And subject to

10 check, Mr. Moore, you have 50 air blast

11 circuit breakers?

12 MR. MOORE:

13 A. At the time, prior to 2014, I believe it was

14 63 and that number is somewhat less now

15 because we've been in a replacement program

16 for our air blast circuit breakers.

17 GREEN, Q.C.:

18 Q. Okay. So again, we see your five-year plan to

19 have it completed was not achieved with

20 respect to the circuit breakers; in fact,

21 backlogs were increasing by 2013?

22 MR. MOORE:

23 A. Again, yes, those numbers are showing the same

24 trend that we seen for our power transformers.

25 GREEN, Q.C.:

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1 Q. So we don't, there's no additional explanation

2 you'd like to provide with respect to the

3 backlogs for the breakers, is there, than we

4 just heard on -

5 MR. MOORE:

6 A. No, other than the same resources that were

7 taken away on higher priority work would have

8 been working on air blast circuit breakers, as

9 well as power transformers, so the same

10 resource pool.

11 GREEN, Q.C.:

12 Q. And now, Mr. Henderson, you said there's a new

13 system in place to actually monitor backlogs,

14 I understood from earlier today.

15 MR. HENDERSON:

16 A. Well the backlogs were monitored before at the

17 scheduler level, so the folks who are doing

18 the work planning were monitoring backlogs.

19 What we have now is we're getting a weekly

20 report on progress on the annual work plan and

21 how much--are we achieving what we set out to

22 achieve in terms of our annual work plan.

23 GREEN, Q.C.:

24 Q. And that's what I meant, it's a higher level

25 of scrutiny or review, I would call it.

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1 MR. HENDERSON:

2 A. Yes.

3 GREEN, Q.C.:

4 Q. And my very last question, is there anything

5 new on the acquisition of the twin assets that

6 was supposed to have happened at the end of

7 2014?

8 MR. HENDERSON:

9 A. Is there any -

10 GREEN, Q.C.:

11 Q. In the application, it said it was expected to

12 be completed by the end of 2014.

13 MR. HENDERSON:

14 A. Well right now we're still working through

15 with a purchase arrangement with Wabush Mines,

16 because Wabush Mines owns the land in which

17 the Wabush terminal station is on, and Wabush

18 Mines are in bankruptcy protection, and so

19 it's causing some delays in getting clearance

20 to complete the purchase of the land.

21 GREEN, Q.C.:

22 Q. And any estimate of time?

23 MR. HENDERSON:

24 A. No, I don't have, other than there has been an

25 exchange of documents and I think right now

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1 we're waiting to hear back from them. Perhaps

2 we might be able to get it done before the end

3 of the year, because most of the documentation

4 is done, it's just a matter of getting the

5 right people to approve it from the Wabush

6 Mine side.

7 GREEN, Q.C.:

8 Q. And that will require an application before

9 the Board for the acquisition of the assets,

10 is that correct?

11 MR. HENDERSON:

12 A. That's correct.

13 GREEN, Q.C.:

14 Q. Thank you very much. We can all now enjoy

15 Thanksgiving, perhaps a bit more for the panel

16 anyway to be off, although I guess Mr.

17 Henderson, Mr. Moore, we see you again, don't

18 we. So, Mr. Gardiner, you have a happy

19 Thanksgiving.

20 MR. GARDINER:

21 A. Thank you, Ms. Green, very much, and to the

22 Board, thank you.

23 GREEN, Q.C.:

24 Q. Thank you, Mr. Chair and the Commissioners for

25 your indulgence, but I did manage to finish.

1 MR. HENDERSON:
 2 A. You did, thank you very much.
 3 CHAIRMAN:
 4 Q. So we are finished now until, we have an
 5 interregnum until the 19th of October, is that
 6 correct? Monday, a week from Monday coming?
 7 MS. GLYNN:
 8 Q. Mr. Chair, any questions -
 9 CHAIRMAN:
 10 Q. Oh, I'm sorry, I forgot about you guys. You
 11 don't have any questions, do you?
 12 MR. CASS:
 13 Q. No questions.
 14 VICE-CHAIR WHALEN:
 15 Q. I guess not.
 16 CHAIRMAN:
 17 Q. So we're adjourned for Monday week.
 18 MS. GLYNN:
 19 Q. Again, any re-direct? I'm assuming not.
 20 CHAIRMAN:
 21 Q. Yeah, who do I go to re-direct for you guys,
 22 I'm sorry, Mr. Cass, it's -
 23 MR. CASS:
 24 Q. There is none, sir, thank you.
 25 CHAIRMAN:

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 8th 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 8th day of October, A.D., 2015
 12 Judy Moss

1 Q. I'm suffering from extreme hunger, it's
 2 affected what's left of my brain.
 3 MS. GLYNN:
 4 Q. So we are on a break until October 19th.
 5 CHAIRMAN:
 6 Q. Okay, thank you very much.
 7 JOHNSON, Q.C.:
 8 Q. Thank you.
 9 Upon conclusion at 1:53 p.m.

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