



COMMISSION OF INQUIRY RESPECTING THE MUSKRAT FALLS PROJECT

Transcript | Phase 2

Volume 47

Commissioner: Honourable Justice Richard LeBlanc

Tuesday

4 June 2019

CLERK (Mulrooney): All rise.

This Commission of Inquiry is now open.

The Honourable Justice Richard LeBlanc
presiding as Commissioner.

Please be seated.

THE COMMISSIONER: All right.

All right, you remain under oath at this time, Mr.
Carter.

And we'll begin examination by counsel now.

Province of Newfoundland and Labrador.

MR. RALPH: Thank you, Commissioner.

Good morning, Mr. Carter.

MR. CARTER: Good morning.

MR. RALPH: As you know, my name is Peter
Ralph and I am counsel for the Government of
Newfoundland and Labrador. And, of course,
you and I work together on this Inquiry. You are
an advisor –

CLERK: Can you turn on your mic, please?

MR. RALPH: You are an advisor on my work
with regard to this Inquiry.

And I just want to ask you some questions about
how the Oversight Committee operates and
about your job. And, I guess, how often do you
have – does the Oversight Committee have
meetings?

MR. CARTER: Generally on a monthly basis.

MR. RALPH: So there's scheduled monthly
meetings. Is that correct?

MR. CARTER: That's correct.

MR. RALPH: And the information that you
consider at those meetings, can you describe that
for the Commissioner?

MR. CARTER: So the information that would
inform each meeting would be information that I

am reviewing within the data room for the
project, as well as information that's being
provided for the purpose of the upcoming
meeting with the Oversight Committee.

MR. RALPH: Now, perhaps we can go to
Exhibit P-04002?

THE COMMISSIONER: Okay, that would be
at tab 55.

MR. RALPH: And scroll down to, perhaps,
page 2 or 3.

Okay, right – stop right there. I'm not going to
go in depth on this, but perhaps you can identify
this document.

MR. CARTER: Yeah, so this would've been
for an Oversight Committee meeting, prepared
for that purpose by the Nalcor project team. It
has a date of March 29, 2019, so it would've
been a presentation deck prepared for our
meeting which would be taking place at – I
believe it would've been an April 4 date, if my
recollection serves me correctly.

MR. RALPH: And so how many documents do
you get from Nalcor for the purpose of the
meeting?

MR. CARTER: There's generally, you know,
anywhere from probably seven to eight key
documents that I review within the data room.

MR. RALPH: But how many documents do
you receive that are specifically for the oversight
meeting?

MR. CARTER: Okay, so for the Oversight
Committee meeting itself, I would receive a
document, such as this one for power
development, which is the generation side of the
project, and one as well for power supply, which
is the transmission side of the project.

MR. RALPH: And perhaps, generally, you can
describe what's in these documents.

MR. CARTER: Generally it's, you know, an
update in terms of progress that has been
achieved during the month for the reporting
period and it's being examined. It contains
information in terms of safety statistics. It would

also include information on various project milestones, current state of construction and activity in that particular month.

It would also include updates in terms of cost of the project, contingency consumption, you know. And these would be, like, kind of the main things that you would see there – schedule.

MR. RALPH: And from your perspective, is there sufficient information in that document or the two documents that you get, to enable you to do your job and the committee to do its job?

MR. CARTER: I believe it does contain that information.

MR. RALPH: So you receive – I think at Exhibit 04004 – no, I'm sorry, 04003 –

THE COMMISSIONER: Tab 56.

MR. CARTER: Tab 56.

MR. RALPH: – again, go to the third page.

MR. CARTER: Correct. Okay.

MR. RALPH: So the first document we looked at was a report on generation and this one is on transmission.

MR. CARTER: Correct.

MR. RALPH: And so would the information in that be similar?

MR. CARTER: Yes, it would.

MR. RALPH: Now, there was, in the Grant Thornton report – you've read that, you're familiar with the report, especially on construction?

MR. CARTER: Yes, I am.

MR. RALPH: They identified issues with regard to reporting of the forecast final cost.

MR. CARTER: Correct.

MR. RALPH: That they suggested there were times when there were new forecast final costs being developed by Nalcor that weren't

communicated with the Government of Newfoundland and the Oversight Committee. Did you understand that?

MR. CARTER: Yes, I did.

MR. RALPH: And do you feel that the reports, as you get them now, you can deal with that issue?

MR. CARTER: Yes, I do.

MR. RALPH: And you feel like you're getting up-to-date forecast final costs?

MR. CARTER: Yes, I am.

MR. RALPH: Now, I understand there are some redactions in both these documents that have been exhibited. And I understand those redactions are – you don't have to look at them right now, but I understand those redactions were suggested and accepted. They were suggested by Nalcor and accepted by the Commission. Is that your understanding?

MR. CARTER: Yes, that's my understanding.

MR. RALPH: Okay.

And do you appreciate – do you appreciate the necessity for those redactions in terms of commercial sensitivity?

MR. CARTER: I do.

MR. RALPH: Now, I understand you also prepare a report for the committee. Is that correct?

MR. CARTER: That's right.

MR. RALPH: And what goes into that report?

MR. CARTER: That report would include a synopsis of all the information that I've reviewed in preparation for the committee meeting. So I would be reviewing documents that are in the data room that are available to the committee. And I would also be reviewing a document – this document here, as well as any other communications that I would've had verbally or, you know, by email exchange with, you know, project team members, and

incorporate that information and provide an update to the committee during each of the committee meetings, in terms of my observations.

MR. RALPH: Now, you've spoken a couple of times now about the data room. Perhaps we can go to P-04004 and I'd ask you to identify.

THE COMMISSIONER: Tab 57?

MR. CARTER: Okay.

MR. RALPH: Ask –

MR. CARTER: Yes. So this is a screenshot of the – what I would see and which would detail the types of reports that are available to the committee, and which I would review in terms of preparing a presentation deck and my commentary to the committee –

MR. RALPH: Yeah.

MR. CARTER: – in terms preparation for the meeting.

MR. RALPH: And perhaps we can scroll down to the second and third pages?

MR. CARTER: So the first page that you would have seen – yeah, okay, sorry, carry on.

MR. RALPH: If you want to go to the first page, that's fine.

MR. CARTER: No, no, I believe it's somewhat of the same document, but there's some additional files which weren't able to be viewed on one screenshot; therefore, there's some duplication. But this one here that you have on the screen right now is, in fact, contractor reports.

So the earlier screen that you would've seen would've been project reports, reports generated by the project team, and some of those reports, as well, where the independent engineer is confirming some of the draft certificates and whatnot. But the second one is the actual contractor reports, which would be the contractor reports that the project team is receiving from its contractors and evaluating in

terms of progress, you know, that they're observing within those reports –

MR. RALPH: You know –

MR. CARTER: – that they also made available to us.

MR. RALPH: Right.

Perhaps, now we can go to Exhibit 04001.

MR. CARTER: Is there a tab?

THE COMMISSIONER: It would be at tab 54.

MR. CARTER: Yes.

So this is a – again, a quick grab, I guess, of – each time a set of documents or any documents are going to the data room, and, of course, I have access, I would receive an email notification indicating that new materials have been downloaded to the data room. And the document itself would largely be a complete review from the time I started, as the executive director, to present, whenever this screen – or sorry, this was compiled.

MR. RALPH: So these are – there's 17 pages here. So I understand this goes right back to '86. If you go right –

MR. CARTER: It –

MR. RALPH: – to the last page, perhaps we'll go to page 17?

MR. CARTER: Yeah, so the date would be August 29, 2016. The date, you know, corresponding with my having been granted access to the data room and assuming the role of executive director.

MR. RALPH: Right. Now, so these reports – there are two reports from Nalcor and the report that you prepare. Assuming this goes to the members of the Oversight Committee?

MR. CARTER: It does.

MR. RALPH: And are they given some time to consider –

MR. CARTER: Yes.

MR. RALPH: – these reports?

MR. CARTER: Yeah.

So, you know, what I would do is generally I would receive the reports from Nalcor, separate from the reports that are in the data room, which – and I generally receive them at least a week in advance. And then, of course, I'm also preparing documents myself. But, you know, our effort is to try and get the information out to each of the committee members, you know, in terms of preparation for the meeting, by about approximately a week prior to the meeting occurring, to give them sufficient time to be able to review and inform their perspectives as well.

MR. RALPH: So is your report largely a synopsis of the reports you've received –

MR. CARTER: It is.

MR. RALPH: – from Nalcor?

MR. CARTER: It is.

MR. RALPH: And I understand, ultimately, that report that you prepare for the Oversight Committee members becomes a public report, not necessarily in the same form, but based on that.

MR. CARTER: Yes, that's correct. Not necessarily all of the data that it would contain, certainly discussion topics and, you know, some of our observations and whatnot. But, you know, the numerical data, certainly, on a monthly basis we do post monthly. And we've done that, you know, it's – well, the period commencing August of 2016 when I did come to the Oversight Committee.

MR. RALPH: When you have your committee meetings, I understand there are officials from Nalcor that attend the meetings.

MR. CARTER: That's correct.

MR. RALPH: And so, generally, who are the officials that attend? What are their positions?

MR. CARTER: Depending on where we are in the yearly cycle. For a committee meeting that would be dealing with the reporting period ending on a quarter, we would generally have both project teams available. And, you know, these members of the teams would primarily include, you know, the senior executive VPs for both the transmission side of the project and the generation side of the project and, you know, other staff that are also, you know, senior in terms of, you know, the project team.

MR. RALPH: So before they come in to speak to the committee, is there an opportunity for the committee members to speak amongst themselves about what's –

MR. CARTER: That's correct.

MR. RALPH: – contained in the reports?

MR. CARTER: Yes, that's correct.

Generally, what I'll do is, prior to the Nalcor teams arriving, I will have my deck available that I've prepared, summarizing my observations. And I will spend, you know, approximately, half hour updating the committee on the materials that are, you know, in front of them in terms of that deck. But also, as well, I would update in terms of any calls or other engagements I've had over the month; by way of example, you know, engagements with the independent engineer and NRC Canada and provide, or at least acknowledge, that the summaries of those meetings are also available in the package that they're reviewing.

MR. RALPH: So do all committee members have an opportunity, I guess, to question or challenge the information that's being provided by Nalcor?

MR. CARTER: Yes, they do.

MR. RALPH: And does that happen very often?

MR. CARTER: Yes, there's quite the lively discussion at committee meetings; lots of questions that are asked. And, you know, certainly, support a very open environment where, you know, any committee member can

ask any question that they feel is necessary to the project team.

MR. RALPH: Now, I understand that after that meeting – or, I guess, the next day, there's another meeting that involves the independent engineer, NRCan –

MR. CARTER: That's correct.

MR. RALPH: – and Nalcor.

MR. CARTER: Yeah.

MR. RALPH: And you attend that meeting but what's your role?

MR. CARTER: Yeah, I attend the meeting; it's done via teleconference. Of course, the Nalcor project team are here in St. John's, but the independent engineer might be anywhere. But a teleconference is set up by Nalcor and NRCan, the independent engineer, some of their legal counsel are generally on those phone calls and I'm also participating in the call. But the purpose of this call, of course, is this is an opportunity for Nalcor to update, you know, the independent engineer and NRCan, but I also sit on that call, more so as an observer.

MR. RALPH: So similar to the committee meeting, so there would be, I guess, two different presentations to the independent engineer: There'd be transmission and generation.

MR. CARTER: That's correct.

MR. RALPH: Is that right?

MR. CARTER: That's correct.

MR. RALPH: And are the documents identical?

MR. CARTER: Yes. Generally, the –

MR. RALPH: The ones they presented to the committee are the same ones that are presented to the independent engineer?

MR. CARTER: Yes, that's correct. So, the – you know, those decks that are given to us, in advance for our meeting, are also prepared for

the purpose of briefing NRCan and the independent engineer.

MR. RALPH: Now, I understand as well that following that meeting – I'm not sure how closely after, but soon after – there's a subsequent meeting between yourself and the independent engineer.

MR. CARTER: That's correct. So –

MR. RALPH: Is NRCan part of that discussion or just you and the independent engineer?

MR. CARTER: No, NRCan is present as well. And this would be a meeting absent Nalcor and it's an opportunity that we, you know, have a discussion with NRCan and the independent engineer on the project update that we would've just received from the project team.

MR. RALPH: And are those helpful discussions for you in your work?

MR. CARTER: They are.

MR. RALPH: In what way?

MR. CARTER: It's an opportunity, you know – and I certainly take great value in terms of having the ability to hear directly from the independent engineer in terms of his observations based on, you know, it could be the report that he has just reviewed. The independent engineer may have also been at a manufacturing visit, or been participating in a manufacturing site visit or a technical site visit, and he's very open and sharing of his perspectives, in terms of where things are in progress and, you know, risks that may be evident and, you know, the types of activities that he's doing to monitor those things as well.

MR. RALPH: So those discussions could cover, I guess, did you say cost issues –

MR. CARTER: Yes.

MR. RALPH: – risks, but also could be covering sort of pure engineering questions.

MR. CARTER: It could, yes.

MR. RALPH: Is that correct?

MR. CARTER: Yes, that's correct. Of course, the independent engineer has a very keen interest in the engineering aspect of the project.

MR. RALPH: And I understand you're not an engineer?

MR. CARTER: I'm not.

MR. RALPH: But are you able to participate meaningfully in those discussions?

MR. CARTER: Certainly, I would believe I am. You know, I'm certainly capable of having an intelligent discussion on these types of topics.

MR. RALPH: Now, I understand that you then produce a quarterly report?

MR. CARTER: That's correct.

MR. RALPH: And so the monthly report and the quarterly report, so what's the process of producing those documents?

MR. CARTER: So the monthly report, as I alluded to earlier, is somewhat of a (inaudible) version, I guess. It's more numerical and just data, versus, you know, commentary, if you will, in terms of more detailed status of where progress and the project is generally that you would find in a quarterly report. But the quarterly report is, you know, a deliverable that the committee –

MR. RALPH: Who writes it?

MR. CARTER: A large part of the report is drafted by me and then, of course, there's also other support that's, you know, provided by committee members. The chair of the committee would also be, you know, looking at that report and adding –

MR. RALPH: Right now, you're the chair, I understand. Is that right?

MR. CARTER: I am now, yes.

MR. RALPH: So the committee members, all committee members, would have an opportunity to –

MR. CARTER: Yes.

MR. RALPH: – provide input on the report itself?

MR. CARTER: That's correct.

So I would draft a report and, you know, get it to a place that I think it's, you know, at least reasonable for the committee to have a view of it as well and provide their perspectives on what it contains or doesn't contain.

MR. RALPH: And before those reports become public, is there a process you have to go through in terms of internal to government?

MR. CARTER: So, generally, what had been happening is, you know, we would draft the report. At this particular time, this was with Charles; Charles Bown was the chair of the committee. You know, we would, as I mentioned, do as I say and, you know, any feedback that we had incorporated, we would include it.

Of course, we'd also send the report to Nalcor for fact checking and, you know, any comment that they might have, you know, particularly around commercial sensitivity. There are also aspects of the report – I should be clear, you know, while I'm drafting it there's also, you know, things that I'm requesting from Nalcor to inform some of the information that's included in the report, but, you know, primarily to go back to Nalcor to fact check and for commercial sensitivity.

After we've done that, you know – so Charles, the chair, would speak to the clerk, you know, at the time – whoever the clerk was at any particular point in time. We'd also share the report with the minister of Natural Resources and we'd also share the report with the Premier's office. And, you know, we would then advance the report from there to post it to our website.

MR. RALPH: Thank you very much, Mr. Carter.

MR. CARTER: Okay, thank you.

THE COMMISSIONER: Nalcor Energy.

MR. SIMMONS: Thank you.

No questions, Commissioner.

THE COMMISSIONER: Okay, thank you.

Concerned Citizens Coalition.

MR. BUDDEN: Good morning, Mr. Carter.

MR. CARTER: Good morning.

MR. BUDDEN: As you know from our brief conversations over the length of this second phase, my name is Geoff Budden and I'm the counsel for the Concerned Citizens Coalition, which is – I'm sure you also know is a group of individuals who, for many years, have been critics and observers of the Muskrat Falls Project and who have standing here at this Commission of Inquiry.

MR. CARTER: Mm-hmm.

MR. BUDDEN: I have not a lot for you today, but probably 15 or 20 minutes.

Perhaps, Madam Clerk, we can start with – by bringing up Exhibit P-02697.

MR. CARTER: 02697.

MR. BUDDEN: What this is – I'm not sure if you have that in your –

THE COMMISSIONER: It's not in your book.

MR. CARTER: Okay.

MR. BUDDEN: Yeah.

This is – it's a – it's from well before your time, obviously, but it has relevance which I'll get to, which the communication plan for the very first release of – very first oversight report release back in the summer of 2014.

MR. CARTER: Mm-hmm.

MR. BUDDEN: Almost – well, a year and a half before you joined.

MR. CARTER: Yeah.

MR. BUDDEN: However, you can bring us to page 5 and I believe it's the fifth bullet point

down. Yes, there's a – the – I'm going to quote here. And, basically, listen to this because I'm going to ask you – my follow-up question will be: Was this the scope and objectives of the committee at the time you sat on it? Or, if not, how are they different?

So I'll read it just so that everybody will have the benefit: "The role of the committee is to review information provided by external auditors, the independent engineer and Nalcor; provide updates and discuss issues with relevant departments; meet regularly with Nalcor officials; report to Cabinet, which will provide direction to appropriate ministers as required; and provide quarterly updates to the public on project costs, scheduling, and project performance."

So that's as it was envisioned in 2014 and Mr. Martin testified that was his sense of things during his term.

MR. CARTER: Mm-hmm.

MR. BUDDEN: I guess I'm asking you: Is that your sense of the scope and role of the Oversight Committee during your time? And, if not, how is it different?

MR. CARTER: Yes. You know, it's generally consistent. You know, certainly, you know, I did mention that we, you know, provide updates prior to the release of documents or quarterly reports that we, you know, would brief ministers of Natural Resources and the Premier's office prior to release.

And, I guess, more recently, you know, there – we have been going to Cabinet the last two quarters, in terms of also providing an update to Cabinet.

MR. BUDDEN: No, I'm straining to hear you a little bit, Mr. Carter.

MR. CARTER: Sorry.

MR. BUDDEN: You're soft spoken.

MR. CARTER: Okay, sorry. I'll try to move a little closer.

MR. BUDDEN: Thank you.

MR. CARTER: But, generally, yes. I know with respect to, provided by external auditors, you know, those things are still happening. Combined financial statements are prepared for the Lower Churchill Project companies. Deloitte does do a review of special audit procedures as well.

You know, we're meeting with the independent engineer, we're meeting with Nalcor. Our departmental reps are on the committee and, you know, I have a clear insight and vision in terms of what's happening with the project.

And, generally, you know, I think that –

MR. BUDDEN: Okay.

MR. CARTER: – we're close to that.

MR. BUDDEN: Sure.

Was there ever any discord or debate within the committee as to whether – what its scope was, you know, whether certain things should be pursued and then weren't pursued? Was there ever issues or was everybody on the same page?

MR. CARTER: I – you know, I certainly – you know, and I think I may have alluded to some of this yesterday, you know, when we came to the – when I came to the committee, there was certainly, you know, a degree of flux, if you will, with significant changes in government –

MR. BUDDEN: Yes.

MR. CARTER: – in terms of senior executive members. They were also, you know, moving through a period of time where there had been significant changes at Nalcor, you know, with their replacement of the CEO and Mr. Marshall coming to the project.

MR. BUDDEN: Yes.

MR. CARTER: And, similarly, you know, the project team was, you know, bifurcated at that particular point in time, so two teams. And, you know – and my engagements, you know, moving forward, there was, you know, a degree of uncertainty in terms of exactly, you know, what – how the role of the committee would function going forward.

And, you know, there was a period of time where, you know, that you might have been deviating a little bit but, generally, consistent with this. And, you know, at the input – output of when all of that kind of finally got resolved, generally still aligned with the original scope of work.

MR. BUDDEN: Okay.

Were there ever – was there ever discord? I mean, I've – the minutes seem silent on this, but was there ever anything that had to go to a vote, certain people want to do things others didn't? Or was it always, sort of, worked out to a consensus?

MR. CARTER: Yeah, the committee itself, you know, generally – since my time certainly – voting had not really been, you know, present. Generally, you know, it was informal perspectives from each of the individual committee members. But I don't recall the – being in an instance where there was, you know, separation, if you will, or differing views.

MR. BUDDEN: Okay so you're – essentially, you're all on the same page –

MR. CARTER: Yeah.

MR. BUDDEN: – with regard to your scope –

MR. CARTER: Yeah.

MR. BUDDEN: – with regard to your relationship with Nalcor, perhaps with EY, with the GNL. There's no – I know you are the GNL, but I –

MR. CARTER: Yes.

MR. BUDDEN: – think you know what I – with the executive. So you were all, essentially, on the same page on all those topics.

MR. CARTER: Yes, you know, to the extent, you know, that, as I mentioned yesterday, you know, there was, you know, some uncertainty, but at the end of the day we got to a place where there was alignment. I mean, we were –

MR. BUDDEN: Sure.

MR. CARTER: – proceeding, moving forward on a – you know, I spoke of this yesterday, you know. We did appoint independent members to the committee as well and, you know, leading up to that, you know, I think that we were on a path that we knew where we were going and certainly complemented by, you know, the inclusion of additional independent members as well.

MR. BUDDEN: Sure.

That rather segues nicely into my next question. However accomplished you – the folks were in your careers – and, obviously, you’re all very accomplished to arise to this level – you, nevertheless, were all public servants and all, to some degree, dependent on the Government of Newfoundland and Labrador and the executive for advancement for career satisfaction.

And that has always been a concern to my clients. And the question, essentially, is: How could this committee ever truly be independent when you’re all in that situation beholden to the executive for your careers?

MR. CARTER: No. I – you know, I, you know, went into this position – I’ll give it to you from my perspective. I mean, I went there, I had a job to do and I was prepared to do it. I, you know, had ample opportunity to provide my perspectives, which I did, and – but at the end of the day, you know, I wasn’t obstinate to what you see here in terms of, you know, the exhibit you have up and the fact that we –

MR. BUDDEN: I’m losing you again, at the end of the day ...?

MR. CARTER: Yeah, I wasn’t obstinate to, you know, proceeding in this manner, you know, so ...

MR. BUDDEN: So you’re aware, obviously – I think everybody by now is aware that there was a special relationship between Nalcor and the executive. Much of the executive, certainly before December 2015, was heavily invested in this project.

And I guess my question to you is: To what degree, if at all, do you feel you and your fellow committee members were constrained by

knowing that the executive was so invested in good news and success?

MR. CARTER: Yeah, I never experienced that, Mr. Budden.

MR. BUDDEN: Not once?

MR. CARTER: No.

I mean I went to the committee. I was new. There was a new clerk, a new chair of the committee at its onset. You know, and certainly in terms of prior to that and Ms. Mullaley being clerk, you know, I didn’t take exception to anything that, you know, I was doing in the short time that she remained there.

But, certainly, you know, as we got further through this process, I’ve never felt that I’ve been doing something that I can’t solely, you know, support. I mean, I was committed to this process and, you know, I had a job to do, I was prepared to do it and I took it on with, you know, a lot of intensity to try and make this work.

MR. BUDDEN: Okay.

Just a bit of an aside but it may be an important one: Did you personally keep the minute – keep the committee minutes?

MR. CARTER: I did.

MR. BUDDEN: Okay.

I’ve reviewed them and they’re sparse.

MR. CARTER: Mm-hmm.

MR. BUDDEN: I mean the one that sort of leaps out; I think it’s not the most recent, but close to the most recent of February 7, 2019.

MR. CARTER: Yeah.

MR. BUDDEN: You guys met for two hours and 45 minutes.

MR. CARTER: Right.

MR. BUDDEN: And it's a two-page – the minutes are two pages. Most of the first page consists of the attendance record.

MR. CARTER: Right.

MR. BUDDEN: So the actual substantive minutes are essentially a page. And I guess my question is: Is there a fuller, more a fulsome set of notes of what actually transpired at that meeting, rather than just a recording of what was – who presented and so forth.

MR. CARTER: No. I – you know, I think it's important, Mr. Budden, to realize, you know, the notes that I am putting down on those are an accurate reflection of the discussion. And my individual notes are not that much different than what the committee notes –

MR. BUDDEN: Yeah.

MR. CARTER: – would say. And, you know, there's an important consideration that, you know, it's a little bit of a different scenario, potentially, in terms of minute taking because you're taking minutes that are meant for the public. You know, different than if you're, you know, in an internal type of environment than taking a set of minutes, you know, that aren't being shared publicly.

MR. BUDDEN: Why?

MR. CARTER: Well, from the consent of, you know, I think it's clear that, you know, what you see are the discussion topics –

MR. BUDDEN: Yes, the topics –

MR. CARTER: – are discussed.

MR. BUDDEN: – but not the substance.

MR. CARTER: Right. That's right.

MR. BUDDEN: So when you said a moment ago – and I was going to stop you, but I thought I'd return to it – you said that the minutes were inaccurate – I forget your exact words you used –

MR. CARTER: I (inaudible).

MR. BUDDEN: – but I think accurate reflection of the discussion. In fact –

MR. CARTER: Yes.

MR. BUDDEN: – that's not true, is it? They're more an accurate reflection of the topics.

MR. CARTER: Well, no, I wouldn't necessarily say that. I mean it was at a level that, you know, had been established as – well, you know, I came to the committee, I didn't object to that.

MR. BUDDEN: Okay.

MR. CARTER: And –

MR. BUDDEN: But if you were keeping minutes for something that was never to see the light of day in a public way, such as it was known these minutes would, would you have kept more fulsome notes?

MR. CARTER: I'm sorry –

MR. BUDDEN: Would you have kept more complete notes?

MR. CARTER: If what? Under what –

MR. BUDDEN: If you had – were doing this without any sense that these were going to be released to the public in short order.

MR. CARTER: I'm not certain that I'm following it. I'm sorry –

MR. BUDDEN: Okay.

MR. CARTER: – I ask you to repeat it one (inaudible).

MR. BUDDEN: Not a problem.

MR. CARTER: I'm listening.

MR. BUDDEN: Not a problem. As we've established, the notes are – the minutes are quite brief.

MR. CARTER: Yes.

MR. BUDDEN: Like I said, it's essentially a page of text for a two-hour 45-minute meeting.

MR. CARTER: Yes.

MR. BUDDEN: As I read in this one in particular, and I think this is representative, it's a list of topics, not really a list of the substantial discussion of those topics. Would you agree with me?

MR. CARTER: I'm not entirely certain that I would. I mean, if you think – if you look at these update decks that are the subject of the discussion and the commentary questions related to those types of topics that are included there – topics that, you know, would include the – you know, my summaries, my activities during the meeting, the types of things I was talking about – you know, there's a basis for what was discussed.

MR. BUDDEN: Okay, well, we'll – I won't pursue the point any further, the minutes are there for anybody who wants to see them. But in answer to my question, there's nothing – there's no more complete notes or anything of which this is a summary, this is it.

MR. CARTER: Well, if you look at – you know, I mean my notebooks were given to the Commission at the time when the first round, I guess, of meetings –

MR. BUDDEN: Right.

MR. CARTER: – or sorry, when the requirement to produce documents were (inaudible). You know, and I don't know that they're very much different than, you know – it's my – me kind of taking personal –

MR. BUDDEN: Sure.

MR. CARTER: – notes, but wanting to reflect, you know, what was discussed at the meeting and what the important topic areas were.

MR. BUDDEN: Okay, fair enough.

Did the Oversight Committee ever consider holding a public meeting or a meeting where select members of the public might be invited to

attend to give feedback, to give input, those kinds of things?

MR. CARTER: No, not that I (inaudible).

MR. BUDDEN: Okay.

Did the Oversight Committee ever – moving aside from a public meeting, did it ever invite knowledgeable individuals to speak to it, to present to it, to comment on matters before it?

MR. CARTER: No.

MR. BUDDEN: Okay.

MR. CARTER: But we did invite the independent engineer to our full committee meeting.

MR. BUDDEN: Yes, as was anticipated in those terms of reference from the summer of 2014.

MR. CARTER: Oh, that would be a new addition in terms of activity. You know, I don't think that the – previous to the meeting I'm speaking about, which was last summer in the June-July time frame, that that would've been the first time that everyone on the committee would've had an opportunity to meet with the independent engineer. Who would've basically, you know, reiterated, in a very similar way, you know, information that I would glean or whoever else was sitting with me on calls with the independent engineer. It was an opportunity, as well, for independent committee members to hear from the independent engineer and provide perspectives of –

MR. BUDDEN: Okay. All right.

In your interview – it's around page 60, and I can show you if you need to refresh yourself – but you speak to correspondence that Premier Ball had forwarded to the committee, correspondence that he had sent to Michel Tremblay of SNC-Lavalin. And this would've been in late August of 2017. You remember that discussion around that correspondence?

MR. CARTER: Yes, I do.

MR. BUDDEN: Can you just briefly tell us the substance of it, what it was all about?

MR. CARTER: That particular correspondence was a letter that was written by the Premier to SNC-Lavalin. And it was in respect of difficulties with reducing water levels in the reservoir in the – following the spring freshet in 2017; I think I got my year right.

MR. BUDDEN: I believe. Yes.

MR. CARTER: And it was a letter where the Premier was requesting that SNC-Lavalin assist in terms of the explanation, based on new information, as I understood, that was provided to the project team that there was a risk associated with reducing water levels from where – lower than they were at that particular point in time. And it was, you know, a request that SNC, you know, get involved together with Nalcor to help explain this situation and the difficult situation that it put the Premier in, in terms of meeting his commitment to Indigenous leaders –

MR. BUDDEN: Yes and –

MR. CARTER: – as a result.

MR. BUDDEN: – the nature of that risk?

MR. CARTER: It was a risk associated with reservoir rim stability.

MR. BUDDEN: Yes. So, essentially, as I understand it, as the water level – if the water level dropped too quickly, the rims of the reservoir would become unstable, possibly triggering slides –

MR. CARTER: Yeah.

MR. BUDDEN: – or similar geological –

MR. CARTER: Yeah.

MR. BUDDEN: – issues that in turn might trigger flooding or perhaps even a bigger catastrophe.

MR. CARTER: Yeah, that's somewhat accurate. You know, it was a risk that was identified by SNC to Nalcor. Nalcor actually

shared that information with the committee because, you know, we were aware of the commitments and –

MR. BUDDEN: Mmm.

MR. CARTER: But this was an area of the reservoir upstream –

MR. BUDDEN: Mmm.

MR. CARTER: – you know, that there was an area where there was a potential sensitivity that if the water level was reduced and the core pressure changed in a rapid manner, having been inundated for the winter period and saturation of the soil, that there was a potential risk that you could have some instability –

MR. BUDDEN: Okay.

MR. CARTER: – and, you know, a slide in that particular area.

MR. BUDDEN: Okay, which could have consequences downstream?

MR. CARTER: Well, certainly if there were – you know, depending on –

MR. BUDDEN: Pardon?

MR. CARTER: It would depend on what the magnitude of, you know, this event could be.

MR. BUDDEN: Sure.

MR. CARTER: I think it's also important to recognize that, you know, you're operating the reservoir at a level that's kind of intermediate, if you will, and not from final design criteria where you don't have these very large fluctuations in the reservoir, you know –

MR. BUDDEN: Okay.

MR. CARTER: – once impoundment is complete and ...

MR. BUDDEN: Sure.

MR. CARTER: Yeah.

MR. BUDDEN: As we – in your interview there's a little quote here I'm going to ask you to explain a little bit. And I'm reading from page 61 of your April 8, 2019, interview where you say: The reason that it's – meaning this correspondence – the reason that it's in the Oversight Committee is obviously because Charles is the chair of the committee and – and then I'll skip a bit, that's not relevant – it's most likely that the Premier would have wanted to share it with the Oversight Committee as well for Charles to have done that.

Firstly, that's Charles Bown, I assume.

MR. CARTER: That's correct.

MR. BUDDEN: Okay.

Having received this correspondence, it having been shared with the committee, what did the committee then do?

MR. CARTER: I think accept it, that that was happening.

MR. BUDDEN: Okay –

MR. CARTER: And if it was a letter from the Premier, I would expect that, you know, that action would've been followed by Nalcor and SNC.

MR. BUDDEN: And the committee has diligently followed up on that issue?

MR. CARTER: I have all these, you know – and I'm sorry, I'm saying I – you know, in our committee reporting, you –

MR. BUDDEN: Yes.

MR. CARTER: – will note that there's a, you know, a risk that was identified upon the committee becoming aware of this potential risk in this – that particular circumstance. And, you know, so basically we haven't been advised of, you know, stability issues in the reservoir since that time.

If there were stability issues beyond the one that was identified, and in that particular instance, I would expect that we would've been informed by Nalcor.

MR. BUDDEN: Have you been proactive and requested whether there's been issues – requested that information?

MR. CARTER: No.

MR. BUDDEN: Okay, should you –

MR. CARTER: The obligation would be on Nalcor to make sure we're aware. I mean, they know that that's a risk in our report. They review our quarterly reports, they're sent to them. It's clear and evident that it's there. So I would expect that if there's any deviation from that, that we would be advised.

MR. BUDDEN: And no obligation on the committee to follow up, like, not even a year later, to say, look, has – have there been other issues, rather than waiting for Nalcor to come to you guys?

MR. CARTER: I think, you know, this is indicative of the relationship that – you know, of trust and openness and co-operation that, you know, I believe the committee has right now with Nalcor and –

MR. BUDDEN: So you trust them.

MR. CARTER: Yes, I trust Nalcor at this point in time.

MR. BUDDEN: Okay. All right.

Let's – Madam Clerk, please bring up Exhibit P-03893. And what that is – while it's being set up, Mr. Carter, this would've come up again yesterday, I'm just going to return to it; this is really my last topic – this covers the correspondence that two officers of my client, Mr. Ron Penney and Mr. Dave Vardy, would've sent in early 2017 – January 2017. They wrote the then-new clerk of the Executive Council, Mr. Coffey, Bern Coffey.

MR. CARTER: Yes.

MR. BUDDEN: And that correspondence ended up on your desk, on the committee's desk.

THE COMMISSIONER: Tab 42.

MR. CARTER: Tab 42.

MR. BUDDEN: Tab 42, yeah, be easier for you.

MR. CARTER: Okay, yes.

MR. BUDDEN: Sure.

Perhaps we could go to page 7 I believe it is. This is the – really, the conclusion of the letter. We’re not going to walk through the letter, but it’s fair to say the letter covers a list of – a very detailed list of some 20 concerns that Mr. Vardy and Mr. Penney had regarding the North Spur. Would that be accurate?

MR. CARTER: Yes.

MR. BUDDEN: Okay.

And they conclude their letter – a little tiny bit more please, Madam Clerk – perhaps you could just read to us the last – and down a tiny bit so I can – perfect.

From Mister – from, “Jim Gordon concludes as follows” – perhaps you could read down the last four paragraphs – read those into the record for us?

MR. CARTER: The last how many paragraphs?

MR. BUDDEN: The one beginning, “Jim Gordon concludes,” right to the end of the letter.

MR. CARTER: *“It is essential that the dam design be reviewed by a panel of geotechnical experts. It is not too late to undertake such a review, since any changes resulting from the review can still be built. If there are no changes required, then there is the added assurance that the dam is safe.”*

“An independent review of ... geo-technical research and remediation for the North Spur should be embraced openly as a prudent course of action. This review should be initiated by” the “government, given Nalcor’s defensive posture and its failure to take action on its own.

“The undersigned would be pleased to meet with you and discuss this matter. We also recommend that you invite Jim Gordon to meet with your committee to explore his concerns, along with options to deal with this major problem.

“You are now the most senior official in the government. Because of” your “own personal experience we know what an immense responsibility that is” for you “You have both the opportunity and the responsibility to recommend that government take ... prudent steps” to “suggest. We look forward to your response.”

MR. BUDDEN: Okay, so Mr. Coffey, who is the subject of this letter, being at that time the most senior official in government, forwarded it to the committee; presumably for action of some sort. That would seem self evident, you would agree?

MR. CARTER: Yes.

MR. BUDDEN: Okay.

MR. CARTER: And well the, you know, the response being, you know, it was forwarded to me for my consideration to look at. I went to Mr. Coffey, talked about, you know, this letter, you know, and that it was a significant letter. And we discussed the approach that we would take, you know, Mr. Coffey had perspectives on this. And the approach that we decided we would take was as per, you know, the other correspondence that was generated around this.

MR. BUDDEN: Sure.

So a couple things strike me there. You say we, meaning you and Mr. Coffey, of course, wasn’t –

MR. CARTER: Yep.

MR. BUDDEN: – on this committee, was he?

MR. CARTER: Pardon me?

MR. BUDDEN: Mr. Coffey wasn’t a member of the Oversight Committee –

MR. CARTER: Yes, he was at that time.

MR. BUDDEN: He was ex officio, was he?

MR. CARTER: No, he was the clerk, who was the chair of the committee.

MR. BUDDEN: Okay. All right then.

So it was decided – you and Mr. Coffey decided on a certain course of action, which I would suggest was essentially to refer the letter on to Nalcor.

MR. CARTER: Yeah, it wasn't only myself and Mr. Coffey. We discussed this with the committee.

MR. BUDDEN: Okay, so the committee decided –

MR. CARTER: That's (inaudible) –

MR. BUDDEN: – on a course of action, which was essentially to forward it to Nalcor.

MR. CARTER: That's correct.

MR. BUDDEN: Okay.

MR. CARTER: With the – you know, Nalcor with experience in this area, you know, and it was Mr. Coffey's view that, you know, this experience is at Nalcor, there's significant more resources at Nalcor. Rather than this having to be dealt with within government, Nalcor is the proponent of this; make sure that they reply to this.

MR. BUDDEN: Okay, but of course that's not what the letter is requesting, is it? It's requesting an independent assessment of this serious issue.

What consideration, if any, did the committee give to that request?

MR. CARTER: I think it's important, Mr. Budden, to – you know, in terms of the committee itself, you know, and our terms of reference, you know, one of the exclusion are environmental considerations here. You know, regulatory authority for, you know, dam safety does not reside within the committee. It's dealt with, you know, through other government departments.

MR. BUDDEN: Mmm.

MR. CARTER: And, you know, I need to bring you back to what our thinking was, and that was that, you know, the North Spur is being designed and engineered by professionals who have, you know – are responsible for authority for signing

and documenting that the engineering design and the construction of this structure is, you know, is sufficient and not, you know, in – and not dangerous, and –

MR. BUDDEN: What's the point of an oversight committee that trusts the project team and just flips any critical correspondence back to them? Like what's your point? What's your reason for existence?

MR. CARTER: I don't know that I'm – are you suggesting I'm resisting or ...

MR. BUDDEN: No, no, I'm just suggesting that what's the point of – I guess that my question is what's the point of an oversight committee that simply – trust is the word used a minute ago – Nalcor and flips critical correspondence on to them without even the meeting of – without meeting with the proponents as is requested?

MR. CARTER: I think that if you look at the – there was a letter that was – and sorry, that's – I believe it's in the front end of this, right?

MR. BUDDEN: It could well be, yeah. There's seven –

MR. CARTER: Yeah.

MR. BUDDEN: – pages, I think, before we get to the – this –

MR. CARTER: And this is what we would want to satisfy, you know, our belief and – or our view of the North Spur –

MR. BUDDEN: Okay.

MR. CARTER: – you know, that these were some additional documents that we wanted to see. We wanted to, you know, have confirmation that, you know, the construction was overseen during the stabilization work by SNC. We wanted to, when complete, to have SNC's as-built drawings and, you know, we wanted confirmation from Hatch, as in item number 4, and we wanted from confirmation that's outlined in number 5 as well, that these activities and the procedures are in accordance with the Canadian Dam Safety Guidelines.

MR. BUDDEN: Okay.

MR. CARTER: And that was on our premise that the structure is being designed and engineered and constructed by professionals.

MR. BUDDEN: This letter however – and as you said in your direct evidence, you – the committee took this seriously; Mr. Vardy and Mr. Penney are serious people, they're not regarded as –

MR. CARTER: No, absolutely.

MR. BUDDEN: – cranks or anything. So when serious people with this kind of level of experience write this kind of detailed letter, raising these very serious concerns –

MR. CARTER: Yeah.

MR. BUDDEN: – the committee didn't see fit to perhaps even meet with them?

MR. CARTER: I was taking direction from the Clerk on this and the chair of the committee at this particular time.

MR. BUDDEN: Okay. Did you wish – as an individual, did you believe it would be a positive thing to meet with them; is that something you wanted to do?

MR. CARTER: No, I never – I don't know that I, you know, recommended that we do this; I don't recall; perhaps I did, I can't remember; seriously, in all honesty.

MR. BUDDEN: All right.

There's a suggestion there that Mister – Dr. Jim Gordon being met with; that wasn't followed up either by the committee, was it?

MR. CARTER: No.

MR. BUDDEN: Okay.

What role, if any, did the Oversight Committee play in shaping the Nalcor-commissioned peer review? There was, as we know, as, you know, the Commission's heard evidence, Nalcor in response to the concerns raised by certain Swedish academics –

MR. CARTER: Yes.

MR. BUDDEN: – Dr. Bernander, Dr. Elfgren, commissioned a peer review that ultimately reported in February of 2018, I believe.

MR. CARTER: Yes.

MR. BUDDEN: What role if any did your committee, the Oversight Committee, play in shaping that peer review?

MR. CARTER: We didn't play any role in that.

MR. BUDDEN: Okay.

Did the Oversight Committee review the peer review when it was completed?

MR. CARTER: No, we didn't.

MR. BUDDEN: Okay.

Was the Oversight Committee made aware that Drs. Elfgren and Bernander in turn replied with a paper to the Oversight Committee reiterating their concerns and raising new ones?

MR. CARTER: Replied to the Oversight Committee?

MR. BUDDEN: The – not – that's my mistake – to the peer review. So just – so that – for clarity: the peer review completed its report –

MR. CARTER: Yeah.

MR. BUDDEN: – in, I believe, February of 2018 –

MR. CARTER: Mm-hmm.

MR. BUDDEN: – several months later, in July of 2018, Drs. Bernander and Elfgren replied reiterating their concerns that remained unsatisfied even after the peer review and raising new ones in a report that is – was actually filed here as an exhibit –

MR. CARTER: Mm-hmm.

MR. BUDDEN: – back last summer, almost a year ago –

MR. CARTER: Mm-hmm.

MR. BUDDEN: – even before the Commission had formally started its hearings.

MR. CARTER: Yes.

MR. BUDDEN: Is the Oversight Committee aware that that rebuttal even exists?

MR. CARTER: I know that I did have copies of responses if I'm recollecting correctly. I knew that the work was ongoing, the panel that was assembled by Mr. – or, sorry, by Nalcor to, you know, take a look at this from a peer-review perspective.

And I do recall that there was, you know, commentary, again, that, you know, that this work potentially wasn't satisfactory, you know, from certain individuals. I don't know the exact names right now and I do know that there was also, if I recall correctly, some follow-up from Nalcor, SNC – if I recall correctly. I'm sorry, I'm probably – I don't mean to – but I did understand that there was a response as well that was –

MR. BUDDEN: Sure.

This, essentially, all has taken place over more or less the past year; we're not talking ancient history.

MR. CARTER: Yeah.

MR. BUDDEN: To what degree did the Oversight Committee roll up its sleeves and engage with these reports?

MR. CARTER: You know, Mr. Budden, I'll take you back to where I started, you know. You know, our perspective being that this is an engineered structure, you know, that is appropriately designed and suitable for, you know, its purpose. And that, you know, what we were looking at here was, you know, an item – a set of items, you know, just to ensure, if you will, to, you know, make sure that we were comfortable with that.

MR. BUDDEN: Okay.

Two questions; if it's – if not the Oversight Committee, where should a person go? If they have concerns about the stability, if they have

scientific evidence such as my client has, what, write Municipal Affairs and the Environment and say, look, here's a report? Is that what would be recommended? If not your committee, who, within government, should be held accountable for this?

MR. CARTER: Well, you know, Dam Safety Guidelines are administered by the Department of Municipal Affairs and Environment.

MR. BUDDEN: Okay.

MR. CARTER: And, you know, there are obligations under those guidelines, in terms of what's required to be done, you know, to have your permit granted for the construction or the alteration of a permanent body of water. And, you know ...

MR. BUDDEN: Does that department have representation on the Oversight Committee?

MR. CARTER: No, it doesn't. And I think that this is an important consideration because, you know, when I first talked about the approach that was taken here, you know, the issues of the environment, you know, and environmental, you know, type of event, you know, are not within the ambit of the Oversight Committee –

MR. BUDDEN: Okay.

MR. CARTER: – if you go to our terms of reference.

MR. BUDDEN: But, surely, the – I mean the stability of the North Spur goes a little beyond – not that environmental concerns aren't important, but we're talking about the structural integrity of the dam edifice itself. I mean this is more than just an environmental issue, I would suggest.

MR. CARTER: Well, you know, that's the approach that we dealt with this in the committee.

MR. BUDDEN: Okay.

So I guess my final question: So can I take it that the Oversight Committee at the present time has no concerns, none at all, about the stability and safety of the North Spur?

MR. CARTER: I, you know, have – am going to review some documents here, you know, that the SNC – or sorry, the engineer design and as-built documents, which is what we requested here. And I do have to go and, you know, to close the loop on this particular exercise that we embarked on here. You know, it's remaining.

MR. BUDDEN: There is a loop to be closed, isn't there?

MR. CARTER: You know, it's just follow-up, you know? The driver for this is impoundment and, you know, this is what was intended to be done before impoundment occurs.

MR. BUDDEN: Okay.

Thank you, Mr. Carter.

MR. CARTER: Thank you.

THE COMMISSIONER: Thank you.

Edmund Martin.

MR. SMITH: No questions, Commissioner.

THE COMMISSIONER: Kathy Dunderdale – not here.

Former Provincial Government Officials.

MR. T. WILLIAMS: Good morning, Mr. Carter.

MR. CARTER: Good morning.

MR. T. WILLIAMS: Tom Williams, I represent a group known as the former elected government officials, 2003 to 2015, with the exception of former Premier Dunderdale.

I just have some questions arising out of your cross-examination with respect to process and procedures of how the committee operates. And was I correct in hearing that primarily the committee has to rely upon the information that are provided by Nalcor, so that you request a number of reports prior to reviewing them and doing your final quarterly reports. Would that be correct?

MR. CARTER: That's correct.

MR. T. WILLIAMS: So does the committee have any means in which to verify that type of information. And I – while you were testifying I was just looking at the, for example – and I only use it by way of illustration – the 2018, I think, is your most recent quarterly report.

MR. CARTER: Mm-hmm.

MR. T. WILLIAMS: And there's a lot of technical information contained in those monthly reports. There's construction progress, expenditures, risk assessment and a lot of detail. So I trust that flows from Nalcor to your committee.

MR. CARTER: It does.

MR. T. WILLIAMS: So are you left at the whims of having to rely on the accuracy of that information that comes in from Nalcor?

MR. CARTER: I think there's a couple of considerations here. You know, if you look at that report and the way it's structured, you know, this was part of the reporting go forward that's very clearly articulated within the report, where that (inaudible) data is originating from. So that report would have a section that talks about Nalcor reporting, it has a section that talks about committee reporting. It has sections that are summaries of the information that's provided by Nalcor.

And, you know – and this is where, you know, we're at a place where, you know, you're testing the information, you're accepting the information, but you're also doing other due diligence in terms of participating in site visits and meetings. You're engaged with the independent engineer in terms of him substantiating, you know, where, you know, progress is, where costs are. You know, so these are the other factors that are based on, you know, relying on that information. But it's clear, it's Nalcor information.

MR. T. WILLIAMS: It –

MR. CARTER: And the committee is structured in a manner the way (inaudible) that report that we do rely on having accurate information.

MR. T. WILLIAMS: And I am not suggesting that that's an error, but just factual that the committee itself does not have the resources, I presume, to go out and test the accuracy of the information being provided to you by Nalcor. So when they give you risk assessment or financial projections, things of this nature, with the exception of your usage – use of the independent engineer –

MR. CARTER: Yeah.

MR. T. WILLIAMS: – you don't send their information out to be verified?

MR. CARTER: No, it's done internal to committee, you know, to the extent we have capacity within the committee. I know we do have external members as we – as I mentioned, independent, you know, committee members, you know, as –

MR. T. WILLIAMS: And, for example, what committee members would be able to test the reliability or the accuracy of detailed financial projections for the, you know, quarter going forward or the quarter going – or the past quarter. For example, would they do a detailed analysis of that?

MR. CARTER: Certainly, if there was something that was of concern to the committee, or not looking correctly, you know, certainly you would have – you know, and Mr. Martin was here yesterday, Craig Martin. You know, you have the deputy minister of Finance; you have, you know, several chartered accountants involved in the committee.

MR. T. WILLIAMS: But it would –

MR. CARTER: So you would have capacity if you believe that there might be a problem.

MR. T. WILLIAMS: But it would have to be, obviously, identified as a concern coming in, in order to review it and analyze it as a concern.

MR. CARTER: Yes.

MR. T. WILLIAMS: Okay.

So you don't have the means about – you know, to every time that you review a report you have

to rely on the accuracy of the information that you're getting.

MR. CARTER: Yes, I do.

MR. T. WILLIAMS: Okay.

MR. CARTER: But, you know – and I'm also relying on that information, on the premise that I'm receiving true and accurate information.

MR. T. WILLIAMS: With respect to identifying issues of concern or issues that you think there needs to be action taken on or mediation with respect to, has the Committee had experience in the past whereby they said, okay, this is a substantive concern for the Committee having reviewed the last quarter and we recommend the following action be taken on a go-forward basis. Is that how you operate?

MR. CARTER: Well, you know, certainly if there were things that were concerning to the Committee, there'd be follow-ups with, you know, Nalcor. You know, it was a very open and engaging dialogue during our Committee meetings. You know, if there's particular issues of – you know, of – that we want further information on, there would – there are examples in these Committee – or the reports that the Committee was receiving which would go beyond general project reporting from the – from Nalcor to the – you know, so if there's something specific that we've requested, there would be commentary and information provided, you know, to the Committee, in that respect. So, you know, and again, you're relying on accurate information being given to you.

MR. T. WILLIAMS: So –

MR. CARTER: It's an important consideration.

MR. T. WILLIAMS: And how – and having said that, and I appreciate your comments to that extent, how realistic or practical is it to consider that your Committee would be able to go out and test all the information that's coming in on a quarterly basis from Nalcor, independently, by a third party?

MR. CARTER: Pardon me? Sorry.

MR. T. WILLIAMS: How realistic or practical is it to think that your Committee would be able to go out and test the reliability of the information coming in from Nalcor on a quarterly basis? Meaning, to have third-party independent review to test the reliability of that information.

MR. CARTER: And to –

MR. T. WILLIAMS: Is that practical in the operation of your Committee?

MR. CARTER: You know, to the extent if there was a problem or something that we believed was problematic or potentially not accurate, you know, we would have the ability to engage external resources.

MR. T. WILLIAMS: Have you had occasion in the last year to retain the services of an expert outside of the independent engineer, that you utilized to review a matter that came to the Committee, that was of any particular concern?

MR. CARTER: Our last engagement for professional services first that's, you know, engaging a consultant was in relation to the conclusion of the Muskrat Falls review report where the recommendations stemming from that report were reviewed by EY. And that has been, you know, our last expenditure since that time and that report was issued in August of 2017.

MR. T. WILLIAMS: Okay.

MR. CARTER: At this – you know, and from that point forward, we've been feeling comfortable in terms of, you know, where we are in terms of the information we're reviewing and, you know, haven't been feeling that the information isn't correct, you know.

MR. T. WILLIAMS: Is there anybody associated with the Committee outside of the independent engineer, that has any specific experience in hydro project mega developments?

MR. CARTER: Not within our Committee.

MR. T. WILLIAMS: Yeah.

MR. CARTER: You know, it's project management experience and engineering experience, financial experience.

MR. T. WILLIAMS: Okay.

MR. CARTER: And so I think, you know, that's where we are within the Committee.

MR. T. WILLIAMS: Okay. That's fine.

That's all the questions I have.

Thank you.

MR. CARTER: Thank you.

THE COMMISSIONER: Thank you.

Robert Thompson's – Consumer Advocate?

MR. PEDDIGREW: Good morning, Mr. Carter.

MR. CARTER: Yes, good morning.

MR. PEDDIGREW: Chris Peddigrew representing the Consumer Advocate. I don't have a whole lot for you this morning; mostly questions that's in relation to some of the evidence you've given.

I believe you said yesterday that the independent engineer report were not coming to you directly. I guess my understanding from some of the evidence that was given by Mr. Martin was that there was a process put in place whereby the independent engineer reports were supposed to be coming directly to the Committee.

So, do you have any comment on that? Or why that wasn't happening or what –

MR. CARTER: Yeah.

MR. PEDDIGREW: – or how you became aware you weren't getting the report directly?

MR. CARTER: You know, I guess – so, there's two aspects to this, and I think it's important to clarify. The reports that the independent engineer prepares on a monthly basis in terms of its obligations under the federal loan guarantee draw certificates and whatnot for release of

funding are prepared by the independent – you know, they're prepared by Nalcor, approved by the independent engineer and they're deposited in the data room. The data room is the repository for these documents.

MR. PEDDIGREW: Right.

MR. CARTER: The reports outside of that – so, there's a full data room process and, you know, it's dealt with through the Nalcor data room in terms of how those documents are handled.

The other, you know, type of report would be a report where there would be a manufacturing-site visit or, you know, a potential site visit, to site, you know, and a report that's prepared. They have been going to Nalcor and, you know, Nalcor has been providing them to the Committee. And I haven't had an issue with that arrangement – you know, subsequent to the issue I did have in the early end that – you know, kind of precipitated a response. But, you know, I haven't had any issue with Nalcor having the report and forwarding it to us as a matter of convenience as well for the independent engineer.

MR. PEDDIGREW: Okay. So the second type of report you talked about which was, I guess, the report that would follow a site visit.

MR. CARTER: Yes.

MR. PEDDIGREW: That was the one –

MR. CARTER: Yes.

MR. PEDDIGREW: – that caught you by surprise – I mean you didn't receive it. You followed up and since then you've been receiving it?

MR. CARTER: Yes. I receive those reports. I – anyhow, I think it's important, Mr. Peddigrew, that first report, we didn't have a copy of it, weren't happy. But also as well, you know, I knew that there was a site visit just – I was new to the Committee, I wasn't certain of what the timeframe would be, you know, in terms of a delivery of a report by the IE.

But, you know, I generally have – keep an eye on where the IE is going and what he's doing. So, following a site visit like that, you know, I would have a degree of understanding of when to expect a report. And when there's a report that's delayed, and I – engage with Nalcor to understand what it is. And I've also engaged with the independent engineer to understand what's happening with that report. So I'm comfortable that I –

MR. PEDDIGREW: Right. Okay.

And the telephone calls with the independent engineer –

MR. CARTER: Yes.

MR. PEDDIGREW: – you had mentioned earlier this morning and I believe you said that there was a telephone call between yourself and the independent engineer where Nalcor was not a participant.

MR. CARTER: That's correct.

MR. PEDDIGREW: When did that process start?

MR. CARTER: That was a process, you know – you know, I don't mean that it's brand new or – you know, certainly, I'm looking at it from the perspective – since I've joined the Committee. You know, there, undoubtedly, would've been engagements with the IE, you know, prior to my participation. It was a – you know, a new procedure that was established following, you know, the recommendations that were coming out of the EY report.

When the implementation of recommendations report in August of 2017 – and as part of, you know, looking to enhance independent assurance, we did embark upon, you know, this procedure where we would be more actively utilizing or engaging with Natural Resources Canada and the independent engineer, as well as adding quarterly meetings with the Newfoundland and Labrador Hydro as well – as, you know, the entity receiving the project after it's constructed to, you know, seek their views as well.

So it would've started in approximately December of 2017 that we started moving in that direction.

MR. PEDDIGREW: Okay. And then my next question to you is how did that arise, but it came from the recommendations in the EY report.

MR. CARTER: It wasn't necessarily the EY report itself. The EY report was, you know, suggesting that independent assurance be considered going forward, you know, that there's some form of that function.

The committee, you know, in part, in fulfilling that, you know – this was an avenue that we explored and went, you know, and I know the committee, it – ourself, we did, you know, talk about adding an independent engineer ourself, you know, to support our purposes also as well as, you know, dealing with that recommendation.

And, you know, I actually did speak to the independent engineer and I also spoke with NRCan. He was at a site visit meeting and I was spending some time with them. Talked about, you know, if the province were to, you know, retain its own independent engineer, you know, if there was anyone that he might be able to suggest. And he, you know, didn't – 'cause so many of his colleagues, you know, or individuals that he knew, at some point in time may have had contact with the project. So he couldn't really recommend anyone.

But he was quite unequivocal and clear that, you know, he was more than willing, you know, to do whatever he could to help, you know, us in terms of, you know, kind of relying, if you will, on an independent engineer, be it even one our own. But he would certainly look to help, to assist in that role.

MR. PEDDIGREW: So the committee did consider hiring its own independent engineer but ultimately decided to –

MR. CARTER: It was a discussion about what we might do with that recommendation and it was, you know, a take-away that I, you know, worked on to look at potentially having our own independent engineer. First starting point was to talk to Mr. Argirov about that, in terms of

anyone that he might recommend. And, you know, he was quite, you know, clear that he would be more than willing to assist and brought that back to the committee and we adopted that practice at that point in time.

MR. PEDDIGREW: Okay.

Do you know – is that – would him being willing to assist – was there additional compensation paid to him because of –

MR. CARTER: No.

MR. PEDDIGREW: – that or was it part of his –

MR. CARTER: No.

I can say – you know, I just want to, you know, state the, you know, the relationship with the independent engineer and between the Oversight Committee is very positive. Also, as well, our, you know, and – 'cause I'm talking about engaging the independent engineer but I'm also, you know, engaging Natural Resources Canada, you know, and they were very, actually interested and appreciative of, you know, the increased communications between ourselves, you know, going forward with that.

MR. PEDDIGREW: And your calls with the independent engineer – is NRCan always on those calls or –

MR. CARTER: They are.

MR. PEDDIGREW: Okay.

MR. CARTER: And that's a requirement as well, you know, in terms of the – if I recall correctly – in the reliance agreement. You know, that when you are, you know, engaging the independent engineer it's generally done, you know, with NRCan's participation as well.

MR. PEDDIGREW: All right.

The next question I had for you was partially asked earlier this morning, but it had to do with commercial sensitivity and I guess to the extent that gets raised by Nalcor in terms of what you intend – the Oversight Committee intends to

report to Cabinet or to – or, ultimately, to the public.

MR. CARTER: Yes.

MR. PEDDIGREW: It – has there been a – how would you describe, I guess, the frequency or the degree to which commercial sensitivity is raised as a reason for not disclosing, say, early in your tenure versus present day.

MR. CARTER: You know, I think the discussion – I don't view this as any problematic discussion at this particular point in time. We're generally aligned with Nalcor.

MR. PEDDIGREW: Was it always that way?

MR. CARTER: In my time – I don't recall that we were really having any difficulty in terms of, you know, their disclosure. You know, or commercial – you know the – there was recognition within the committee itself that, you know, some of these things might be commercially sensitive.

I guess, you know, one of a more recent topic would be, you know, the way that we were reporting contingency and contingency allocation and consumption. You know, and as from the onset of the project, of course, we were reporting by way of contingency, you know, consumption by individual project assets so, you would report on MF gen, you'd report on the LTA, you'd report on the LITL and – you know, which was fine for early days of the project where there were so many contractors that were involved.

And, you know, if there's movements in contingency, it's kind of difficult to track exactly, you know, if somebody is looking at using that information to understand, you know, what kind of commercial arrangements might be in place or where contingency is being consumed. But, you know, as we got closer and, you know, I guess – so, in my time frame, you know, the – being down to two or three, four contractors, you know, Nalcor did approach us on, you know, kind of rolling that up, if you will, because there was concern that, you know, with so few contractors, any movement in the contingency budget clearly delineated by project assets would, you know, potentially, be

commercially sensitive. And we did agree with that and we've adjusted our public reporting of it.

MR. PEDDIGREW: Okay. So, generally, as between yourselves and Nalcor there's agreement, or there's an understanding on behalf of the committee that certain issues should not be disclosed at a particular time.

MR. CARTER: Yeah. Like, I mean, we – you know, in terms of commercial sensitivity – is that what you're referencing?

MR. PEDDIGREW: Yeah. I guess, my question is – there's a recognition on the committee's behalf that commercial sensitivity is a valid issue at certain times with respect to certain issues.

MR. CARTER: It is. Absolutely.

MR. PEDDIGREW: Just some questions, Mr. Carter, about the independent members of the committee –

MR. CARTER: Yes.

MR. PEDDIGREW: – and how they're identified, how they're appointed, that process.

So, I guess first of all, when or – your recollection, what is your recollection of the – I guess when the importance of having somebody independent or independent individuals outside of government appointed to the committee, would that come from the committee itself, did it come from somebody within government?

MR. CARTER: So, again, I'll take you back to kind of a realignment, you know, getting comfortable at the point in time that I come to the committee. You know, some of the uncertainty in terms of the way that the committee would report, you know, the way it might be structured and, you know, the conclusion of EY, but clearly by Christmastime, you know, I'm pretty actively involved in the committee and we're pursuing a path, you know, there's been meetings that's been – have been taking place. The clerk at the time, Mr. Coffey, has been participating in those meetings, and somewhere probably around early April, you

know, I was advised that we would also be adding –

MR. PEDDIGREW: 2017?

MR. CARTER: – yes, correct, –

MR. PEDDIGREW: Okay.

MR. CARTER: – April 2017, that we would also be adding independent committee members.

MR. PEDDIGREW: And you were advised by who of that?

MR. CARTER: By Mr. Coffey.

MR. PEDDIGREW: Okay.

MR. CARTER: And, you know, my activity at that point in time became focused on preparing materials, to give them binders of information to bring them up to speed in, you know, a quick manner in terms of at least getting them familiar with –

MR. PEDDIGREW: Right.

MR. CARTER: – the documents and what we were reviewing.

MR. PEDDIGREW: But in terms of who the independent people would be, was any input sought from the committee as to, you know, what sort of expertise you thought might be lacking on the Oversight Committee –

MR. CARTER: Not at –

MR. PEDDIGREW: – what might be helpful?

MR. CARTER: Not – not that I'm aware of.

Now –

MR. PEDDIGREW: Is there anything that –

MR. CARTER: – that's not to say that there mightn't have been discussions between the clerk and, you know, deputy ministers in different departments but, you know, I was just advised that committee – independent committee members were being added.

MR. PEDDIGREW: And was there any gap in terms of a skill set that you – or, as a – as the executive director or anybody else on the committee you're aware of that felt there was a gap in a skill set that would be useful to add to the committee?

MR. CARTER: No, not – you know, we proceeded with the independent committee members as, you know, were presented to us, and, you know, there was some significant capacity, you know, in terms of those new members being appointed. You know, you did have engineering, you had, you know, financial people, or individually you had academics, economists, you had, you know, a representative from Labrador, you know, in addition to myself as being, you know, very much interested in Labrador and, you know, my past roles.

But, you know, that was a fairly significant complement of outside people.

MR. PEDDIGREW: Okay, so you certainly felt it was helpful to have these individuals as –?

MR. CARTER: Yeah, certainly. You know, the more people that were involved – and, you know, an important consideration that, you know, you do have independent members that are also sitting on this committee, you know outside of us as a shareholder, being government.

MR. PEDDIGREW: Right.

MR. CARTER: You know, it kind of elevates the bar in terms of openness and transparency.

MR. PEDDIGREW: And I believe yesterday you gave some information about the background of some of the independent members, but I think Vanessa Newhook – I don't know if – maybe you said it and I missed it, but what was her – Ms. Newhook's background?

MR. CARTER: Ms. Newhook is – wasn't – are you asking me who her employer was or –

MR. PEDDIGREW: Well, I'm just – was she –

MR. CARTER: Yeah, no, she –

MR. PEDDIGREW: – an engineer? Was she an accountant?

MR. CARTER: She's actually a former civil servant, you know, a senior civil servant, assistant deputy minister, actually was assistant deputy minister of the Royalties and Benefits division. She actually was my predecessor in the position that I occupied at one point in time.

But she would bring the – you know, and had moved into the private sector and was operating in a commercial environment amongst project owners in the oil and gas sector. And, you know, she would bring with that, you know, not only her experience in terms of, you know, government and government activity, but certainly as an owner of a project.

And, you know, (inaudible) Mr. Muise, who was also involved, I mentioned he's an engineer, also, you know, very active in terms of, you know, managing a company that's, you know, would – not an owner of a project, per se, but a contractor to a project and – you know, with, you know, subsea engineering –

MR. PEDDIGREW: Right.

MR. CARTER: – and, you know, equipment and kit for the offshore.

MR. PEDDIGREW: Some of the questions this morning, as well – you outlined for Mr. Ralph just the structure of committee meetings and the lead-up in terms of reports, how often did meetings happen, things that are discussed. Was that – has that been the format the entire time that you'd been executive director, or is that something that changed during your time?

MR. CARTER: It was – you know, generally that was the type of approach. And I think Craig described some of that yesterday as well.

MR. PEDDIGREW: Are there any, I guess, regular pieces of information or regular reports that you get now that you did not get when you initially became executive director?

MR. CARTER: The form and content of the reports has changed, you know, being, you know, fairly detailed and, you know, the issue that the committee, you know, dealt with, you

know, or had difficulty dealing with in terms of understanding cost exposure in terms of risk with the project that might be above the existing approved AFE. You know, that type of information was not originally included even in my time when I first came to the committee.

You know, it progressed from, you know, briefings that, you know, verbally, you know, were very informative and a lot of photos and – you know, of where progress was, and there's value in photos, you know, absolutely. But, you know, we were looking for, you know, greater certainty in terms of cost and – you know, and through the progression of time, these things got to where we, you know, we have a greater degree of comfort with the information.

MR. PEDDIGREW: Okay.

MR. CARTER: In terms of the, you know, these new things that I talked – you know, there's some new processes that were, you know, in the December of 2017 time frame that I've spoken about where, you know, we would also sit in or be observer to, you know, Nalcor's update to Natural Resources Canada and the independent engineer and, you know, and doing that frequently and then –

MR. PEDDIGREW: Right.

MR. CARTER: – following up with the independent engineer each month.

MR. PEDDIGREW: Okay.

MR. CARTER: You know, I – I'm not –

MR. PEDDIGREW: (Inaudible.)

MR. CARTER: – certain that there was, you know, that type of, you know, regularity to the engagement with the independent engineer. But also as well, you know, certainly participating in site visits and, you know –

MR. PEDDIGREW: Is that something that arose out of the EY report, that it would be important for committee members to observe the site and what was taking place?

MR. CARTER: No, that would've tied back to, you know, we were certainly participating in site

visits and meetings prior to my coming to the – it was a matter that stemmed out of the cofferdam issue and the report and, you know, committee members being present. But when committee members were questioned internally within the committee – were you aware of these items – you know, they weren't aware. And it was evident that, you know, that was either discussed somewhere in the – you know, the meeting or – and the site visit that they were either not part of or not able to, you know, understand what was happening there.

So, you know, full meeting, full participation all the time that the independent engineer is there.

MR. PEDDIGREW: Mm-hmm.

MR. CARTER: You know, that was a deliverable that we – or an effort that we undertook.

MR. PEDDIGREW: Okay.

You were asked this morning, as well, about your reports and whether they became part of – I think the phrase was public record. And I think you said – I just wanted some clarification on that. I didn't quite understand your answer.

So, Nalcor reports to you –

MR. CARTER: Yes.

MR. PEDDIGREW: – you do a synopsis for the Oversight Committee, and does that synopsis then become part of the public record, or is it just the minutes that come out of the meeting that become part of the –

MR. CARTER: So –

MR. PEDDIGREW: – public record?

MR. CARTER: – what would come – or become part of the public record out of that meeting on a monthly basis would be, you know, the front end, if you will, of the information that I'm sharing with the committee and presenting when I'm giving my update.

So it would be, you know, the numerical side of, you know, a progress curve, and it include, you know, what contingency was – you know, what

the contingency level was, where costs were on the project, and that would then be publicly reported.

In terms of what the discussion or, you know, issues that were being monitored or tracked by the committee, you know they would be gathered up collectively over the quarter, you know, and that would form, you know, the type of information that you see within the quarterly report, which is much more fulsome –

MR. PEDDIGREW: Right.

MR. CARTER: – you know, and, you know, identifies cost-, schedule- and risk-type examinations.

MR. PEDDIGREW: Okay.

That may be it, Mr. Carter.

That's right, yeah. Last question: You indicated that if the committee felt it was necessary to retain an expert to, I guess all but analyze an issue that arose, it would have the power to do so. Is that something that would be – I mean, I guess, you know you have a budget, I'm assuming.

MR. CARTER: Yes.

MR. PEDDIGREW: And so to – you know, depending on what the cost of retaining an expert would be, that's something that you would have to go to Cabinet, I guess, to get approval for, depending on –

MR. CARTER: Yeah.

MR. PEDDIGREW: – what the anticipated cost might be? I assume something like that would be outside, sort of, your regular budget?

MR. CARTER: The – you know, there – I believe I submitted a document here that spoke to the committee budget has been exhibited, you know.

But, you know, certainly if there was something that needed to be done, regardless if the money's in the budget or, you know, specifically prescribed, you know, for the Oversight Committee, I wouldn't anticipate that if there

was a will to do some work, that you would get the funding you needed to complete that task.

MR. PEDDIGREW: Okay, and you would go to Cabinet for that, I assume?

MR. CARTER: No, there's some – you know, in terms of the way that the budget is structured, you know, it's in main supply in the Department of Finance and, you know, there is, you know, the ability, if you need more money than what you have in your actual budget, that there may be more money available in other places or departments in – or in main supply, potentially allocated for other work. But if not realized, that money can be transferred for this purpose.

MR. PEDDIGREW: Okay.

All right, those are my questions, thank you.

MR. CARTER: Thank you.

THE COMMISSIONER: Thank you.

Okay, I believe the next group that are present would be the Grand Riverkeeper Labrador/Labrador Land Protectors.

MS. URQUHART: Good morning, Mr. Carter.

My name is Caitlin Urquhart. I'm representing Grand Riverkeeper Labrador and the Labrador Land Protectors, which are two citizens' organizations based in Labrador –

MR. CARTER: Mm-hmm.

MS. URQUHART: – who are dedicated to maintaining the ecological integrity of the Grand River, Mista-shipu.

MR. CARTER: Mm-hmm.

MS. URQUHART: So –

MR. CARTER: Good morning.

MS. URQUHART: – I have a few questions for you today.

Firstly, Madam Clerk, if we can please go to 01992 – P-01992?

THE COMMISSIONER: And that'll be on the screen.

MR. CARTER: Okay.

MS. URQUHART: And this is the report of the Oversight Committee from September 2014. I understand this is before your time, but I'm just kind of going to set up the background to this question first.

So, Madam Clerk, if you can go to page 37 near the bottom.

UNIDENTIFIED MALE SPEAKER: That's 35.

MS. URQUHART: Yeah, sorry, that's 35. We can keep going to 37, please?

Oh, that should be right.

THE COMMISSIONER: So 37 would be the red 37?

MS. URQUHART: Yes.

THE COMMISSIONER: Is that what your –

MS. URQUHART: Yeah, red 37, that's correct, perfect. That's the last paragraph there.

So, this report indicates – so, the independent engineer – I'm just gonna pull up the quote that I had here which is I believe the second last sentence.

So, independent engineer "... agrees with the plan that further geotechnical observations will be made as ... remedial works progress and as new" geotech "monitoring is performed. These observations will be calibrated against the expectations of the various analysis reports. Designs will be amended if any significant surprises or discrepancies are encountered."

So this is the expectation of the independent engineer as –

MR. CARTER: Yeah.

MS. URQUHART: – at 2014.

MR. CARTER: Yes.

MS. URQUHART: And that accords with your understanding of that.

MR. CARTER: Yes.

MS. URQUHART: Okay, and so, Madam Clerk, if we can please go to 03884, and this is the independent engineer's report from November –

THE COMMISSIONER: Tab 32.

MS. URQUHART: – excuse me – from November 2016. And, Madam Clerk, if you can go to page 15, please, at the bottom again.

Oh, now my page numbers appear to be off. I know it was – can you scroll up a bit please? I believe it was before the switchyard. Apologies, I must have the wrong number there. And unfortunately I don't have a hard copy, so I can't quickly get to it, but there is a – if you'll – oh yes, there we go.

If you can scroll up a little bit further, please?

So this is the section where the independent engineer is discussing the North Spur – perfect, thank you – and there was, I guess, a meeting held in Montreal to discuss the geotechnical features of the North Spur –

MR. CARTER: Mm-hmm.

MS. URQUHART: – and it's indicated: "It was noted during the January 2016 Montreal meeting that very little information was being documented or mapped by site staff about geological features." It goes on to note – and, Madam Clerk, if you can just scroll down a little bit, you'll just see – scroll down a bit further, so this is – this bullet here says a project meeting was held, and there's a summary there of the meeting.

MR. CARTER: Yes.

MS. URQUHART: And if, Madam Clerk, you'll scroll down a little bit further, please, just to the top of the next page.

So, again, it's indicating that no as-built geological mapping was being done at the downstream slope at that time, and this was a

concern that the independent engineer has – had raised.

And, Madam Clerk, if you can now go to P-04014, and so this is where the Oversight Committee sort of comes into it, and my question comes from this.

THE COMMISSIONER: That's at tab – did you say 14? That would be –

MS. URQUHART: Sorry –

THE COMMISSIONER: – at tab 60.

MS. URQUHART: – 04014, yeah.

THE COMMISSIONER: Yeah, tab 60.

MR. CARTER: Tab 60.

MS. URQUHART: So these are meeting notes from the Oversight Committee meetings and site visits in November and December – or sorry, November to December of 2016. So shortly after the independent engineer's report.

And Madam Clerk if you'll scroll down, please – yeah, so just a little bit further. So this section discusses the challenge with – the concern that the independent engineer noted. So "The IE noted that real time mapping is standard industry practice for this type of activity, and therefore felt that the manner in which it was being treated by Nalcor was deficient in this regard."

It goes on to essentially indicate that Nalcor was gonna provide this mapping and information by the end of this meeting. Did that occur?

MR. CARTER: I can't comment if that – oh sorry, I'm in my note – the note here that was prepared by myself and others who were participating at this meeting.

I – no, it did not occur, I don't believe, but I'm just – I don't know what's on the rest of the note if – because there were some things that got or did get responded to, you know, after I had left the meeting or, you know, we were finished.

I guess, you know what – I'm just writing – you know, and if you look at the – "Paul Carter recommended that Nalcor provide" the "required

information to” the “IE to close the geological mapping information gaps” in the first stage of the meeting. “... would be done as the meeting closed.” It’s ongoing and, you know – (inaudible) yes, you are correct. I don’t believe it was done at that particular point in time.

MS. URQUHART: And they were asked to do so?

MR. CARTER: Yes.

MS. URQUHART: Okay.

MR. CARTER: But I don’t know exactly what the circumstance was that why it wouldn’t have been able to be given. My guess being, you know, that certainly some of the – unless I’m misunderstanding exactly what it is they’re speaking, probably not complete at that particular point in time, and saying that you could do it in – you know, at that particular time would have been a challenge.

MS. URQUHART: So my understanding based on these – this, sort of, build up of notes from the independent engineer: since 2014, they’ve been indicating to Nalcor that as geotechnical features and conditions are viewed, so as they’re doing construction –

MR. CARTER: Right.

MS. URQUHART: – they should be keeping records –

MR. CARTER: Yes.

MS. URQUHART: – keeping notes –

MR. CARTER: Yeah.

MS. URQUHART: – of what types of geotechnical features they’re observing –

MR. CARTER: Yes.

MS. URQUHART: – and that’s been, sort of, consistent from 2014, now again in 2016, this was then – my understanding is they are directed by the Oversight Committee to provide these –

MR. CARTER: Yes.

MS. URQUHART: – and they did not at that time.

MR. CARTER: I don’t know that –

MS. URQUHART: I’m going to suggest to you because I’m going to lead you through some other –

MR. CARTER: Yes. No, certainly. I think –

MS. URQUHART: – correspondence where you’re asking for it –

MR. CARTER: Yeah. I think what I’m saying here is, you know, to make sure you get that information to them, you know? I don’t know if I’m being specific that it had to be before the meeting closed that –

MS. URQUHART: No. That –

MR. CARTER: – (inaudible).

MS. URQUHART: – that’s fine. It just says: “Nalcor agreed that information requested ... and site visit would be done as the meetings closed.”

MR. CARTER: Yeah.

MS. URQUHART: You know –

MR. CARTER: Yeah.

MS. URQUHART: – my question is just whether or not, at that time, if you recall that those were provided and I –

MR. CARTER: Yeah I – gee, I really – I don’t know if it actually happened before the end of the meeting or not. I –

MS. URQUHART: Okay.

MR. CARTER: – I’m sorry, I can’t comment. But, you know, certainly I’m telling Nalcor make sure you give the independent engineer exactly what he needs.

MS. URQUHART: What he needs.

And so from – following these meetings – and I don't have the exhibit number – but you sent a letter following up saying –

MR. CARTER: Right.

MS. URQUHART: – please provide the independent engineer with all of the –

MR. CARTER: Yes.

MS. URQUHART: – things that they've requested. And you get a response back from Gilbert Bennett in May 2017, and that's P-03895.

THE COMMISSIONER: 03895 would be tab 44.

MS. URQUHART: Madam Clerk, if you'll please scroll down?

So this is the letter directed to you again May and from – I believe May 11 from – in response to your letter dated March 31, 2017. And so you had requested this information that the independent engineer indicated was standard and industry practice to provide.

MR. CARTER: Yes.

MS. URQUHART: And what I – I read this to say: "Hardcopies of all stamped design documents ... will be made available" So that's not geotechnical mapping?

MR. CARTER: No that's not as-built or, you know, the geotechnical mapping that we're talking about.

MS. URQUHART: Right. And: "Record Drawings will be finalized once all the North Spur stabilization work is completed later this year."

MR. CARTER: Yes.

MS. URQUHART: When you read – when I read this I – that sounds like a direct rebuff or a failure to answer the request to provide this information. What was your response when you – or your reaction when you read that?

MR. CARTER: And, I guess, this is where I'm kind of thinking, you know, record drawings at that particular point in time, you know, didn't seem like you could have them available because they were in notebooks – was my understanding at that particular meeting, right?

MS. URQUHART: Mm-hmm.

MR. CARTER: I think there's reference to that. And, you know, I don't know that I can say to you I didn't react negatively to this.

MS. URQUHART: Mm-hmm.

MR. CARTER: But I know that this is a deliverable that's required in accordance with industry practice in terms of engineering, design, construction and completion. You know, it's something, you know, that, you know, if you see – I'm also interested myself in seeing to satisfy that there are these documents that are – exist that are as-builts and, you know, are approved accordingly by an engineer able to approve such documents in the province.

MS. URQUHART: And, I mean, the intention of the mapping, right, the ongoing mapping, is that designs may need to be changed –

MR. CARTER: Yes.

MS. URQUHART: – in the event that there – that the conditions aren't as expected, right?

MR. CARTER: Hmm.

MS. URQUHART: And so you would expect that that would be maintained on an ongoing basis but –

MR. CARTER: Yeah.

MS. URQUHART: – from the evidence we have, that was not done.

MR. CARTER: My understanding is, you know, that there – the IE and – or his team, his geotechnical people, were expressing concern over the fact that, you know, this was seemingly being done, you know, a little bit behind, if you will, the actual activity taking. But my understanding being that, you know, there were records that were being taken; it was a matter of

compiling these records and, you know, getting to the point where you actually have the as-builts. I mean, undoubtedly there would be, potentially, situations where design – when you actually get in and examine existing, you know, actual geotechnical conditions that may call for, you know, changes or modification to the original construction design.

MS. URQUHART: And I will put to you that it would be very difficult for an engineer to adjust any designs if all of the information about the on-site geotechnical is contained in record books that are in the hands of on-site people and are not accessible to the engineers?

MR. CARTER: I don't – you know, I don't know that I, you know, could, you know, really – I can't – I'm not an engineer.

MS. URQUHART: Mm-hmm.

MR. CARTER: I can't, you know, say that that's incorrect or correct. You know, good practice, in my mind, would be you're doing this as quickly, you know, as you're following. But certainly, you know, my understanding as well that SNC is overseeing this construction and, you know, that this is being, you know, dealt with in a manner that's, you know, appropriate.

MS. URQUHART: And you understand that this is obviously an issue that's very important to the people in Labrador, right?

MR. CARTER: Yes, I would agree, absolutely.

MS. URQUHART: So – which I think you've – my read on the documents is that you have taken this seriously. I mean, you had these meetings, you've – you're following up, there's further follow-ups –

MR. CARTER: Yeah.

MS. URQUHART: – after this and we'll go through that in a moment.

But when I read this, I – it seems to me that it's not answering the question or not addressing the independent engineer's concern that ongoing mapping is not taking place. And this is a concern that was expressed in 2015, expressed in 2016, it's an ongoing concern and I'm – you

know, who has the authority to tell Nalcor? Because when I read this, they're coming back saying this is what we're – the independent engineer is saying this, but this is what we're going to do.

MR. CARTER: Mm-hmm.

MS. URQUHART: Who has the authority to tell Nalcor that they should be complying with the recommendations of the independent engineer?

MR. CARTER: Right.

You know, I'm not taking sides in, you know, the discussion that's ongoing between the independent engineer and Nalcor. You know, I know that, you know, the independent engineer and his geotechnical team have significant experience and, you know, any commentary that they're making, you know, should be respected, you know, at the highest level possible and incorporated where possible.

MS. URQUHART: Mmm.

MR. CARTER: SNC is the design engineer of record –

MS. URQUHART: Mm-hmm.

MR. CARTER: – and the engineer of record that will sign off on, you know, the – you know, the structure, you know, the adjusted structure, if you will, to make it, you know, suitable for the purpose that it's designed. And I don't recall – you know, and then similarly, in my own correspondence to Nalcor, I'm looking for this. I want the as-builts. And, you know, that I'm only looking for that stamp and then that sign-off and approval being the purpose of that.

But, you know, it was – it is my understanding, of course, that, you know, the North Spur geotech – or sorry, as-built drawings, you know, were certainly, you know, not coming until probably – nor being finalized until probably around December of 2018, possibly. Because, you know, I was asking myself, you know, where are these documents? We would like to see them.

MS. URQUHART: But my question is: Does the Oversight Committee have the authority to require Nalcor to produce these documents?

MR. CARTER: Potentially, yeah, I guess. You know, if we felt that this was – you know, certainly we could bring that to someone and say that this is an issue. I didn't.

MS. URQUHART: I mean, in this case, you've specifically requested them and you've received a response that says: We'll get them to you when we're good and ready.

MR. CARTER: To me or to –?

MS. URQUHART: This – that's what this letter is saying. They're not providing that document that – the documents that are – or that are being requested by the independent engineer.

MR. CARTER: Yeah, and I think that, you know, in my – or in my note that I had there I indicated to them: Get him the documents.

MS. URQUHART: Yes.

MR. CARTER: I don't know if I was being entirely specific that, you know, it had to be by the end of that day.

MS. URQUHART: No. And, I mean, obviously you sent this letter in March and they responded in May –

MR. CARTER: Yes.

MS. URQUHART: – so I don't think they were –

MR. CARTER: Yeah.

MS. URQUHART: – it doesn't sound like they were really rushing to get this to you.

MR. CARTER: No.

MS. URQUHART: So who would you have had to ask if you really wanted those documents? Like who does that – where do you send that up the chain?

MR. CARTER: I mean, you know, certainly the correspondence that was received by, you

know, the committee in this respect I – was shared with the committee.

MS. URQUHART: Okay. So – but the committee as a whole would have the authority to require that (inaudible)?

MR. CARTER: Well, you know, if we felt that this was an issue that needed immediate follow-up or further action, yes, you would've had – you could – you had authority to, you know, certainly take action.

And I do recall – now, I'm not certain if – because my recollection isn't, you know – but I did follow up with the independent engineer, myself, to make sure that he was –

MS. URQUHART: Okay.

MR. CARTER: – comfortable, you know, with the information he had received. I'm just trying to recall if it was exactly related to the as-builts or, you know, other issues that he was raising in that – in his report.

MS. URQUHART: And I'm not asking about the as-builts, I'm asking about the mapping –

MR. CARTER: Yeah.

MS. URQUHART: – that was to be occurring throughout the process –

MR. CARTER: Okay, yeah.

MS. URQUHART: – right? The –

MR. CARTER: Yeah.

MS. URQUHART: – ongoing –

MR. CARTER: That's right, the geological mapping, you know –

MS. URQUHART: Exactly.

MR. CARTER: – that would help support, you know, either, you know, the as-built being developed or the construction design.

MS. URQUHART: Yeah.

And, Madam Clerk, if you can please pull up P-03899.

THE COMMISSIONER: So that would be at –

MS. URQUHART: Sorry, I don't have that.

THE COMMISSIONER: – tab 49.

MR. CARTER: Forty-nine.

MS. URQUHART: So this is your follow-up. And, Madam Clerk, if you'll please scroll down – continue down a little bit further. Okay, so – oh, sorry, a little – up a little bit. That's great.

So you're requesting some information from Hatch about their response to the North Spur –

MR. CARTER: Yes.

MS. URQUHART: – damn safety and as well as some other stuff in terms of the stabilization construction activities. But you also go on to say: The committee has requested, with respect to a March 31 letter from Mr. Vardy and Mr. Penney on issues raised regarding the North Spur, that Nalcor respond.

MR. CARTER: Yes.

MS. URQUHART: And, you know, significant time has lapsed that this – this is now in July and significant time has lapsed since you – they were requested to provide a response –

MR. CARTER: Mm-hmm.

MS. URQUHART: – so again, this – you know, what's the protocol? If you're requesting this information or you're requesting action on – from Nalcor but they're not complying, how do you escalate these – your – how would you escalate your concerns?

MR. CARTER: I guess in terms of these issues, you know, I wasn't, you know, behaving in a manner that I was looking to escalate these issues. I mean, this was an action and, you know, authority that, you know, was believed to be held within the committee to do these things.

MS. URQUHART: Mm-hmm.

MR. CARTER: And, you know, the – we did follow up to, you know, indicate. I became aware that our original request to respond to Mr. Vardy and Mr. Penney hadn't been received and, you know, I asked that Nalcor do that. And there might be more to that than – you know, that they didn't respond. They might have responded in a manner that it wasn't understood by, you know, Mr. Vardy and Mr. Penney that the response was specific to their letter that they had originally – (inaudible) – sent to the committee. So I kind of – I followed up on that as well, in terms of making sure that that loop was closed.

MS. URQUHART: So, in terms of the risk of – associated with lowering the water table, when did you first become aware of that risk?

MR. CARTER: I'd have to go back to our committee reports, but it would have been in the spring-summer, early summer of – or early-midsummer of 2017? That would have been at the point in time – as I may have, you know, alluded to earlier – when there was a commitment made to Indigenous groups in Labrador that the water level in the reservoir would be returned to its pre-winter level –

MS. URQUHART: Mm-hmm.

MR. CARTER: – you know, and that – at the particular time that that was planning to be done and, you know, water was being slowly retreated or reduced in the reservoir that this concern arose.

MS. URQUHART: And what did – what steps were taken by the Oversight Committee?

MR. CARTER: You know, in terms of the committee, we were advised. You know, the role of the Oversight Committee in terms of directing Nalcor to raise or lower the water level was not what we were – you know, we weren't involved. The Oversight Committee, just to be clear, was not involved in any way, shape or form in terms of the agreement that was reached between the premier and the Indigenous leaders.

MS. URQUHART: Mm-hmm.

MR. CARTER: I was – we were – I’m sorry, I don’t mean to say I, the committee. We were aware of the sensitivity, and we recorded it in our committee report.

MS. URQUHART: And so, is that where the extent of it – do you take any steps to investigate that risk at all, or it’s just you put it in the report and job done?

MR. CARTER: I don’t – you know, I would have seen – you know, and I think I might have seen documentation from SNC over this.

MS. URQUHART: Mm-hmm.

MR. CARTER: You know, and this is coming from the engineer of record –

MS. URQUHART: Mm-hmm.

MR. CARTER: – qualified capacity to make these types of statements.

MS. URQUHART: Mm-hmm.

MR. CARTER: I wouldn’t doubt its legitimacy or its validity. I just –

MS. URQUHART: Mm-hmm.

MR. CARTER: – I wouldn’t be operating from that perspective. It was obviously – if SNC is making this claim and, you know, there are geotechnical experts who are making these statements, you know, I would have accept it. Now with that being said, the arrangement on this particular, you know, commitment was between the premier and the Aboriginal leaders, and the premier was taking action in terms of the correspondence that we, you know, would have seen here earlier today in one of the exhibits.

MS. URQUHART: Okay, so that – so the steps taken by the Oversight Committee would be to accept the information, ensure that it’s in your risk register, proceed?

MR. CARTER: Identify it as a risk and one that, you know, we needed to pay particular

attention to going forward just to be – you know, that we’re aware of this sensitivity.

MS. URQUHART: Okay.

So and when there’s a specific risk that you’re paying particular attention to, what is your expectation in terms of how that’s managed?

MR. CARTER: Well it’s more just a monitoring role.

MS. URQUHART: Mm-hmm.

MR. CARTER: See if it’s escalating. See if it’s, you know – we don’t manage the risk our self.

MS. URQUHART: Mm-hmm.

MR. CARTER: The risk is, you know, directly managed by Nalcor, but we’re, you know – and generally a risk that we’re talking about are generally cost, schedule and – you know, cost and schedule and those types of risks that are, you know – but not to say that we don’t include risks that are beyond that, you know –

MS. URQUHART: Well, I mean –

MR. CARTER: – if we think it’s legitimate to do so.

MS. URQUHART: – if the whole rim of your reservoir falls into the reservoir that, I would suggest, would be likely a cost risk. There’s upstream shocks and all sorts of other hazards that are associated with that. I mean there’s –

MR. CARTER: Yes.

MS. URQUHART: – yeah, so –

MR. CARTER: It’s a consideration but, you know, I think it’s also important to consider the circumstance under which this risk is, you know, being realized. It’s a risk that’s happening, you know, because of the fact that you’re dealing with, you know, interim impoundment –

MS. URQUHART: Mm-hmm.

MR. CARTER: – where you're somewhere between, you know – without any impoundment, possibly around the elevation 14 up to 25 metres, which was the limit that was agreed to during that period, if I recall –

MS. URQUHART: Mm-hmm.

MR. CARTER: – and, you know, you're going, then, looking to draw the water back down to 14 metres.

MS. URQUHART: Mm-hmm.

MR. CARTER: And my understanding of the risk and, you know, the way that the project functions is that, you know, probably their project isn't originally designed to be going up and going down. You know, you got the project, you impound to protect your project assets to 25 metres, you're not supposed to come back down, I guess, in the original design –

MS. URQUHART: Mm-hmm.

MR. CARTER: – you know, and then you're going from there upwards.

MS. URQUHART: Mm-hmm.

MR. CARTER: And then when the reservoir's full, you're talking about a drawdown from the reservoir, which is relatively small in comparison, you know, so you don't have these. You know, I – and I'm speaking off the top of my head in terms of what that drawdown might be, but –

MS. URQUHART: Mm-hmm.

MR. CARTER: – my understanding or recollection, it's somewhere in a metre or two, a couple of metres.

MS. URQUHART: Mm-hmm.

MR. CARTER: So this risk –

MS. URQUHART: Mm-hmm.

MR. CARTER: – you know, would seemingly, intuitively, when you're at a full impoundment level, not be as significant as it is because of the action that you're taking, you know, during interim impoundment and adjustment of the reservoir level.

MS. URQUHART: Okay. And so the reason that that was agreed to, that the drawdown was agreed to, was because –

MR. CARTER: Yes.

MS. URQUHART: – of methylmercury concerns.

MR. CARTER: Yes.

MS. URQUHART: So, I guess, I wanna move to that now, and just when did that concern come to the attention of the Oversight Committee?

MR. CARTER: Methylmercury –

MS. URQUHART: Yes.

MR. CARTER: – concern? I can't speak prior to my time –

MS. URQUHART: Mm-hmm.

MR. CARTER: – but certainly, you know, that late winter period, October-November, and, you know, I'm just recollecting, you know, and certainly the protest, you know, taking place –

MS. URQUHART: Mm-hmm.

MR. CARTER: – and, you know, it was – you know, it's clear that there's a concern, an environmental concern, here, you know, and then the engagement with the Indigenous leaders and the Premier's office to attempt to come to some form of agreement on that particular issue at that particular point in time.

MS. URQUHART: Did the Oversight Committee, during your time, take any steps in terms of methylmercury? Did you investigate

that at all, look at the risks associated with that at all?

MR. CARTER: The involvement in terms of methylmercury was small to none.

MS. URQUHART: Mm-hmm.

MR. CARTER: But I do recall trying to get an understanding of the issue myself –

MS. URQUHART: Mm-hmm.

MR. CARTER: – you know, just for information purposes, and I believe at one point I would've reached out to Municipal Affairs and Environment to kind of understand what baseline data was looking like versus – and data that was collected to that point in time.

MS. URQUHART: Mmm.

MR. CARTER: But in terms of, you know, this particular risk, you know, or sorry, this circumstance, you know, at the point in time it's clear that there's an issue which needs to come to some form of resolution, and I think it was when we did our – or had EY in to do the finalization of the interim report, the implementation of the recommendations, you know, it was clear in that report that, you know – and then now, we're not talking about environmental events, we're talking about a potential cost and schedule impact –

MS. URQUHART: Mm-hmm.

MR. CARTER: – which is in the purview of the committee.

MS. URQUHART: Mm-hmm.

MR. CARTER: And, you know, from that particular report in our risk identification and the committee reports we flagged, you know, that risk, you know, in terms of, you know, the – and that could've been one of many outcomes in terms of soil removal or, you know, vegetation removal and the cost associated with that, which was not in the project budget, and we had been recording against that since that particular time.

It was included in our June committee report of 2017. The report from EY was in August, but we were – you know, by the time the report was out we had that information and included it in the June report.

MS. URQUHART: That was in August 2017.

MR. CARTER: Yeah, around that time frame, August. But, you know, we had the EY report in hand and we had that on August 31. So the report that covered the period ending June was very soon after that that it was to be published.

MS. URQUHART: Okay.

So the issue of the risk associated with full clearing or topsoil removal didn't sort of enter into the Oversight Committee until sometime in around late 2016 is your understanding.

MR. CARTER: Yeah, so, you know, the – there's an environmental aspect to all of this.

MS. URQUHART: Mm-hmm.

MR. CARTER: And the environmental aspect of it eventually translates into a potential cost or schedule risk and, you know, at least at my point in time on being in the committee, that's when we start identifying this as the risk and, you know, track it (inaudible).

MS. URQUHART: So we've seen – the Commission's seen some information that indicates Nalcor considered full clearing and/or soil removal as a risk. Or part of the cost and schedule risk that they were associating with that was in the event that additional environmental assessment and/or Canadian fisheries, like habitat (inaudible) and all that, approvals would be required in the event that those were completed.

Did that come to the attention of the Oversight Committee?

MR. CARTER: So what time frame are you speaking of now?

MS. URQUHART: I believe that was in 2016 that that – that the document that indicates the – where there’s a notation from Nalcor essentially saying this could lead to further EA and fisheries issues.

MR. CARTER: Yeah, I don’t – you know, it’s – my recollection of us reporting on risk –

MS. URQUHART: Mm-hmm.

MR. CARTER: – you know, it’s clearly, from that point forward –

MS. URQUHART: Mm-hmm.

MR. CARTER: – which I said to you is, you know, September time frame.

MS. URQUHART: But do you –

MR. CARTER: So –

MS. URQUHART: – remember specifically talking about that risk, the risk that additional clearing or soil removal would require – would trigger additional environmental assessment and/or fisheries permits being required?

MR. CARTER: Yeah, I don’t recall myself exactly, but certainly, you know, I would’ve been aware that, you know, through project reporting, you know, that, you know, and it’s – you have the additional risks which have been quantified and, you know, outside of the AFE, that –

MS. URQUHART: Mmm.

MR. CARTER: – there would be a cost impact certainly associated and potentially schedule if –

MS. URQUHART: Mmm.

MR. CARTER: – further work was going to be completed within the reservoir, you know –

MS. URQUHART: Mm-hmm.

MR. CARTER: – related to the methylmercury issue. Yes, I was aware of that.

MS. URQUHART: But specifically related to environmental – like, do you recall seeing this? I haven’t seen it in any of the minutes or anything like that. I haven’t reviewed all of them, so I – you know, and that’s why I’m asking you whether you have any recollection of addressing the issue of the potential, you know, risk to cost and schedule of another EA or fisheries being required?

MR. CARTER: Yeah, I’m sorry, I’m – you know, I’d probably have to go back in time and look what might’ve been in the risk register from –

MS. URQUHART: Mm-hmm.

MR. CARTER: – Nalcor. Is that what you’re suggesting, it’s in the risk register (inaudible)?

MS. URQUHART: No, I’m not.

MR. CARTER: Okay.

MS. URQUHART: I’m saying – I’m asking whether you recall being it – that being flagged to the Oversight Committee, that being an issue that was ever brought up or brought to your attention?

MR. CARTER: You know, my recollection would be clearly that, you know, if there is a directive or a requirement to do something different, you know, than what had already been planned, you know, that certainly there would be a cost and schedule risk associated with it, particularly if it was full-scale reservoir clearing and soil removal.

MS. URQUHART: Mm-hmm.

MR. CARTER: But to the extent that the committee was monitoring or tracking it is, as I said, unless I’m missing something from my earlier that I wasn’t paying attention to, but we started recording the potential cost or schedule risk associated with this, you know, as a result of it being identified, a cost and schedule impact –

MS. URQUHART: Mm-hmm.

MR. CARTER: – and, you know, I’ve reported consistently about it.

MS. URQUHART: So even now the IEAC has recommended full topsoil removal and that hasn’t been something that’s been discussed, that you’ve heard mentioned that there’s a risk that further EA or fisheries permits would be required.

MR. CARTER: Is that ...?

MS. URQUHART: Is that a risk that’s been discussed in relation to that recommendation?

MR. CARTER: Yeah, it would be. You know, certainly, I don’t want to get too, too deep into IEAC and recommendations because it’s a process that’s ongoing –

THE COMMISSIONER: I think, Mr. Carter, if you could just concentrate –

MR. CARTER: Yeah.

THE COMMISSIONER: – on the question that you’re being asked. We don’t need to – there’s things that you’re going into that it’s not really responding to Ms. Urquhart’s question.

MR. CARTER: Sorry.

THE COMMISSIONER: The question is simply: In the discussions in the Oversight Committee, has there ever been discussion related to the need – if there is to be further clearing or topsoil removal, of the need for a further EA or, alternatively, permits from the Department of Fisheries?

Is that your question?

MS. URQUHART: That’s my question.

MR. CARTER: Okay, so –

THE COMMISSIONER: If you could just answer that question, it’s a simple question, yes or no.

MR. CARTER: Sorry. I can’t recall that it has.

MS. URQUHART: Okay, thank you.

MR. CARTER: Sorry.

MS. URQUHART: Excellent.

My only other question relates to the issue of community unrest. And I know that you came on sort of right in the thick of it when letters from Innu and Inuit leaders were being sent to the Premier and all that.

MR. CARTER: Yes.

MS. URQUHART: But at what point was that issue sort of brought to the fore with the Oversight Committee? Was that really just in October-November when it materialized or was that something that was being addressed earlier on in your tenure?

MR. CARTER: Yeah, I don’t mean to be – you know, I’m trying to answer your question as best I can. I’m – you know, I’m being as open and honest as I can. You know, that – it’s early days for me on the committee.

MS. URQUHART: Mm-hmm.

MR. CARTER: And I – you know, and even your earlier request, and I think that that’s probably why I’m struggling with an answer because, you know, I really can’t recall what we would’ve been looking at in terms of risk. And I don’t recall if that was, you know, discussed in, you know, in terms of the ...

I’m really stretching it because – you know, and I just – so just so I’m making sure because I’m having – you know, I want to be as responsive as I can, just make sure – if you could ask me the question one more time so I –

MS. URQUHART: Absolutely.

So, obviously, the protests and whatnot that we were talking about earlier –

MR. CARTER: Yes.

MS. URQUHART: – those happened in October of 2016.

MR. CARTER: Yes.

MS. URQUHART: And you came on in August, I believe it was, of that same year. Is that right?

MR. CARTER: Yes.

MS. URQUHART: Yeah, so you – you know, you were fresh on to –

MR. CARTER: Yes.

MS. URQUHART: – the committee.

I'm wondering if, from the – in those early days sort of leading up to those protests, if you recall the issue of unrest in the community being a risk that was discussed?

MR. CARTER: Yeah, potentially in, you know, the committee, I – you know, I'm going back a couple of years, three –

MS. URQUHART: Yes.

MR. CARTER: – years here now, and exactly what was, you know, being discussed within each meeting – you know, and I know at the front end of this, the meeting was – those meetings were somewhat sporadic in terms of the transition –

MS. URQUHART: Mm-hmm.

MR. CARTER: – between, you know – and me coming to the committee and –

MS. URQUHART: Mmm.

MR. CARTER: – you know, getting everybody realigned. I mean we didn't really get into a – but, you know, whatever, you know, the record says in terms of the minutes, if it was discussed.

In terms of – I was aware, you know, in terms of what was happening in the media and, you know, watching, you know, and seeing what was happening here, I mean – but it's really at that time that, you know, it's evident in my time frame, it's in November, you know, when these things are starting to happen, that there's a

potential issue here that – and a recognition of an issue that needs to potentially get resolved one way or another at some point.

MS. URQUHART: Okay.

Let me just check here. That was all for me, thank you.

MR. CARTER: Thank you.

THE COMMISSIONER: Thank you, Ms. Urquhart.

Former Nalcor Board Members.

MS. G. BEST: No questions, Mr. Commissioner.

THE COMMISSIONER: All right, Newfoundland and Labrador Building and Trades Council. Not present, okay.

Dwight Ball, Siobhan Coady.

MR. O'FLAHERTY: (Inaudible.)

THE COMMISSIONER: Okay, no questions.

All right, Mr. Fitzgerald.

MR. FITZGERALD: Just briefly, Mr. Carter.

And this exhibit is on the screen, 03899? If we can just scroll down a little bit so I can just go up to the top a bit and the date?

Okay, thank you, July 20, 2017. This is the letter that you sent to Mr. Bennett.

MR. CARTER: Yes.

MR. FITZGERALD: And we can scroll up a little bit further, or down a bit further, thank you. Receiving specific information from companies like Hatch and SNC-Lavalin?

MR. CARTER: Yes.

MR. FITZGERALD: You indicated in your testimony that you had a level of trust with respect to information that was coming from Nalcor now –

MR. CARTER: I –

MR. FITZGERALD: – and the relationship is good?

MR. CARTER: I do.

MR. FITZGERALD: And was part of your – the trusting you have on some of this information in particular in this context, the fact that professional engineers, who are subject to professional regulation and standards, are signing off on these documents.

MR. CARTER: That's correct.

MR. FITZGERALD: Can you just speak up a little?

MR. CARTER: Yes, that's correct, that's the approach we're taking.

MR. FITZGERALD: And that was the direction and the discussion you had with Mr. Bernard Coffey.

MR. CARTER: And with the committee.

MR. FITZGERALD: Yeah, and the committee had a level of comfort knowing that.

MR. CARTER: Yeah, and this was the extent of, you know, what we – the committee was doing, you know, around, you know, gaining that understanding or appreciation that –

MR. FITZGERALD: Yes –

MR. CARTER: – they (inaudible).

MR. FITZGERALD: – from – in terms of the trust and the level of comfort, the professional regulation of these entities did play a significant factor in your conduct here.

MR. CARTER: It did.

MR. FITZGERALD: Thank you.

If we could just go to P-02051, please, page 6? I don't believe this –

THE COMMISSIONER: That'll be on your screen.

MR. FITZGERALD: Yeah, I don't believe it's in the book. Thanks, Commissioner.

Okay, if we can just blow that up a little bit. Thank you – no, can we scroll up a little bit? Thank you.

There's been a lot of testimony given over the last couple of days with respect to methylmercury and the cofferdam leakage and such things and environmental issues, but – and I guess, Commissioner, I'm trying to close the gap, if there is a gap, on Mr. Ryan's questioning yesterday, and he put Mr. Martin to number 3: "The cost and schedule risks are being reasonably anticipated and managed."

What Mr. Ryan did not point out was the paragraph below, which says: "The Committee will not participate in the day-to-day management of the Project. The Committee will not have oversight of health, safety and environment, quality, regulatory compliance and benefits tracking." They "are specifically excluded from the Committee's scope and ... administered or monitored by other Provincial Government Departments and Agencies."

So it's my understanding that environmental risks – and they may not have a cost, they may have a, you know, a monetary cost – I mean they all have a, you know, environmental cost, I accept that – but it's my understanding that environmental risks are addressed in monitoring plans at the Department of Environment.

MR. CARTER: Yes, the – you know, it's clear in terms of the terms of the – you know, what the responsibility is here (inaudible).

MR. FITZGERALD: But that's the entity in government that deals with such risks.

MR. CARTER: It is, yes.

MR. FITZGERALD: And you said in your testimony that there was – you know, an environmental risk could end up being a potential cost risk.

MR. CARTER: That's right.

MR. FITZGERALD: That's correct.

So when an environmental risk becomes a potential cost risk – correct me if I'm wrong – this becomes something on your radar because you need to look at cost and schedule risks that are being anticipated.

MR. CARTER: That's correct.

MR. FITZGERALD: And when the – when the Oversight Committee is aware of an environmental risk that may lead to a cost risk, whether anticipated or not – well, anticipated, according to the terms of reference – then the Oversight Committee would continue to follow up on that and would monitor that in some way, shape or form.

MR. CARTER: Correct.

MR. FITZGERALD: And how would you monitor that, just in general, once it –

MR. CARTER: Monitoring –

MR. FITZGERALD: – comes in to you?

MR. CARTER: – of the – you know, certainly if it's a risk that's identified in the project risk register, we'd be keeping an eye to that. If it's a risk that, you know, we some – you know, sometimes there's risks that the committee ourselves develop, if there's an issue that, you know, has a cost or monetary impact or is a potential schedule impact, you know, that we identify that ourselves and keep an eye to current circumstances.

MR. FITZGERALD: And I guess what I'm trying to get at, too, is – I think Mr. Ryan might've been alluding to this yesterday – what is the, I guess, the connection between the departments; you had the Department of Environment, you had the Department of Municipal Affairs.

MR. CARTER: Yeah.

MR. FITZGERALD: So, if there is a risk that's in that department – let's say dam leakage, that

would be Municipal Affairs – how does that get to the Oversight Committee? I guess the clerk is on top isn't it – isn't he or she?

MR. CARTER: Yeah, I'm not certain that I'm following you, Mister (inaudible).

MR. FITZGERALD: Well, the communication link between the department of – the various departments, when there may be a risk, –

MR. CARTER: Yeah.

MR. FITZGERALD: – how does that risk get to the Oversight Committee?

MR. CARTER: Yeah, I'm tracking that through, you know, the project risk register primarily, –

MR. FITZGERALD: Yes.

MR. CARTER: – as opposed to, you know, something environmental, and when, you know, I do see identification of a cost or schedule risk, you know, that's when –

MR. FITZGERALD: Yeah.

MR. CARTER: – we include it.

MR. FITZGERALD: But up until recently, the clerk of the Executive Council would've been the chair of the Oversight Committee.

MR. CARTER: It (inaudible).

MR. FITZGERALD: Well, up until Mr. Coffey.

MR. CARTER: (Inaudible.)

MR. FITZGERALD: I mean I know it changed after that to Mr. Bown, but initially –

MR. CARTER: Yeah.

MR. FITZGERALD: – it was Ms. Mullaley and then we went from there.

MR. CARTER: Mister (inaudible).

MR. FITZGERALD: But I guess one form of communication in terms of the Oversight Committee was that if there are risks with respect to Muskrat Falls, environmental risks, one would expect that the department would be reporting those to the clerk and to the Premier, wouldn't you agree?

MR. CARTER: Yes, that's correct.

MR. FITZGERALD: And then that could flow down to the committee, that's just one element of communication to the committee.

MR. CARTER: Right, and, you know, in addition to that, you know, there's certainly the LCP deputies committee, you know, and –

MR. FITZGERALD: And who's on the LCP deputies committee?

MR. CARTER: Deputies for the various departments.

MR. FITZGERALD: Such as Environment?

MR. CARTER: Yes.

MR. FITZGERALD: And Municipal Affairs on that too?

MR. CARTER: Yeah, in one department; they're combined.

MR. FITZGERALD: Okay, thank you.

MR. CARTER: More recently, I've been involved in that committee.

MR. FITZGERALD: Okay.

Those are my questions. Thank you, Mr. Carter.

MR. CARTER: Thank you.

MR. FITZGERALD: Thank you, Commissioner.

THE COMMISSIONER: Thank you.

I wanna talk a little bit about oversight of the Oversight Committee for a minute.

Just wondering; I have had a chance to look at the minutes that have been introduced here, and I think the wording used by one of the counsel, I think it was Mr. Budden, was that they were sparse.

MR. CARTER: Yes.

THE COMMISSIONER: Can I indicate to you that if I was a citizen looking at those minutes, I would have very little understanding of what was being discussed at the Oversight Committee.

Is there a reason why you don't – I know you're there trying to take notes, you're trying to chair the meeting, all that – is there a reason why you don't have a recorder there, an assistant there who's taking minutes, who can produce a set of minutes that's forwarded out to everybody?

Maybe I'm old school but in the old days, at least, I always, when I went to a meeting, I would see a set of minutes that would come back and I'd have an opportunity to comment on the minutes.

MR. CARTER: Right.

THE COMMISSIONER: What – why is there such a terse reporting of the discussion at the Oversight Committee; is there a reason for that?

MR. CARTER: I followed suit in terms of the way that –

THE COMMISSIONER: I'm sorry, just move a little bit –

MR. CARTER: Oh –

THE COMMISSIONER: – closer –

MR. CARTER: – sorry.

THE COMMISSIONER: – 'cause I'm having (inaudible).

MR. CARTER: My apologies.

You know, I followed suit in terms of the way that the minutes were structured for the committee. You know, there's many – you know, there may be certainly things of

commercial sensitivity and, you know, these types of things –

THE COMMISSIONER: Yeah, –

MR. CARTER: – but –

THE COMMISSIONER: – I understand that, so –

MR. CARTER: Yeah.

THE COMMISSIONER: – so if there was things in the minutes that would be commercially sensitive, you do the same thing that you're doing for the report, you just exclude that part.

MR. CARTER: Right.

THE COMMISSIONER: What I'm trying to figure out is why is it, or is there a reason, other than commercial sensitivity, because that can be weeded out after –

MR. CARTER: Yes.

THE COMMISSIONER: – is there a reason why, or that you're aware of, as to why those minutes are so terse?

MR. CARTER: Yeah. You know, I – they're brief. I share your observation. The exact reasons as to why they're brief, you know, I should be able to give you an answer.

You know, certainly, you know, the – I think experience, you know, has been that, you know, if – you know, the more you might put in there, the more, you know, that you're dealing with ATIPPA requests and these types of things and – you know, but trying to be – you know, or at least perceived to be that you're indicating, you know, what's happening at the meeting, what the topics are being discussed what – you know, there's certainly consideration such as that.

And, you know, my understanding and I guess my appreciation of the situation – I mean, I hold responsibility here; I'm taking the minutes – you know, is that I did have a hesitation to have a full set of notes that are, you know, larger and bigger, and then at the end of the day only reporting, you know, a very preside version of it,

so I took a bit of concern with that. But, you know, I can accept your statement in terms of, you know, how brief the minutes might be.

THE COMMISSIONER: Okay. One other query, and I realize now I'd forgotten to ask Mr. Learmonth if he had any redirect, but I may just ask my other question.

You talked about what the Oversight Committee looks at in the Nalcor documents, the IE reports, the site visit reports, things of that nature. Wondering whether or not at this point in time there are other things going on besides Nalcor and the IE with regards to what's happening with this project. For instance, the Public Utilities Board, right at the moment, is conducting some hearings with regards to direction that they've received from the government.

MR. CARTER: Yes.

THE COMMISSIONER: So, would the – or would it be within the ambit or the purview of the Oversight Committee to be reviewing reports being received by the PUB – for instance, reports from Synapse or Liberty Consulting, those sort of groups? Because – do you guys – does the Oversight Committee actually review any of those?

MR. CARTER: No, we haven't been reviewing those reports, and, you know, I guess, you know, the role of the Oversight Committee – you know, and going back to the terms of reference – to be primarily, you know, focused on the construction phase of the project.

THE COMMISSIONER: Right, I'm just –

MR. CARTER: So –

THE COMMISSIONER: – I'm just thinking that –

MR. CARTER: Yeah.

THE COMMISSIONER: – for instance, in some of those reports there are issues – at least I'm thinking of two – that are issues that are addressed that relate to construction and particularly schedule, and I'm just wondering if

– you know, they may well be coming through you from Nalcor, I don't know. But –

MR. CARTER: Yes.

THE COMMISSIONER: – that's why I just wondered whether or not you are paying any heed to what was appearing in some of these other consultants' reports?

MR. CARTER: I'll be honest with you, Commissioner. I haven't paid attention to what's happening in those consultant reports, but if there's information there that may add value to the committee, I'd certainly – you know, and I will certainly take that, you know, as something that I might want to look at.

If the reports are, you know, the things that are happening with rate mitigation and, you know, these –

THE COMMISSIONER: Right.

MR. CARTER: – types of things, they're different and –

THE COMMISSIONER: I understand that.

MR. CARTER: Yeah.

THE COMMISSIONER: So – anyway, no, I was just wondering if you were following. And –

MR. CARTER: Yeah.

THE COMMISSIONER: – and obviously the other big thing that's going on is the Inquiry and –

MR. CARTER: Yes.

THE COMMISSIONER: – are you – there is information about construction and things of that nature that is coming out, so are you kept apprised of that?

MR. CARTER: I'm not certain –

THE COMMISSIONER: Are you kept apprised of what – you know, like, we have now, ourselves, you know, well over five million documents now ourselves.

MR. CARTER: Yes.

THE COMMISSIONER: There are documents that are being entered as exhibits; there's testimony that's being given on the construction phase. Is – are – is the Oversight Committee following what's being heard at the Inquiry to any degree in its oversight of construction?

MR. CARTER: Yes, I mean to the extent, Commissioner, that, you know, the Grant Thornton report and, you know, final forecast costs being known within the project team at various levels and, you know, the understanding of the Oversight Committee members at that particular point, these are – is information –

THE COMMISSIONER: Right. I'm not talking more from a historical perspective –

MR. CARTER: Yeah.

THE COMMISSIONER: – I'm talking about – we're hearing witnesses now talking about what's happening in the construction. For instance, we've had contractors that are testifying – who have testified about various things.

MR. CARTER: Yes.

THE COMMISSIONER: We have – now we have some of the project management team members that are testifying, and I'm just wondering whether or not, as part of oversight being conducted by the Oversight Committee, if any heed is being given to the evidence that's being presented at the Commission?

MR. CARTER: Yeah. I haven't, you know, raised it in any significant way with the Oversight Committee of late, but certainly I've been listening to a lot of the information and, you know, in part probably because I have, you know, a role in the Inquiry itself.

But I certainly, you know – you know, I'm onboarding what I'm hearing as well, and it is, you know, a potential recommendation that, you know, we will – might need – might want to be paying close attention to the record that's been generated and to see, you know, if it lines up with our understanding or if there's deviation, I agree.

THE COMMISSIONER: All right.

I'm sorry, Mr. Learmonth, I went ahead of you. I apologize for that.

MR. LEARMONTH: Well, there's no –

THE COMMISSIONER: No questions?

MR. LEARMONTH: No redirect.

THE COMMISSIONER: Okay.

All right, thank you, Mr. Carter, you can step down. We're a little later this morning finishing, but I wanted to try to get Mr. Carter finished. We can hopefully get started with Mr. Warren next.

So let's take 10 minutes, and we'll start with Mr. Warren.

MR. CARTER: Thank you.

CLERK: All rise.

Recess

CLERK: All rise.

Please be seated.

THE COMMISSIONER: All right.

Mr. Collins.

MR. COLLINS: Commissioner, could we enter Exhibits P-03985 to P-04000?

THE COMMISSIONER: Just one second now.

MR. COLLINS: Absolutely.

THE COMMISSIONER: Okay, go again, P ...?

MR. COLLINS: P-03985 to P-04000 and Exhibit P-04025.

THE COMMISSIONER: All right.

And your next witness then?

MR. COLLINS: Mr. Auburn Warren; I believe he wishes to be sworn.

THE COMMISSIONER: All right.

Mr. Warren, if you could stand and take the Bible in your hand, please.

CLERK: Do you swear that the evidence you shall give to this Inquiry shall be the truth, the whole truth and nothing but the truth, so help you God?

MR. WARREN: I do.

CLERK: Please state your name.

MR. WARREN: Auburn Warren.

CLERK: Thank you.

THE COMMISSIONER: Okay, go ahead.

MR. COLLINS: Mr. Warren, you've already introduced yourself to the Commission in Phase 1, but could you outline, briefly, your role and responsibilities inside of Nalcor?

MR. WARREN: Sure.

So my role is as general manager for Commercial, Treasury and Risk Management. With regards to the Lower Churchill Project, my team is responsible for the financial modelling related to the Lower Churchill Project.

MR. COLLINS: Could we start with P-02206, which is tab 21?

And this is a November 6, 2013, presentation given by Ed Martin to Canada and to the independent engineer. And if we go to tab – to page 29, we see a list of key changes since DG3, and this is a slide we've seen before. And the first bullet on this list is a capital cost increase of \$300 million, but the second bullet is financing costs, a reduction of \$300 million at net present value. So that's the first issue I'd like to ask you about.

MR. WARREN: Sure.

MR. COLLINS: And if we go to P-02671 next, which is tab 10, we have an email from October

28 from you to Mr. Martin and various other people, and it indicates that there are \$300 million in net present value and financing savings.

Do you know if this email is the basis of Mr. Martin's slide?

MR. WARREN: That is my understanding. It's – in looking at the 300 financing savings, this is the point that – the point of intersection of the \$300 million that I see.

MR. COLLINS: And so in this email you talk about the difference between net present value or cumulative present worth dollars and nominal dollars, and this is something the Commission has heard about several times and I'd like to review it briefly.

As I understand it, net present value is the tool you use when you want to value a stream of cash flows or costs in the present value. So if your exports are worth \$100 million every year for the next 50 years, how – net present value will answer the question: How much is that worth today? And to do that you have to choose a discount rate; Nalcor chooses, I believe, 7 per cent in most of these analyses. And to cash – to value future cash flows based on a 7 per cent discount rate, you reduce them by 7 per cent for every year you go into the future.

MR. WARREN: That's correct.

MR. COLLINS: So \$100 million this year is a \$100 million; a \$100 million next year counts as \$93 million, the year after it's 86.5 and so forth.

MR. WARREN: Yes.

MR. COLLINS: So that \$300 million in financing savings, that's the net present value of a large amount of interest paid over a long time.

MR. WARREN: Yes, the savings – the reduction in financing costs over the 50 years.

MR. COLLINS: Before we talk about why the financing costs decreased, can you tell me: What are the major components of the financing costs?

MR. WARREN: Sure.

So, obviously, the biggest expense is the interest costs and the interest costs are made up of the base risk-free rate, which generally we've used Government of Canada bonds. So that's – in the marketplace, that's how much a risk-free bond would look like. On top of the base rate we add a spread – or it's a margin, so to reflect that it's not a risk-free debt instrument. And also included in financing costs would be your costs related to the fees, the underwriting fees, so the – your lead arranger and the banks that go get you the financing are paid a fee as well. That's the biggest components of the financing costs.

MR. COLLINS: The base rate, as I understand it, that's – that fluctuates according to the financial markets –

MR. WARREN: That's correct.

MR. COLLINS: – it goes up and down.

The – what are the factors that determine the spread?

MR. WARREN: So again – so that is – that's market driven. They look at kind of the quality of the security that's attached to the debt instrument. In our case, they would look at where it was a guaranteed from the federal Government of Canada, they would look at the quality of the guarantee that's associated.

That was the chief and only security that was provided under the LCP financings.

MR. COLLINS: So it's – the question is basically how many hoops do the financiers have to jump through to get to the federal government –

MR. WARREN: Yes.

MR. COLLINS: – if something goes –

MR. WARREN: And how –

MR. COLLINS: – wrong?

MR. WARREN: – how closely do the investors, who are investing in the – in that debt, how close to Canada is it perceived.

MR. COLLINS: And so at DG3, the team had estimated what the base rate would be, what the spread would be, what the fees would be. In October 2013, as financial close approached, what new information did the team have about what those things would end up being?

MR. WARREN: Yeah. So in October 2013, we were nearing financial close and we also were actually in receipt of proposals from three different proponents. So, three different teams of banks came with the structure of what their bonds would look like, the duration of those bonds.

So we had in hand, in October, obviously, committed – so what the banks were willing to actually provide in forms of debt. At that point in time, the base rate was still subject to where it would actually come in at financial close. And for the margin, the spread, some proposals gave you a fixed spread that you could take to the bank, or some had a fixed component, but it was able to fluctuate depending on market conditions. And then they also fixed their underwriting fees.

MR. COLLINS: And so even with the base rate – the base rate wasn't fixed yet, but in October 2013, did you have more information about what the base rate in December of 2013 would be –

MR. WARREN: Yeah.

MR. COLLINS: – than in –

MR. WARREN: Yes, so we –

MR. COLLINS: Of course.

MR. WARREN: – had a better view. It was closing within a month, month and a half, so we could see where the market was currently for that – for those underlying base rates. And we saw that compared to DG3, those base rates were 30 – roughly 30 basis points, so 0.3 of a per cent, lower than what we had estimated at DG3.

MR. COLLINS: And what about the spread? How had that changed from your estimate?

MR. WARREN: So the spread – so, throughout the process, we worked on trying to get, what I

call, as clean of a guarantee as possible so that when the investors were looking at it, they were actually looking at something as close to Canada as possible. And our benchmarks that we were looking towards, our comparables in the market, was Canadian Housing Trust and CMHC, the Canadian Mortgage Housing Corporation.

And so we were trying to ensure that the market, when they looked at the LCP financing, they saw it very close to that. So what we saw was that spreads actually came down by 50 basis points, so half of a percentage point. So, all in, the debt was coming in at little over 80 – at this point in time, when I did the – when the team did the calculation for the benefit, the \$300-million NPV benefit, it was roughly 0.8 per cent or 80 BPS lower than DG3.

MR. COLLINS: So, in total, we were paying all – not quite but almost 1 per cent less in interest –

MR. WARREN: Yes.

MR. COLLINS: – over the course of the whole life of the financing.

MR. WARREN: Yes.

MR. COLLINS: And what about the fees? I understand they're a smaller component but –

MR. WARREN: So yeah, so at DG3, we had a conservative estimate. Through the competitive process that we followed for the request for financing – the short acronym that we have for that is the RFF – so during the RFF, we held a competitive process, and that competitive tension saw that that came in significantly lower.

MR. COLLINS: So all told, between the reduced rate – base rate, the reduced spread and the reduced fees, do those three factors together explain the \$300 million in savings?

MR. WARREN: Yes, that's – that is – the basis of the 300 is that you have less financing costs as a result of the change in those estimates.

MR. COLLINS: And from what you've said, it sounds like it's a – there's a mixture of luck in the financial – good luck in the financial markets and good work by the team that secured that –

MR. WARREN: Yes, but it's not as evident because in the marketplace generally, if you see that base rates are going down, it's not a one-to-one correlation, but you'll see the margins are going up. It's kind of how the market kind of balances to basically stay in as equilibrium as possible. So, although we saw that our base rates went down 30 basis points, and we see that our margins came in 50 basis points lower, what the 50-basis points change is not reflecting is that that – the margins could've actually gone up 25, 30, 35 basis points.

So –

MR. COLLINS: So that –

MR. WARREN: – it is a good indication of, yes, the markets have change, which is great for bringing the base rates down, but the quality of the guarantee definitely came in.

MR. COLLINS: So, did anything happen between your October 28 estimate and financial close that would make that \$300-million estimate no longer right?

MR. WARREN: So, just looking at where we had estimated it in October to financial close, the base rates came down. We incurred some additional costs with respect to fixing the Canadian base rate through a hedging program, but our all-in costs actually went down another two or three BPS.

So when you look at the effect of average cost of borrowing, it was two, three BPS lower than what we were estimating in October.

MR. COLLINS: But that's a small change by comparison.

MR. WARREN: No. Yeah, exactly. But relative to how everything came in at the point, I was comfortable that the 300 was still a good measure for what finance savings we garnered through the RFF process.

MR. COLLINS: And did the increased capital costs have any effect on those financing savings?

MR. WARREN: So we never – at October, we were still using a \$6.2-billion capital cost estimate.

MR. COLLINS: And did you recalculate for the 6.5?

MR. WARREN: No, not at – not subsequent because we saw – we went through another best-and-final-offer process so we felt comfortable that we had squeezed enough to offset any incremental costs for that incremental borrowing cost related to the extra \$300 million.

MR. COLLINS: So between October and December, there were some small changes, but on the whole, the \$300 million is about right?

MR. WARREN: Yes, yeah.

THE COMMISSIONER: Can I just stop you there, just my simple mind here as I look at finances.

So, I wanna make sure that there's no sort of double counting here.

MR. WARREN: Yeah.

THE COMMISSIONER: So, you've explained to us now about how you got the \$300 million to – for the lesser amount for – in financial – financing costs you – that was on the basis of the \$6.2 billion. Because you were gonna be potentially borrowing \$300 million more, what did you do about the additional \$300 million with regards to financing costs, like the additional interest that you would have to pay on that, fees or whatever if there were any?

MR. WARREN: So, on the debt side –

THE COMMISSIONER: Okay.

MR. WARREN: – the guarantee was fixed, so we incurred \$5 billion of guaranteed –

THE COMMISSIONER: Correct.

MR. WARREN: – debt –

THE COMMISSIONER: Okay.

MR. WARREN: – and that was fixed, that wasn't going to increase.

At – in October we had, I believe, \$50 million to \$100 million of excess capacity, so we didn't – because our rates came in so well under, we didn't really need to draw the full \$2.4 billion –

THE COMMISSIONER: Okay.

MR. WARREN: – at that point. So, we had probably \$50 million to \$100 million of extra debt that we were carrying, so that would help cover off some of that \$300 million. The incremental 200, 250 would be incurred through equity.

THE COMMISSIONER: Right, okay.

MR. WARREN: And, we didn't recalculate the incremental impact of carrying that extra \$200 million, \$250 million –

THE COMMISSIONER: Okay, yeah.

MR. WARREN: – to update the \$300 million.

MR. COLLINS: Right, and going to the market to secure that money, that's the Minister of Finance's problem.

MR. WARREN: The equity?

MR. COLLINS: Yes.

MR. WARREN: Yes. It's sourced from the Minister of – from the Ministry of Finance.

MR. COLLINS: So, if we could return to P-02206, tab 21, page 29, the same slide. So, the third bullet is Excess sales/other value have increased by \$100 million. Do you know who calculated that figure, Mr. Warren?

MR. WARREN: So my team would've provided an estimate for that, and that was calculated using the same pricing assumptions. It's composed of two different elements of the export sales, so we have what we generally call the Muskrat Falls' export sales, and what we looked at there was, under status quo, what is included in the net benefits analysis that I discussed during Phase 1, had – that was our status quo model.

And in August of 2012, we were approached by Mr. Martin to come up with a value, between myself and the general manager of Energy Marketing, Greg Jones. And, so Greg worked with my team to just come through that, and what we did was we opened up a new market in Nova Scotia, delivery point which is Point Aconi.

MR. COLLINS: So, let's go back –

MR. WARREN: Yeah.

MR. COLLINS: – let's go back a few steps.

So, before we get into the details of the calculation, this \$100 million is – like the \$300 million, is a net present value, so it's a long stream of revenues over time –

MR. WARREN: Yes.

MR. COLLINS: – discounted into the present at 7 per cent a year.

So at DG3, before the net benefits analysis, how did you model export sales?

MR. WARREN: So at DG3, we would've modelled through the HQ booking that we have in Quebec, and deliver the energy, any excess energy, into the New York marketplace. At DG3, we didn't – we assumed there was no Maritime Link because mid-2012 when we were doing the modelling, there was – there wasn't sufficient clarity to include the Maritime Link into – to the sanctioning decision.

MR. COLLINS: And as I understand it, going through – putting all your exports through hydro – the Hydro-Québec booking, limits both the amount of power you can export, or energy, and it also limits the price – the markets you can sell into.

MR. WARREN: That's correct.

MR. COLLINS: Mmm.

MR. WARREN: In those cases there was spill.

MR. COLLINS: Yeah. In – when you did the net benefits analysis later on, what additional –

what changes did you make to the – to model exports?

MR. WARREN: So, as we were going through 2012 and we were coming closer to the sanctioning decision, and I believe the net benefits analysis started in October of 20 – 2012, we had better clarity that – and the purpose of the net benefits was to look at the total project, including the Maritime Link – we included the Maritime Link being available and the terms and conditions of the transmission through Nova Scotia, New Brunswick and into New England. So we had an additional market into – in New England, New England ISO.

MR. COLLINS: And, that change increases the number of markets available and also the amount of energy you can sell.

MR. WARREN: Yes.

MR. COLLINS: Was – in the net benefits analysis, were you selling only Muskrat Falls' power or was there energy from other sources?

MR. WARREN: So in the net benefits analysis, the exports line includes just the Muskrat Falls' exports but also includes ponding opportunities and reserve sharing.

MR. COLLINS: And, we'll talk about that later. But did you incorporate that into this analysis?

MR. WARREN: Into the –

MR. COLLINS: (Inaudible) –

MR. WARREN: – the 200 million?

MR. COLLINS: – the –

MR. WARREN: No, what the basis of that was the two different sets which was Muskrat Falls' exports which was included in the exports, sorry, the net benefits analysis and recall sales which was not included in the net benefits.

MR. COLLINS: Do you know – so, what I take you to be saying is that at some point, you generated a model that was selling Muskrat Falls' surplus power but also recall power, and you're selling it through the Hydro-Québec

booking but also through the Maritime Link. Is that right?

MR. WARREN: That's – that is correct.

MR. COLLINS: You know when you built that model or why?

MR. WARREN: So it was likely around this October development of the – of the net benefits analysis.

MR. COLLINS: So it's a 2012 model probably.

MR. WARREN: Yes, for – sorry – for Muskrat Falls, it was the October 2012. And then there's a separate model for the recall because that was a different business unit, different area of Nalcor and that had a different model. And for that point in time, we had – we had something what I call "on the shelf" in the models. The models were developed so that the most recent model that we had was in July, August of 2013.

MR. COLLINS: So if I can summarize what you're saying, as of July 2013 you'd have two models. There's a Muskrat Falls' surplus power sales model –

MR. WARREN: Yes.

MR. COLLINS: – and that's selling through Hydro-Québec and through the Maritime Link.

MR. WARREN: Yes.

MR. COLLINS: And there's a recall sales model that also sells through Hydro-Québec and also through the Maritime Link.

MR. WARREN: Yes.

MR. COLLINS: So how did the Energy Access Agreement change the way your team modelled export sales?

MR. WARREN: So based on the terms and conditions of the EAA, what the EAA did for us was establish a marketplace, a new market that we had not previously modelled. It basically formalized Nova Scotia's request to provide them energy or at least bid in – for energy. And so at that point, we opened up a new marketplace with a delivery point being Point

Aconi in Cape Breton, Nova Scotia. And the pricing reference was as per the EAA, the Mass Hub pricing, the New England pricing, but it was at Cape Breton so we didn't have to incur losses and the transmission tariffs.

MR. COLLINS: And so if you go back to your July 2013 model, as I understand it, the marketplaces you're selling into are New York and New England. Is that right?

MR. WARREN: Yes.

MR. COLLINS: And what are the transmission costs and the losses in selling into those markets?

MR. WARREN: Yes, there would have been – I guess, when we looked at the opportunity to sell 1.8 terawatt hours, 1,800 gigawatt hours, the total, there was about \$200 million of – \$210 million of incremental net revenue that we could get, which is a portion of tariffs that we no longer have to pay. And a portion of it is we're delivering more energy into the market because we're not incurring the losses from Cape Breton into New England.

MR. COLLINS: So what I understand you to be saying is that when you have two faraway markets, New England and New York, the price – regardless of the price once you get there, the costs and losses of selling the power to markets that far away erodes much of the value of your sales. When you add a market in Cape Breton, even if you're selling at the same price as you would it in New England, because it's so much closer, you get a lot more money for it.

MR. WARREN: Yes.

MR. COLLINS: And when you – in these models, when we talk about the value of your exports, you're factoring in transmission tariffs along the board, transmission tariffs – you're factoring in line losses, you're factoring in the cost of sale. Are you factoring in any of the capital or operating costs of the Muskrat Falls plant?

MR. WARREN: No, that's fully recovered through the PPA and the TFA basically.

MR. COLLINS: So this model – these models are based on the idea that the capital cost and operating cost of the project are recovered from the ratepayers and the surplus power is being sold. And it accounts for all of the costs of selling the surplus power, but no additional costs.

MR. WARREN: Other than transmission tariffs and losses. That's correct.

MR. COLLINS: So you were talking about 1.8 terawatt hours per year. Can you – what do you mean by that?

MR. WARREN: So under the EAA, Nalcor is asked or required to bid, on average – or sorry, not on average, up to 1.8 terawatt hours of energy in each year, and Nova Scotia Power has the right to accept those bids. It'll be a bidding process.

MR. COLLINS: And so when you built a – when you built this additional model with – which includes the option to sell to Cape Breton, did you – how much energy did you assume Nalcor would be selling every year?

MR. WARREN: So, the original model that they built up was assuming the full 1.8 terawatt hours was going to be sold. When I looked at the results with the team, we brought it to – that showed an improvement in the sales revenue of, I think it's around \$210 million on a present value basis. And we took 50 per cent as half the time the bids will be accepted, half of the times the bids wouldn't be accepted.

MR. COLLINS: So you're assuming that Nalcor will offer the maximum amount possible under the agreement every year and that they'll take half.

MR. WARREN: They'll take half, yes. That's what is assumed in the \$100 million savings.

MR. COLLINS: And the price – you're assuming Nalcor will offer at the maximum price, the – you said Mass Hub prices.

MR. WARREN: Yes, it's based on the pricing mechanisms that's in the EAA, which is Mass Hub, New England prices that you would

normally get in New England, backed up into Cape Breton.

MR. COLLINS: So why would Emera accept that offer at Mass Hub prices, given that Nalcor doesn't really have any options that are close to Mass Hub, when you factor in transmission costs and losses.

MR. WARREN: Because the Nova Scotia ratepayer, its alternative is to purchase in New England marketplace, incur the losses, incur the transmission tariffs and they – it works out to the same pricing reference, so it's a win-win situation between Nova Scotia and Newfoundland.

MR. COLLINS: How much of the additional sales comes from adding this additional market and from saving tariffs and losses and how much of it comes from price changes?

MR. WARREN: So it's 100 per cent the former. The latter – the changes in prices, the status quo versus the – what we call the UARB in our models which is the new EAA conditions, we use the underlying – the exact same pricing assumptions.

MR. COLLINS: So if you compare your July 2013 two-market model to your October 2013 three-market model, they assume the same prices.

MR. WARREN: Yes. So at the time we were using the most recent for each version, the Muskrat and the recall. And so we were using the exact same pricing assumptions. And all we did was basically have an extra market and we used the New England pricing for that new market.

MR. COLLINS: Commissioner, I see it's around 12:30.

THE COMMISSIONER: Did you want –

MR. COLLINS: Should we keep going?

THE COMMISSIONER: If you'd like to go for a few more minutes, because I –

MR. COLLINS: Delighted.

THE COMMISSIONER: – we have to finish Mr. Warren today, so ...

MR. COLLINS: We do.

MR. WARREN: Could I just also just point out that that 900-gigawatt hour assumption that we have, that that's still in our assumptions today for how we anticipate the EAA. And that's kind of actually been independently verified on the Nova Scotia side.

The UARB, I believe, in the last year or 2017 had Synapse provide them a report of basically looking at their supply. And in that document they actually indicate that they anticipate, in the near term, over and above the Nova Scotia Block and the supplemental energy that is being delivered to Nova Scotia. They anticipate starting at 900 gigawatt hours and that's growing over time to 1.2 terawatt hours being sourced from the Maritime Link.

MR. COLLINS: So when you assumed they'd buy 50 per cent of the energy you offered, that was, at the time, a rough assumption, but it's proved to be right. Is that what you're saying?

MR. WARREN: Yes.

MR. COLLINS: So what are – does the Energy Access Agreement improve Nalcor's bargaining position with Emera?

MR. WARREN: So what it does is it provides the mechanism, the pricing protocol that will be used. It formalized. It was always thought that a lot of this energy would stay in Nova Scotia; however, what the EAA provided was the formal acknowledgement and basically the request for Nova Scotia for that energy.

MR. COLLINS: The EAA doesn't commit them to buy any energy and doesn't put any floor on the price they can demand. They can ask for – they can take no energy or they can offer us 1 cent a kilowatt hour.

MR. WARREN: That's correct, but again, what we're seeing is the economics behind it, and partly why the UARB was requiring or insistent to see access to economy energy is that Nova Scotia ratepayers do want to have access to this energy.

MR. COLLINS: So if you were assuming earlier on that much of this energy would end up going to Nova Scotia, why didn't you include the Nova Scotia market as an option before the EAA?

MR. WARREN: Before the EAA we didn't have a formal, I guess, visibility into the marketplace, and in particular on the pricing.

MR. COLLINS: You always had the right to offer all your energy to Nova Scotia at Mass Hub prices. You have no better right today.

MR. WARREN: Just say that again, sorry?

MR. COLLINS: You – Nalcor always had the option, if it wanted, to offer any energy it could to Nova Scotia at Mass Hub prices.

MR. WARREN: Yes, however, the EAA provided a formalized process in which we knew that we were servicing a marketplace. So the EAA provided a formalized process that we were required to provide 1.8 terawatt – bids of up to 1.8 terawatt hours, and I guess that's just the view that we had at that point.

MR. COLLINS: So I think to a lot of outside observers, the EAA looks like a pure cost to Nalcor. It looks like Nalcor is promising to make offers and it's putting a maximum on its price, it's simply weakening Nalcor's bargaining position. But from your team's perspective, the EAA actually strengthens our position because they are planning to buy some energy.

MR. WARREN: Yes. So I guess what people have to understand for modelling purposes, we were modelling this energy in spot markets. So if we can get preferred pricing at a closer point along the transmission line then it would obviously have – it formalized those benefits.

MR. COLLINS: Stepping back from the details of the modelling, it is a bit strange that this agreement constrains Nalcor's options and doesn't provide any guarantees or any increased promises; nevertheless, in your modelling strengthens – improves the price we're getting.

Can you see stepping back that that's a bit – not what you would expect?

MR. WARREN: I think that's probably at a higher level, but for financial modelling purposes, again, we saw better clarity and I guess the drawbacks are to the eye of the beholder.

MR. COLLINS: So, Commissioner, that's the end of my questions on this topic. I have – I can move to the next topic or –

THE COMMISSIONER: No, I think, we'll take our lunch break now.

And we'll come back at 2 o'clock, then, Mr. Warren.

MR. WARREN: Thank you.

THE COMMISSIONER: Okay.

So we'll return at 2.

CLERK: All rise.

Recess

CLERK: All rise.

This Commission of Inquiry is now in session.

Please be seated.

THE COMMISSIONER: Okay.

All right, Mr. Collins, when you're ready.

MR. COLLINS: Thank you.

Mr. Warren, I have a – before we move on, I'm going to return for a few more questions about export revenues.

As I understand it, Nalcor's best alternative to selling to Emera is to sell – in most cases will be to sell the power to New England for Mass Hub prices minus all the transmission and losses to New England.

MR. WARREN: I think – in the period that we're looking at, I think, actually, the preference was through New York because it was netting back a better netback but it was –

MR. COLLINS: Up to the amount of recall booking.

MR. WARREN: Very – well, no, in addition, the Muskrat exports – there was the 265 megawatt – up to the 265-megawatt booking through Quebec into New York. That was netting back a higher price than, I believe, New England, just – again, just based on my recollection of the modelling at that time.

MR. COLLINS: Very good.

So between – in that case, between Nalcor's best netback price, which is maybe a little bit better than New England plus losses and fees –

MR. WARREN: And tariffs through Nova Scotia and New Brunswick into New England, yes.

MR. COLLINS: So our best alternative is maybe a little bit better than that.

MR. WARREN: Maybe, yes.

MR. COLLINS: And their best alternative is, basically, New England plus losses and fees.

MR. WARREN: Yes.

MR. COLLINS: And so the total surplus when we sell to them, the surplus is close to, but not quite, twice the losses plus twice the fees.

MR. WARREN: So when we sell it to Nova Scotia at Cape Breton –

MR. COLLINS: Yeah.

MR. WARREN: – it will be, obviously, up to – close to \$200 million for the whole.

MR. COLLINS: Right. But apart from the value –

MR. WARREN: Yeah.

MR. COLLINS: – if we just look at the surplus on the transaction, if we sell a unit of power to Nova Scotia, we save – the total savings are the transmission costs and fees from Nova Scotia to New England, twice. Once that we don't have to

send it through, and once that they don't need to send it through.

MR. WARREN: Yes, but what – for Nalcor –

MR. COLLINS: Yes.

MR. WARREN: – it's saving that – it once.

MR. COLLINS: But there's a total pool of money to be shared between Nalcor and Emera, and the two – the pool of money that we can share between us is twice the transmission fees plus twice the losses.

MR. WARREN: Yes.

MR. COLLINS: And how we share that pool of potential surplus, that is a – that's an issue of negotiation between us and them.

MR. WARREN: Well –

MR. COLLINS: Between Nalcor and Emera.

MR. WARREN: – under the EAA, it's established, the pricing mechanism.

MR. COLLINS: What the EAA does, is it means that the most we can get is half the surplus. That's what the EAA – they can ask for more than half but we can't ask for more than half.

MR. WARREN: I think I follow what you're saying. I guess we – I personally never viewed it as a surplus in that manner.

MR. COLLINS: Do you –

THE COMMISSIONER: Just a second now. So let's speak English here on this. So – because that's the way – I find I understand English better than anything else.

So I guess the – what is – what we're really asking here in the – I think this probably goes back to your win-win scenario. There's no question that if we sell power under the EAA to Nova Scotia that we won't be paying transmission fees, or alternatively we won't incur line losses – or to any significant extent. So there's – that's a win for the province –

MR. WARREN: Yes.

THE COMMISSIONER: – for Nalcor.

On the other end, for Nova Scotia, for Emera, Emera comes in now and if they were to purchase their energy from us, they, too, get the benefit of the fact that there would be limited – when they get their power there's no charge for transmission and no charge for line losses, correct?

MR. WARREN: Yes, so they would have to go to New England –

THE COMMISSIONER: Right.

MR. WARREN: – and incur those.

THE COMMISSIONER: So then the next issue is that if they went to New England to get their power – to sell their power, then they would have to pay the additional line losses and the additional fees.

MR. WARREN: Yes, right.

THE COMMISSIONER: So the question is – I think that Mr. Collins – I think the question that he's asking relates to the fact that if Nova Scotia decides that they're not going to purchase the power, then that means that we have to sell it, or we could sell it. And first of all, as opposed to being limited to the Mass Hub price, we could sell it at whatever price we thought we could get for it, which potentially could be more than Mass Hub, potentially, if it's sold outside of Massachusetts or New England or whatever the scenario is. There could be some other way. Somebody else – it could go through Quebec, it could go through anywhere. So – but if we don't sell it to Nova Scotia – if we do sell it to Nova Scotia we're stuck with the Mass Hub price.

MR. WARREN: And this may be a question more so for the architects of the EAA.

THE COMMISSIONER: Okay and maybe –

MR. WARREN: I think –

THE COMMISSIONER: So –

MR. WARREN: I think there is some terms and conditions there that in case of peak – what's called peaking markets –

THE COMMISSIONER: Yeah.

MR. WARREN: – we get that preferred or that premium pricing.

THE COMMISSIONER: I'm not so sure but, in any event, the issue is, too, is that – well, it depends on what you mean by win-win. And I think what Mr. Collins is assuming, you mean, is that it's an equal win-win.

When, if you look at it fully, at least my looking at it, it's not an equal win-win. There's a bit of a win for Nalcor but there's bigger win for Nova Scotia or with Emera. But, like you said, maybe you're not the right person to be asking about this and maybe we should be asking somebody else.

And maybe I'm not even asking the right question, Mr. Collins, but I was just trying to put into English what I thought you were asking anyway.

MR. COLLINS: I appreciate that, Commissioner. Thank you.

MR. WARREN: I guess, just, Mr. Commissioner, like, the win-win that I speak to is kind of – and it's probably similar to what Mr. Collins said, was that it is – we have basically the same – in our pricing, because we don't have to incur those losses and those tariffs, that's equal to what Nova Scotia would have to incur in order to get that same –

THE COMMISSIONER: Mm-hmm.

MR. WARREN: – that power.

THE COMMISSIONER: The only thing is Nova Scotia – we have to offer the power at Mass Hub price. Nova Scotia doesn't have to buy the power at Mass Hub price. They could offer less and Nalcor, if it has no other market, would have to – could sell it at less.

MR. WARREN: Or, alternatively, it could flow into New England and get that –

THE COMMISSIONER: Right.

MR. WARREN: – higher pricing.

THE COMMISSIONER: Right, but it would cost more to do it. Right.

MR. WARREN: Because it's based on the spot market.

THE COMMISSIONER: Right.

MR. COLLINS: If you add – you take the win-win and you sum up what they win and what we win, it adds up to twice the losses, plus twice the tariffs, just about.

MR. WARREN: Yes, I understand that now.

MR. COLLINS: And what the EAA does is it guarantees that they will get at least half of that pool.

MR. WARREN: I understand what you're saying. It also guarantees that we get at least half or we get half of it as well, if they want to accept our bid price.

MR. COLLINS: If they accept our bid price. But they could – between Nalcor and Emera there could be any number of negotiations over the next few years and they could try and squeeze us, refuse to accept our offers, and maybe Emera will eventually decide – if Emera had a policy of never accepting, of never being more than 90 per cent of Mass Hub, maybe we'd have to end up scaling our bids down. Maybe they could squeeze us.

MR. WARREN: Our bid – based on my limited understanding of the EAA is we can – we have to put in a bid, but there is a price and we can put in Mass Hub. And as long as we put in Mass Hub – although based on your hypothetical scenario of 90 per cent or what have we, we could put in the hundred per cent Mass Hub and if they choose not to accept it, then we can flow through and get the 100 per cent Mass Hub.

MR. COLLINS: That's good. Can we go next to P-02517?

THE COMMISSIONER: 02517.

UNIDENTIFIED MALE SPEAKER: Twenty-two.

THE COMMISSIONER: That's tab 22.

MR. COLLINS: It is.

Now, this is an email from you to Ed Martin. And on – if we skip to page 3, the bottom of page 3, we see an email from Auburn Warren to Ed Martin, Derrick Sturge and others. And if we turn – go to the next page, we see: "I will also have a waterfall that I can walk us through on our rough estimate of where we stand with respect to DG3 CPW preference."

Can you tell me what that means?

MR. WARREN: So, based on my review of the past week, my – what I'm seeing through the emails that I've reviewed over the last week or so is that there were waterfalls that we were working on, trying to identify I guess, on a rough estimate basis, changes in the economics.

MR. COLLINS: So I think it might clarify if we go to P-03992, tab 9. Sorry, P-03992, not the attachment, the exhibit.

Oh, I think it–

THE COMMISSIONER: P-03992 which would be tab –

MR. COLLINS: Tab 9.

THE COMMISSIONER: Tab 9, yeah.

MR. COLLINS: Now, this is an email with several attachments from Terry O'Rielly, who's the manager of Economic Analysis, and it's the day before the email we just looked at. And he says – is this diagram a waterfall as you referred to it?

MR. WARREN: That would be a waterfall. Yes.

MR. COLLINS: And is this the analysis that you were – is this approximately the analysis that you were planning to discuss with Mr. Martin?

MR. WARREN: So this would probably be what I was referring to. I don't recall and I don't see any email transmissions of anything like this to Mr. Martin.

MR. COLLINS: Do you know if you did discuss this with Mr. Martin or with anyone else?

MR. WARREN: I don't remember.

MR. COLLINS: Do you know if a meeting with Mr. Martin happened?

MR. WARREN: So if you look at the timing of the last two exhibits that we looked at, you'll see that Terry sent me this email at 10:31 Saturday, October 26. And earlier in the day, we're – at this time in October, the end of October, we're working towards an RFF recommendation package. So that was my primary focus throughout the month of October.

MR. COLLINS: Mmm.

MR. WARREN: And we were in the process of trying to come to a recommendation for our lead arranger for the lead bank for our financing. So on that weekend we were pushing to get this RFF recommendation package out to Ed for his review and we had scheduled a meeting with Mr. Martin for 3 o'clock on Sunday afternoon in advance – I believe he was going to be meeting with the province on Monday the 28th.

So we were working – this came in at 10:30. You'll also see the previous email – the distribution – my email to Ed indicated – attached the recommendation package that we had at that point at 1:30. And what you'll see in subsequent emails – when I went through the emails just this past week trying to get my head around this ad hoc – this one, what I call one-off analysis, I noted that I sent a message to Terry and Gord Alexander, who's copied on this email, at 1:33 or 1:32 – so a couple minutes after I got the – my key deliverable, the RFF recommendation package, and indicated to him that I need to get with them to review this and even had a question on the very first thing that I kind of saw there.

So, obviously, it was a piece of work that the guys were working on. So at that time – I then

turned my attention, once I had the key deliverable out the door, to try to get the guys to meet with me prior to my 3 p.m. meeting that Sunday.

MR. COLLINS: So this is a piece of work your team put together, and from – it looks like they reviewed it with you before your meeting with Mr. Martin?

MR. WARREN: Yes, so looking through the emails, it appears that we got together at 1:30. What is critical to take away from this is that it is a very high-level preliminary. Just looking at it I would caution people to understand that this process and throughout the files that are behind this, there's a lot of high-level and it doesn't reflect a full update of the CPW. It's just looking at a couple of different pieces that we kinda had a feeling that may have changed in the interim.

MR. COLLINS: So the – these are the biggest items your team saw at the time that had changed in the CPW. Not necessarily everything that had changed –

MR. WARREN: No.

MR. COLLINS: – but what your team understood to be the biggest items.

MR. WARREN: What we – yes, what the team probably viewed as the more significant. But also understand the level of analysis and details behind the numbers that are even on this page right now are – they don't represent full exhaustive updates of the financial models. It's trying to find proxies, back-of-the-envelope type of calculations.

MR. COLLINS: Certainly, Mr. Warren.

So do you recall if you presented it to Mr. Martin?

MR. WARREN: I – again, I –

MR. COLLINS: You don't?

MR. WARREN: – looking through the emails, I can't see an email going to Mr. Martin. And (inaudible) –

MR. COLLINS: And you have no recollection?

MR. WARREN: – no recollection.

MR. COLLINS: Do you remember – do you recall if anyone else was present at that meeting with Mr. Martin?

MR. WARREN: So at the 3 p.m. meeting –

MR. COLLINS: Yes.

MR. WARREN: – we had – I looked through the calendar for that, because I wanted to see if my calendar invite would've had any attachments as well, but it didn't. It was with Ed Martin, Charles Bown and Derrick and the financing team: myself, Jim, Craig.

MR. COLLINS: And so if you did share this with Mr. Martin, you probably would've shared it with Mr. Bown too?

MR. WARREN: I don't have a recollection of it. If I was to – as I indicated in the previous exhibit – walk it in at the 3 p.m., my understanding, looking through the emails that Ed was – or Charles would've been in that meeting as well.

MR. COLLINS: And before we move – before we move on to the substance of this analysis, as I understand it, this is version 2–?

MR. WARREN: Yes.

MR. COLLINS: Of the spreadsheet? And that was completed on Saturday night. Your meeting with Mr. Martin was Sunday afternoon and there is a version 3 from Sunday evening.

MR. WARREN: Yes.

MR. COLLINS: Which simplifies the presentation somewhat.

MR. WARREN: Yes, it condenses it. It appears to be more reflective of kind of – it reflects, kinda, some – probably my likely feedback that I would have had to the team.

MR. COLLINS: Does the existence of a modified version of this analysis after the agreement – after the meeting, suggest that perhaps the analysis was discussed in the meeting? And there was some feedback?

MR. WARREN: I don't – I don't have a recollection to that effect. I do – there is an email, and actually I think you referenced it earlier, the – my latest, what I call the latest materials email, in which I indicate the genesis of the \$300 million financing savings –

MR. COLLINS: Mm-hmm.

MR. WARREN: – was around that time period, as well. And it indicates for the \$300 million, based on discussions, on trying to find the nominal version of it. So, it feels like at least the \$300 million was discussed at that meeting.

MR. COLLINS: Excellent. Let's – so Commissioner, this waterfall is quite important and I expect we'll go through it in some detail.

THE COMMISSIONER: Okay.

MR. COLLINS: So, as I understand it, Mr. Warren, the first blue column, the DG3 CPW preference, represents the \$2.4 billion advantage that the Interconnected Option had over the Isolated Option at DG3. Is that right?

MR. WARREN: That would be my understanding again, based on the work that I've done over the past week. I don't – again, the context at the time is important in that the key deliverable that I had during that period was the RFF recommendation package, so that I can probably have more vivid memories of, so –

MR. COLLINS: This wasn't the main thing you were working on, but regardless of that –

MR. WARREN: Yup.

MR. COLLINS: – we start off with the DG3 CPW preference, and to the right of it we have a number of red and green columns. What's the significance of the red and green columns?

MR. WARREN: So, red is where there is a reduction in the preference, and the green is where there's an improvement to the preference.

MR. COLLINS: And then we have a revised CPW preference of 2.173 billion.

MR. WARREN: Yeah. So, that would be just a result –

MR. COLLINS: A cumulative –

MR. WARREN: – of those ups and downs.

MR. COLLINS: And then we have two columns at the end. There's a \$600-million reduction and then a restated preference at financial close.

Do you know what happened in those two steps?

MR. WARREN: So I don't have direct visibility into the calculation or memory of it, but it does appear, just looking at it over the past week, that what we're – what they're trying to do in the second – or the second-last column, is moving the NPV, the present value date – present-valuing it to December 1, which is financial close, 2013, versus DG3, which was present-valued as of July 1, 2012.

MR. COLLINS: Would it be fair to say this is more an accounting change than a substantive change to what's going on?

MR. WARREN: It's a pure timing change.

So again, when I first saw this – well, when I first saw it for the first time last week, it immediately made me feel that this would be more oranges and apples, so it would be more confusing then.

MR. COLLINS: So we'll return to the initial set of red and green columns that represent substantive changes.

Do you know what exports to taxpayer refers to?

MR. WARREN: So as I noted, that was one of my – that was my first question that I had to the guys and they – Gord gave me an explanation 9:40 the next morning. I believe at DG3 there may have been some inclusion of the exports that was in the DG3.

However, at a high level, when we look at the \$300 million savings for financing costs, what you'll see is there are columns here, 'cause the guys, when they gave me, I guess, version 2, gave me all of the details, and they may have been combined in different ways. When I look at reconciling the \$300 million that I came – developed as part of the initial request, that

would've been included as a part of the financing change.

MR. COLLINS: Okay.

Commissioner, I think we'll return to this point later. We'll move through the rest of –

MR. WARREN: Yeah.

MR. COLLINS: – the analysis now.

So, the second red column is Emera, \$76 million, do you know what that refers to?

MR. WARREN: I don't have a recollection on that one.

MR. COLLINS: The third column, Emera extra purchase from New York, \$200 million.

MR. WARREN: So, based on what I've seen the past week in reviewing for this, it appears that this was an estimate. Again, this one was actually a very late breaking item that Terry was working on, I think, that Saturday – that day, and it relates to – with Emera transitioning from DG3. There was no Maritime Link. There was no Nova Scotia Block. This reflects the change in energy that's available and it – that's available for Hydro in the later years and that's reflective of that.

MR. COLLINS: So, essentially, it seemed like there might be a need to buy extra energy to meet the Island's needs.

MR. WARREN: Yes, towards after, like – the late 2030s, early 2040s.

MR. COLLINS: And that was your team's analysis and your team's estimate, at the time, was that it was about \$200 million in present value as a cost.

MR. WARREN: Yes. But again, now, looking at it just this past week, there's – I would've likely have had some concerns with, kind of, that number as presented, because looking at the calculation five, six years later, I have questions on the build up of that number.

MR. COLLINS: So where the \$200 million is – so \$200 million might be right or wrong, but

your team saw a cost here that was significant and there was potentially a cost.

MR. WARREN: Possibly, yes.

MR. COLLINS: If we look at the – the next column is a point about financing. It shows \$100-million cost. If we look over at the last – the large green column, we see a \$400-million benefit, and the net is about 320 – \$318 million.

So do you know if those two items combined correspond roughly to the \$300 million in savings you indicated?

MR. WARREN: They could be. I don't have a recollection of that, but it would appear reasonable at a high level.

MR. COLLINS: So the remaining two items we have – they both refer to a delayed COD. Do you know what COD stands for?

MR. WARREN: So COD, in this instance, is the commercial operation date.

MR. COLLINS: So, as I understand it, in the spring of 2013 the milestone dates for the project dates shifted, and at DG3 first power was supposed to be in July 2012. First power moved to the end of – sorry, 2017. And after the milestones shifted, first power becomes the end of 2017. And at DG3, full power is supposed to happen in late 2017 and after the milestone shift that becomes mid-2018.

Is that shift in milestones what's being referred to here as the delayed commercial operations date?

MR. WARREN: Yes, at a high level. Based on – again, looking back at it, looking at the emails over the past week to refresh my memory on this, it appears that my team would've worked closely with Jim. And this item would've likely came up in September as we were negotiating the project financing agreements. With regards to the project financing agreements, there's certain terms and dates that are used, the date certain being one of them, the amortization start date being another.

So in working through the agreements with Canada, we would've had to look at dates. At

that time, we were very team focused, so this type of item would've been pegged to Jim Meaney to kind of take care of. So Jim Meaney would've worked closely with the modelling team to give them an idea on the dates. But what we see here, based on my review of those calculations, is the team's – again, back of the envelope, looking at how much extra fuel would have to be burnt at Holyrood between July and March 1, 2018.

MR. COLLINS: And so what's going on there, as I understand it, is that if first power – if Muskrat Falls power became available starting in the summer of 2017, you'd have most of the – most or all of the units available for the whole winter of 2017-2018. You wouldn't have to run Holyrood at all. But with the milestone date shifting, suddenly the first unit of Muskrat Falls will only start producing power in December and Holyrood will basically have to continue running the whole year. And the value of that fuel is \$200 million.

MR. WARREN: That's correct.

MR. COLLINS: So when you combine all of these factors, none of these factors include the increased capital cost.

MR. WARREN: That's correct.

MR. COLLINS: So your team's estimate before the increased capital cost was that there'd been an over \$200-million reduction in the CPW advantage of the Interconnected Option.

MR. WARREN: Based on the analysis that's here, without the benefit of my memory on whether or not what subsequently came in or out of this analysis, and again, with the caveats that I provided on – that this was rough estimates, I would agree with what you just said.

MR. COLLINS: Do you know why this analysis wasn't completed or extended or developed any further?

MR. WARREN: Again, it comes back to the nature of it. It was more of a one-off. The focus, again, for our modelling team, at that time, was to focus on actually getting the financing closed and get the – at this particular time, the lead arranger selected as well.

MR. COLLINS: This is intrinsically a fairly – it's a very interesting and important analysis. As you indicated, it's incomplete. But where the CPW stood at – as financial close approaches, as the province approaches, essentially, the point of no return, is a question that many policy-makers might be very interested in. Do you have any idea why this was left?

MR. WARREN: So this would be a very, what I would say, rough and crude analysis. If you're making policy – if you're looking at revisiting policy decisions, then you would have to revisit all of the scenario. And again, that's why there's got to be extreme caution in analyzing this chart. Like, what you don't have evaluated here is any updates to the Isolated Island scenario or – and in actual fact, the estimates that I have here haven't gone fully through, what I would say, policy-making kind of rigour.

MR. COLLINS: But, one way or another, this analysis comes up that shows significant changes, and either you decided to cut it off and not show it to Mr. Martin, or Mr. Martin decided not to ask you to finish the job.

MR. WARREN: Well, after this there was some further development. But again, the reason why I can't recall is at that time – or at least what I've been racking my mind, my memory for the past week – is at that time, I was very much immersed in the financial close process.

MR. COLLINS: So if we look generally at this analysis, what you – the big items are \$300 million in financing savings, \$200 million in fuel costs and \$200 million in power purchases. Is that fair?

MR. WARREN: At a high level, yes.

MR. COLLINS: For a net negative of \$100 million.

MR. WARREN: Yeah.

MR. COLLINS: Now, if we go back to P-02206, page 29, we see ...

THE COMMISSIONER: That's tab 21.

MR. COLLIN: It's tab 21, yes it is. It's page 29.

We see Mr. Martin's summary of what the key changes have been since DG3. The big negatives in that last analysis, the fuel costs and the power purchases, are completely absent. The financing has been brought forward and it's been communicated. And – other work has done to find export – additional export sales.

There are lots of positives, but the negatives, they're – they've been buried. Do you know why that would be?

MR. WARREN: Again, I don't know whether or not they're buried. They're not on this paper. This presentation, I don't recall participating in the development of it. And, again, at a high level, I can't recall what – where the – what was communicated or where the – that waterfall analysis concluded.

MR. COLLINS: Mr. Warren, you are obviously – you're responsible for your team's work and not for the CEO's decisions, but is this slide an honest presentation of your team's work?

MR. WARREN: Again, I – it's difficult for me to say yes or no to that because I can't recall whether or not – or what discussions have taken place and what, if any, analysis or discussion that we had on this waterfall to either say that – to discuss kinda what those two other adjustments would be. Whether or not –

MR. COLLINS: If I could focus particularly on the excess sales/other value. Would additional fuel costs not count as other value?

MR. WARREN: I'm not sure what the other value would be referring to.

MR. COLLINS: The – do you know what the purpose of this presentation was or who it was given to?

MR. WARREN: I think it was – based on, I think, what I've seen in the testimony and that is this was what was used or presented to the independent engineer.

MR. COLLINS: So it was being given in order to secure an offer of financing. Do you think failing – representing that, on the whole, the project had improved since DG3 when, in fact, your team's analysis was showing that, on the

whole, the project was looking worse than it had in DG3 to a potential investor is acceptable?

MR. WARREN: Again, the problem that I have is I don't know what level of analysis or discussion has been taken on those two other items. So there may have been valid reasons that I can't recall today for its exclusion.

MR. COLLINS: If we focus again on the simplest example of additional fuel at Holyrood, is there any significant doubt that in the winter of 2017, 2018, Holyrood had to keep running and that that would have a fuel cost associated with it?

MR. WARREN: At a high level, I would agree there probably isn't. But, again, without the benefit of my full recollection of the discussion, it's difficult for me to say with a hundred per cent.

MR. COLLINS: Okay.

Can we go to P-00254, which is tab 1?

This is a slide we've already discussed with you. It's an exhibit you discussed with Mr. Smith and Ms. O'Brien, and the Commission has since heard about it with Dr. Wade Locke and with Mr. Ed Martin.

And I'd like to refer – to return to it to ask a few questions about how – first, about questions that arose after it was first shown to you and, second, to ask, generally, how it would look today.

So the first line is the CPW preference for the Interconnected Option. At DG3, there was a \$2.4-billion present value preference for the Interconnected Option. Today, with – the increased capital cost of the project would tend to decrease that preference?

MR. WARREN: It would increase the present value of the Interconnected scenario, which would decrease the preference. What you would also then have to look at is what the ancillary impact is on the rest of the Interconnected expansion plan – generation expansion plan, and you'd also have to look at the Isolated generation expansion plan.

MR. COLLINS: So, there would be increased capital costs for Muskrat Falls, increased operating costs for Muskrat Falls, Holyrood fuel for the winters of 2018, 2019 – maybe 2020. All those factors would tend to increase the cost of the Interconnected Option and reduce the preference?

MR. WARREN: Yes.

MR. COLLINS: And, similarly, decreased fuel prices and a decreased load forecast would reduce the cost of the Isolated Option and reduce the presence – the preference.

MR. WARREN: Yes, at a high level. Exactly.

MR. COLLINS: There could be other changes, but those, at least, would be relevant. And if the Commissioner finds any other concerns about the way the CPW analysis was put together, those would also bear on the extent to which this preference is real.

MR. WARREN: Yeah. I would agree with you there, but, again, just a quick realization that there was more capital involved in the Isolated scenario versus the Interconnected scenario. So, a true apples to apples, you'd have to look at the capital plan for under the Isolated scenario as well.

MR. COLLINS: So, maybe the labour productivity result at Muskrat Falls might change our estimate of what it would cost to build Round Pond.

MR. WARREN: Yes, or the refurbishment of Holyrood and that kind of (inaudible) –

MR. COLLINS: So, the second line is CPW Induced. Can you explain that?

MR. WARREN: So, what the CPW Induced is it's a – it's a percentage that Steve Goudie from Investment Evaluation, my team, along with Steve Goulding from the project team along with SCI, Dr. Locke's firm, came up with a factor to reflect. So for the \$2.4-billion present value, it's 30 per cent of that. So the 2.4 reflects that ratepayers would have extra dollars in their jeans and the assumption here is that 30 per cent of those extra dollars, 30 cents from each of those dollars, would go back into the economy.

MR. COLLINS: And so if the number on the first line was decreased or reduced, then you'd have to decrease or reverse that second line too.

MR. WARREN: So it would be exactly 30 per cent of whatever the result would be above it.

MR. COLLINS: The third line we have income. And so, as I understand it, direct income is when the project hired a construction supervisor. It's people who are directly included.

MR. WARREN: It's direct. Yeah, direct jobs.

MR. COLLINS: And indirect income is people who provide services to the project. So that's if a garage in Goose Bay hires an extra mechanic because there's extra work.

MR. WARREN: That's my understanding, yes.

MR. COLLINS: And induced income is the idea that with all these people working and spending money in the economy, some of that income is spent in restaurants and produces local economic activity.

MR. WARREN: Yes, that's my understanding as well.

MR. COLLINS: So given that the Muskrat Falls Project's capital and operating costs have increased significantly, this line would also have increased significantly.

MR. WARREN: But, again, I would caution that the Isolated scenario, depending on the generation expansion plan, would also – may have increased as well. And as you can see by the nominal buildup, that kind of reflects the higher capital and operating costs that were associated with the Isolated scenario, the timing of which, obviously, it doesn't reflect in the present value.

MR. COLLINS: Now, the Commission has heard that this analysis doesn't capture opportunity cost. And the idea is when you hire an unemployed construction supervisor, that person's whole salary becomes a net benefit to the province. But when you hire someone who already had a job, the net benefit is their new salary minus their old salary. Do you – is that right? Does that match your understanding?

MR. WARREN: So, again, I would defer to the economists on that. No doubt, Dr. Locke probably had great discussions with the two Steves, the economists that we had in-house working on this. And they, obviously, were working close with Strategic Concepts in developing these benefits, so I would defer to them.

MR. COLLINS: And the opportunity costs would exist both for the Isolated and for the Interconnected Options?

MR. WARREN: Correct.

MR. COLLINS: A third – the third line is dividends. And, as I understand it, a significant part of the project financing is advanced by the province's equity. And, generally, the province is borrowing about 3 per cent to borrow that equity. And when you put it in, according to the financing agreements, the province is supposed to receive a benefit of about 8 to 10 per cent. Is that right?

MR. WARREN: That's correct at a high level.

MR. COLLINS: And so does this dividends line, does that capture the net return or the total return?

MR. WARREN: It's the net return. So what – the numbers behind this reflect a cost – an opportunity cost on all of the equity invested by the province, and it assumes that the province goes out and secures financing at – I think this was at 4.1 because we were trying to give it a conservative higher estimate over 10 years and it reflects that net benefit.

MR. COLLINS: So all of this – all the revenue here under dividends is available to reduce rates.

MR. WARREN: That's correct.

And in the dividends line, as well, is the regulated dividends as well. And that's why you see, on the Isolated, there are dividends available as well. But where that is more fuel dependent and less capital dependent, that's why there's a significant nominal difference between the two scenarios.

MR. COLLINS: Now – and since the province is – since the capital costs have increased significantly, have the dividends – will the dividends also increase significantly?

MR. WARREN: So on the Interconnected, they would have also increased in conjunction with the increased capital because they're making – the province is, obviously, getting more dividends or injecting more equity earning on that. Now, obviously, the reality of that is it's on ratepayers, but it is available for mitigation and it's actually reflective of mitigation that's been discussed more recently in the public domain.

MR. COLLINS: Now, as I understand it, the dividends – you said they reflect some opportunity cost, but there is an opportunity cost that borrowing all of – this huge amount of money all at once, the province has put some strain on its ability to borrow potentially and that could come out as reduced credit ratings, increased borrowing costs, perhaps austerity.

MR. WARREN: So probably the – Donna Brewer or someone from the Department of Finance would be good to, kind of, provide you some feedback on that.

Going through the second loan guarantee, I recall that we actually looked at it and there was some view of that, but it – in discussions with the capital markets it wasn't viewed as a – based on where we were and where we are, it wasn't viewed as a significant risk.

MR. COLLINS: The next line, we have Treasury, direct, indirect and induced. And, as I understand it, this is the idea that all of the income in the income line, there'll be tax paid on it.

MR. WARREN: That's correct.

MR. COLLINS: And, once again, this doesn't – like the income line, this doesn't account for opportunity cost.

MR. WARREN: Again, I would defer to my learned colleagues in economics to opine on the opportunity cost.

MR. COLLINS: The next line is exports, and this is a particularly interesting one. Can you explain what's included in exports?

MR. WARREN: So in this exports line is the Muskrat Falls – what we call the Muskrat Falls exports which we discussed earlier today. And that's reflective of flowing – having the Maritime Link available and it's reflective of it being optimized by the energy marketing team.

It also includes some ponding value which, for laymen, ponding is we try to – we can – we have the ability, through the Maritime Link and through HQ booking, to import power during off-peak hours. So, in the night, we can bring in electricity and instead of turbinning water, we can elevate our water levels.

And, again, you've got to understand that this is an accountant, finance person, explaining electrical engineering, so – but this is based on my understanding. So the ponding is you bring the water up in off-peak and you then turbine it during peak periods, and you get an incremental premium when you do so, when you buy low, sell high.

There's also reserve sharing included in that and that is just a factor, again, that they'll – the system planners provided the team on potentially not having to – sharing our reserves with Nova Scotia and other jurisdictions may require – may reduce the level of capital that's required in future periods.

MR. COLLINS: And so this Exports line, the \$750 million over the life of the project – and that's not – that represents not just the sale of excess power from Muskrat Falls, but also the storage value of the water at Bay d'Espoir and also the potential for interconnection reducing our reserves. Is that fair?

MR. WARREN: Yes.

MR. COLLINS: And, it's interesting because even with all those benefits combined, they're quite small compared to the capital cost of the project. Is that fair?

MR. WARREN: Again, I don't think the capital costs of the project was done for an export purposes –

MR. COLLINS: Exactly.

MR. WARREN: – so.

MR. COLLINS: This project could only be really justified to serve ratepayers as an export project. The capital costs would be very difficult to recover even if all the energy was sold.

MR. WARREN: I would – I agree with you on that.

MR. COLLINS: The next line, Water rentals, I believe is unchanged.

MR. WARREN: Yeah, 'cause that's just based on gigawatt hours, I believe, that are turbinated at Muskrat, so ...

MR. COLLINS: The next line, Carbon, this represents an estimated carbon tax and how that would drag down essentially the Isolated Option.

MR. WARREN: Well, again, you see it in the Interconnected because after Muskrat comes on, there's still obviously diesel isolated – but, yes, this attempts to put a cost based on the estimated cost at the time of this and based on the CO2 levels.

MR. COLLINS: So the carbon tax that's now in place may not be the final one, but do you know how it compares to what was estimated?

MR. WARREN: My understanding is what actually was implemented was a little bit higher than what we estimated, but not exactly sure the levels of the change.

MR. COLLINS: Given the change in the load forecast, is it possible that the Isolated carbon tax would have declined?

MR. WARREN: Based on where it went, it is possible. Yes.

MR. COLLINS: And something I don't see in this analysis, would the carbon tax not be a treasury benefit?

MR. WARREN: It depends on what the use of the – of it would be, I guess. As it's implemented right now, it is – I think intended

to go back to Treasury and then go back to the economy, I guess. So, yes.

MR. COLLINS: So there would be a corresponding line exactly equaling this?

MR. WARREN: Again, I think I'm straying a little bit too far on the economist side, but at a high level, I would probably agree with your point but with caution that I'm not a fully trained economist and probably defer to their type of thinking.

MR. COLLINS: So the next line, Carbon Induced, can you explain that?

MR. WARREN: So again, that's very similar to the CPW Induced. We use a factor of 30 per cent, so, again, the thought process at the time was that if ratepayers have an extra dollar, they've – they'll likely spend 30 cents. Again, that's based on the work with my team and Dr. Locke's team.

MR. COLLINS: And the last line, Innu dividends, this is the idea that some of the costs being passed on to the ratepayers go to Innu Nation.

MR. WARREN: Yes. So as part of it, we have an agreement in place and this reflects the estimated dividends being returned to the Innu.

MR. COLLINS: There're a few themes that I'd like to try to pull out of this. The first one is that the – this analysis does show significant benefits to the province, that don't appear in the CPW analysis. There are real export revenues, there are net dividends and there are water rental fees which can go to mitigation. Does –

MR. WARREN: Absolutely.

MR. COLLINS: Yeah.

So the second is, when the capital cost of the project increase, the province does get some fraction of that back in taxes and in increased economic activity?

MR. WARREN: Yes.

MR. COLLINS: Third, this analysis – many lines of this analysis fail to account for

opportunity costs and what the opportunity costs would be of the income –

MR. WARREN: Yes.

MR. COLLINS: – treasury is – I think a question looming over the significance of this analysis.

MR. WARREN: Okay.

MR. COLLINS: And fourth, big parts of the analysis – the CPW, CPW Induced, Carbon and Carbon Induced – all depend, to some extent, on what the CPW – the truth of the CPW analysis. And any questions about the CPW analysis raise questions about any of those lines.

MR. WARREN: That would be, again, based on the calculations of the induced amounts.

MR. COLLINS: So, I'd like to move, at this point, to P-02535 which is –

THE COMMISSIONER: Tab 19.

MR. COLLINS: – tab 19, yes.

This is an email we've discussed quite a bit, it's from Derrick Sturge to you, among others. And it asks you "to walk Donna Brewer and Paul Myrden through the LCP cost update data."

Do you recall doing that?

MR. WARREN: So at the time, we were at Barnes Road, we were off-site and in – at that location, Paul Myrden would've been regularly attending the meetings that we were having down there. And Donna would visit as well. But I don't have a direct recollection of actually having that meeting with Donna and Paul.

MR. COLLINS: Is it believable to you, having been involved in the financial process through the financial close process, that Paul Myrden would not have known about the LC – the increased capital cost estimate?

MR. WARREN: I would have difficulty with them not being aware of the 6.5 because, again, the context at the time is in October, part of November, we were working together as a team around the table, in closing this financing, in

negotiating with Canada the terms and conditions of the project finance agreements. Paul Myrden was, in large part, there very regularly.

The other context that's important as well is with respect to the Cost Overrun Reserve Escrow Account, what I call COREA, and I believe there's been some testimony to that effect. This was a subject that was very high in visibility with the province. The shift of 6.2 to 6.5 for the capital cost, reflected a \$300-million capital cost increase which, based on discussions, would have resulted in roughly \$100 million equity requirement in December of 2013. If you look at, kind of, what was allocated or – I guess, allocated in the budget for that year, was based on the \$6.2 billion capital spend profile that we had during the budget for that year.

So, in particular, the finance officials were very concerned that if there wasn't successful resolution of how the COREA was defined, which is what we spent October-November discussing, negotiating with Canada. If there wasn't a successful resolution of that, the prospect was that they were going to potentially have to enter into the House for a special warrant in order to fund the cost overrun – reserve.

MR. COLLINS: So, when you say the finance officials were aware of that, do you mean Mr. Myrden? Anyone else?

MR. WARREN: I would – my recollection is that it would be Donna, Paul, very likely Natural Resources – 'cause they were the owners of the budget – Paul Morris. I'm less so with Charles Bown, just 'cause Charles was less involved down at Barnes Road, but I can't speak directly, having had those conversations with any of those four. 'Cause again, it was a busy time, but again they were around the table, so.

MR. COLLINS: And when you say the budget was done based on a \$6.2 billion budget, was there any discussion that it might not be based on a \$6.2 billion budget?

MR. WARREN: So, at the time of the budget, my recollection of it is we – we introduced the idea that maybe you would like a contingency

just for – not just if there was capital cost increase but also to reflect timing 'cause construction could pull ahead early, potentially. And it's just the timing of your cash flow, so we recommended a contingency amount and during the budget process I think that was reviewed, but where we landed was just at the 6.2.

MR. COLLINS: How would that conversation about including a contingency in the 2013 budget have affected Finance officials and other – and Natural Resource officials' sensitivity to capital costs – capital cost information?

MR. WARREN: I'm not following. Just –

MR. COLLINS: Would – when you had those conversations in the spring of 2013 about maybe you should include a contingency; no, we won't. Would that – would those conversations have shaped the way in which later conversations about capital costs went on?

MR. WARREN: I don't think so.

MR. COLLINS: Okay.

MR. WARREN: Like, my recollection is that: The officials probably could understand what were suggesting, but when they went forward and developed the budget, it was – the plan is to go forward with it.

MR. COLLINS: So we've had a fair bit of context here, but your sense is – is it credible that Mr. Myrden didn't know?

MR. WARREN: I would – it would be hard for me to believe that, based on – again, just based on my recollection, the fact that he was in the room and that, but –

MR. COLLINS: What about Ms. Brewer?

MR. WARREN: Again, based on my memory of people being afraid of the prospect of COREA not ending favourably, my recollection is that it would be likely that she would be aware of it as well but –

MR. COLLINS: Mr. Morris?

MR. WARREN: Mr. Morris? I would think that he was – he was around the table, so, again, I would think that he would be aware of that.

MR. COLLINS: And Mr. Bown?

MR. WARREN: Mr. Bown, as I noted, may have been around the table less. There were a couple of touch – what I call touch-point meetings where it may have been discussed, but, again, maybe less likely that he may have been around the table. So, I can't say for Mr. Bown in particular.

MR. COLLINS: If we go to the next tab, tab 20, this is another document we've seen a number of times. It's an email from you from to Paul Myrden attaching information about the cost budget based on a \$6.2 billion budget. The email is from November 1 and it's entitled: "Minister Request."

Oh it's Exhibit P-02522. Thank you.

Do you remember being involved in this work, or sending this document?

MR. WARREN: Yes.

MR. COLLINS: And do you remember why you based this work on a \$6.2 billion budget?

MR. WARREN: So at the time that was the information that we had available.

MR. COLLINS: Do you remember when you learned that the capital cost information underpinning this analysis was inaccurate?

MR. WARREN: I think that was a couple of weeks later or a week or two later. So sometime during November.

MR. COLLINS: Did you consider at that time correcting the information you'd sent?

MR. WARREN: So again, the context that I provided is – this would be an analysis that was a request – some ad hoc analysis – and our focus in November was trying to get to done on the financial close. Bear in mind that Mr. Myrden, as I said, was around the table, so again, my recollection based on our recent – just those last few questions – was that he would be aware that

there would be a \$300 million capital cost change, which would likely end up being a \$300 million equity requirement. But I don't recall updating this until in 2014.

MR. COLLINS: In retrospect, do you think you should have updated this?

MR. WARREN: It's – so, with the benefit of six years and looking at where things change, absolutely I can understand that, but you also can't discount the context, or hopefully you don't discount the context that I provide in that this was one – what we deemed one-off information. We have – we set up the financing team so that the province, in our view, was walking lockstep with us.

We had Natural Resources, we had Finance in the room with us as we're going through all these issues, and we use best available information – the timing of which, on an update of this, really you – the next earliest that probably I could have updated this, was shortly after financial close, which would have been mid to late December.

MR. COLLINS: One more issue. The Commissioner – the Commission heard evidence in Phase 1 from Tom Garner that while – we discussed this already – that while doing the CPW analysis at DG3, Nalcor realized that the federal loan guarantee increased the profitability of exports by about \$69 million. And as I – I understand the reason for that is that the federal loan guarantee allowed the project to take on more leverage which made the province's equity contributions more profitable.

MR. WARREN: Correct.

MR. COLLINS: Do I have that right? And so in the final CPW analysis, my understanding from Mr. Garner is that Nalcor chose to use the increased export profits to lower rates and improve the CPW preference for the Isolated Option. Is that also right?

MR. WARREN: That is correct. Yes.

MR. COLLINS: Who instructed Mr. Garner to do that?

MR. WARREN: So Tom would've brought the issue to me. He would've explained to me that – at a high level the process that he followed. And I have a vague recollection of Tom – are you trying to tell me that taxpayers were getting a benefit of the loan guarantee? And the response was: Yes. And as I was intimately involved in the loan guarantee negotiations, the overarching objectives of the loan guarantee, being that the benefits would flow a hundred per cent to the rate payer.

I said, well, we need to ensure that any benefit of the loan guarantee is going to the rate payer and ask that he develop the process to do that, so ...

MR. COLLINS: That's the technical reasons for the choice. When you made that instruction were you aware that Nalcor was informing the shareholder and the public that the CPW analysis assumed that all surplus energy was spilled?

MR. WARREN: Just say that one more time? Sorry.

MR. COLLINS: When you instructed Mr. Garner to include the extra export profitability in the CPW analysis, were you aware that the public and the shareholder were being informed that the CPW analysis was being done on the assumption that all extra energy was being spilled?

MR. WARREN: Yes. So there was no exports – and when the communication was that there was no exports in the business case, that's – it was to reflect that they weren't going to get the benefit of export sales in that.

MR. COLLINS: So it's – it is a bit – it's a bit tricky how there's – the export revenue is not in the CPW analysis, but the increased export profitability is in the –

MR. WARREN: So, again, you have to look at the intention.

The intention of this was to ensure that the loan guarantee flowed to the ratepayer. And although the export sales was not going to go to reduce rates, at that point in time it was discussed that it was available. Again, it was an attempt by us to

make sure that the full guarantee benefit was passed to ratepayers.

MR. COLLINS: Was the basis of – was that technical choice communicated to senior decision-makers at Nalcor?

MR. WARREN: I can't recall. I don't think it was viewed as that significant – I probably did not view it as that significant of a change. I could've – I likely probably discussed it with Derrick, just basically gave him the high-level view of, spoke with Tom kind of a thing, this is where we're going and didn't connect, I guess, that the – there were no export sales.

MR. COLLINS: Do you see how when you end up with several Cabinet ministers, the Premier in the House saying all of – this analysis is done on the assumption that all exports are being – that there are no exports and that all extra energy is being spilled. Do you see how the inclusion of extra export profits could make that a bit misleading?

MR. WARREN: But it's only – and it's – I'm struggling because when exports were excluded, it was more to be up front on – at least my memory of it, was that none of this was based on – none of the financing, none of that was based on achieving certain levels of export sales. And in conferring this benefit we were trying to stay hold to the core principle of the loan guarantee which was – it was entirely to the benefit of the ratepayers.

MR. COLLINS: Thank you, Mr. Warren.

Those are my questions.

MR. WARREN: Thank you.

THE COMMISSIONER: All right, I think we'll take out 10 minutes here and then we'll begin cross-examination.

My plan is to finish with Mr. Warren today, so we'll adjourn for 10 minutes.

CLERK: All rise.

Recess

CLERK: All rise.

Please be seated.

THE COMMISSIONER: All right.

The Province of Newfoundland and Labrador.

MR. LEAMON: No questions, Commissioner.

THE COMMISSIONER: All right.

Concerned Citizens Coalition.

MR. HISCOCK: Thank you.

Good afternoon, Mr. Warren.

Will Hiscock for the Concerned Citizens Coalition. I have a number of areas I'd like to discuss with you.

Perhaps I could begin by asking how your role fits with and how you interface with the other people in the financing with Nalcor, particularly Mr. Derrick Sturge and Mr. James Meaney, who we spoke to already with the Commission?

MR. WARREN: Sure.

So I'm a direct report into Derrick –

MR. HISCOCK: Mmm.

MR. WARREN: – who's the CFO, and one of my colleagues is Jim Meaney, who also reports directly into Derrick. Myself and Jim, our teams work fairly closely together, especially during this time period with the financing.

MR. HISCOCK: I understand your role in the – chief role in the modelling processes. Does PricewaterhouseCoopers play any role in your modelling and forecasting?

MR. WARREN: So back at that time –

MR. HISCOCK: Yes.

MR. WARREN: – they were the chief modellers with respect to the Muskrat Falls Labrador Transmission Asset models.

MR. HISCOCK: How would that interact with your models?

MR. WARREN: So they – their models are our models.

MR. HISCOCK: Okay.

MR. WARREN: So they're working MFLTA for us and providing us the models as output.

MR. HISCOCK: Okay.

A couple of questions on the cost-sharing arrangement here: How much of the annual revenue requirements are charged to Newfoundland and Labrador Hydro, to NL Hydro?

MR. WARREN: Are you speaking of Muskrat?

MR. HISCOCK: Yes, yeah.

MR. WARREN: Okay.

MR. HISCOCK: Of Muskrat, yeah, sorry.

MR. WARREN: So Muskrat, it is 100 per cent cost recovery.

MR. HISCOCK: Right. And so the – it's 100 per cent gets charged to NL Hydro, but they don't – NL Hydro doesn't get all of the power. So does NL Hydro pay only for the power that it uses, or it pays for the full amount of power generated?

MR. WARREN: So the cost-recovery mechanism is at its full cost recovery – it's built into the supply price.

MR. HISCOCK: And that Newfoundland Hydro now is paying the full cost of transmission and generation, correct?

MR. WARREN: Yes.

MR. HISCOCK: Okay. And that, ultimately, means – because Newfoundland and Labrador Hydro is funded purely by the ratepayers – that the ratepayers of the Province of Newfoundland are responsible for 100 per cent of the generation costs and 100 per cent of the transmission costs, correct?

MR. WARREN: That's correct.

MR. HISCOCK: Okay. Does that mean that Nalcor can avoid imposing a transmission tariff for out-of-province sales?

MR. WARREN: That is outside my purview. My understanding is that you'd probably have – best to speak to, kind of, the system operators.

MR. HISCOCK: Sorry. Who, specifically, would you suggest? Like, are you aware of any transmission tariffs that we would charge for exports out of the province?

MR. WARREN: I think that would be more of either energy marketing – are you talking about our exports or is it, like, if someone wants to wheel through –

MR. HISCOCK: We don't impose any tariffs when we're exporting the power, correct, through our transmission systems and so on? That's all covered by Hydro.

MR. WARREN: Yes.

MR. HISCOCK: Okay.

In that case, what's the minimum export price which Nalcor can market its energy? Is there a minimum price – export price that Nalcor has?

MR. WARREN: I guess it would be the transmission tariffs and the losses that get into that marketplace.

MR. HISCOCK: Okay.

MR. WARREN: But that is – even in depressed markets, who are seeing that, they're still flowing to markets.

MR. HISCOCK: Okay.

A few questions on revenue requirements now; if we could – Madam Clerk, if we could turn to Exhibit 00127. I'm looking at page 19 first, page 19 to page 20 are the two I'm most interested there.

THE COMMISSIONER: Okay, so that would be on your screen – that one.

MR. HISCOCK: Exhibit 00127.

MR. WARREN: Whoops, sorry.

MR. HISCOCK: And if we can get to page 19 of this exhibit.

We see the May 27 [sp. May 2017] load forecast based on 18 – sorry – 18 cents per kilowatt hour – terawatt hours. If – sorry, this’s not exactly the page I thought we were on. So maybe we could scan up one page and just let me see if – no, if we could scan down one page, then, maybe.

THE COMMISSIONER: I think the reference you’re looking at may be on page 17 at the bottom, underneath the graph. Just go back up to page 19, please. Is what you’re looking for, what’s on the bottom?

MR. HISCOCK: Oh, sorry, yes. There we are.

So the May 27 [sp. May 2017] load forecast is based on 18 cents per kilowatt hour and it escalates at 2.2 per cent per annum, as it is shown in that footnote down there as the Commissioner kindly pointed out there.

If we turn to page 20, that shows that the average rate to achieve full cost recovery is 22.89 cents per kilowatt hour. Is that correct?

MR. WARREN: Yes.

MR. HISCOCK: Okay. And if the rates are set at 18 cents, and that’s obviously well below the 22.89 cents, what will be the deficit in 2021?

MR. WARREN: So, as a rule of thumb, what we’ve been using is out there in the public realm, is that for each penny of domestic rate, mitigation is approximately \$66 million of mitigation required. So if you’ve got 22.9 cents at 18 cents, I believe – was the 18 cents as of 2021?

MR. HISCOCK: Yes, 18. So it was – call it 5 cents, perhaps.

MR. WARREN: Okay. So five times 66 is \$330 million.

MR. HISCOCK: Okay.

Do you agree that the May 2017 load curve, shown on page 19 that we just looked at, that

would have to be shifted down if the 22.89 cents had been applied rather than 18 cents, correct?

MR. WARREN: My understanding is that that would be correct. A better one to have asked would be Paul Stratton who runs the load forecasting.

MR. HISCOCK: But that would correspond with your understanding, right?

MR. WARREN: My understanding, yes.

MR. HISCOCK: I’d like to turn to Exhibit 01562 – 01562 and –

THE COMMISSIONER: Again, that will be on your screen.

MR. HISCOCK: That will be on the screen, as well, yes.

MR. WARREN: Tab 23 as well or –?

THE COMMISSIONER: No, it will be on your screen.

MR. HISCOCK: No, it will be – it will come up on the –

MR. WARREN: Okay.

MR. HISCOCK: – computer screen just in one second there.

MR. WARREN: Yeah.

MR. HISCOCK: And we’re going to turn to page 8 of that, if we could, Madam Clerk.

And this document, which was dated October 3, 2017, it discloses a total 2021 revenue requirement of \$808 million. And where we’re getting that is in the first column, if we take the LIL number of \$416 million in the first column there; Muskrat one, 324; and the 66 from LTA. That gives us a total revenue requirement of \$808 million, and this includes \$151 million in RROE. And you can see those again, the return on equity in – is the first of each of those columns under Muskrat, LIL and LTA.

I’d like to turn now to a second exhibit, which is 04025, Exhibit 04025.

THE COMMISSIONER: Again – oh, that one’s in 24 – tab 24 of your book.

MR. HISCOCK: And if we could turn to page 7 of this exhibit.

And here we have – see a similar set of figures and – however, what we have here now under 2021, again, same year – however, here we have the revenue requirements reduced to \$726 million from 808. That includes \$118 million of return on equity, as opposed to the 151 we had before.

Can you explain why the revenue requirements are being reduced while the overall capital costs are being maintained at the level reported in June 2017?

MR. WARREN: I can’t speak specifically to what the drivers would be for this. Very likely, it relates to timing of expenditures. So ...

MR. HISCOCK: Well, can you explain what you mean by that? Because the revenue requirements of 808 have come down substantially, but we don’t see any sort of indication that the overall capital costs have – certainly haven’t been reduced during that same period, so –

MR. WARREN: No, but what has changed is the timing of – so between June 2017 and October 2018 expenditures would have – the timing of the expenditures would have changed. The timing of the equity injections required from the shareholder would have changed. I know that the – for Muskrat and LTA, that we haven’t changed any of the underpinning assumptions on the 8.4 or IRR calculation.

MR. HISCOCK: Yeah.

MR. WARREN: And, I don’t think there would’ve been a significant, if any, change for the LIL rate.

MR. HISCOCK: Right.

MR. WARREN: So it would lead me – again, not just seeing this cold – it’s likely that there may have been changes when you were just looking at the return on equity –

MR. HISCOCK: Mm-hmm.

MR. WARREN: – there’s probably changes to when the equity is being called by the – or called from the shareholder, which changes the whole calculation, which is one of the reasons why when I’m pushed on changes, I’ll often say that it’s very complicated, ’cause it – there’s so many different variables –

MR. HISCOCK: But –

MR. WARREN: – understanding this –

MR. HISCOCK: – there’s a lot of moving parts, but if I’m understanding what you’re saying here, you’re saying – ’cause, you know, it’s a fairly substantial reduction. It’s \$80 million – a 10 per cent, say, reduction in their revenue requirements for the year –

MR. WARREN: Yeah.

MR. HISCOCK: – over a fairly short period of time.

What I’m understanding from you right now is that that is almost certainly due to the fact that, basically, the money is flowing out slightly slower than was expected as the – not as much capital has been demanded of the shareholder – of Newfoundland and the Government of Newfoundland. And that’s why the return on equity is also lower at that period. That – is that basically what you’re saying, your explanation? Because the underlying figures haven’t changed.

MR. WARREN: So you mixed up a couple of different –

MR. HISCOCK: Okay.

MR. WARREN: – things there, so –

MR. HISCOCK: Please.

MR. WARREN: – the return on equity –

MR. HISCOCK: Yeah.

MR. WARREN: – which is what I was asked or –

MR. HISCOCK: Yeah.

MR. WARREN: – what I thought I was answering –

MR. HISCOCK: Okay.

MR. WARREN: – that has gone from 151 to 118, I think, by your –

MR. HISCOCK: Yes.

MR. WARREN: – what you indicated. I haven't added it up, but I –

MR. HISCOCK: Yeah, that's my math, but, yeah.

MR. WARREN: – I trust – yep.

So that's gone down by \$30 million –

MR. HISCOCK: Yes.

MR. WARREN: – and I think that's where the timing aspect with regards to calls for equity injection and that –

MR. HISCOCK: Okay.

MR. WARREN: – would factor. What you see, as well, is there has been probably some changes on the O&M side, which is driving more of that larger reduction that you referenced –

MR. HISCOCK: Yeah, 'cause the –

MR. WARREN: – (inaudible) –

MR. HISCOCK: – total revenue requirements got reduced by \$80 million approximately there –

MR. WARREN: Yeah.

MR. HISCOCK: – right?

MR. WARREN: Yeah, so 30 of it is with regards to the return on equity –

MR. HISCOCK: Yeah.

MR. WARREN: – and there's probably another 30-ish probably from O&M just eyeballing it –

MR. HISCOCK: Okay.

MR. WARREN: – kind of here.

MR. HISCOCK: Okay.

If we could to turn to Exhibit P-01557.

THE COMMISSIONER: Don't think you have that. It'll be on your screen.

MR. HISCOCK: And this shows that the estimated provincial Nalcor equity at project completion will be \$4 billion, with \$3.2 billion for Muskrat Falls and the LTA. The return on equity on \$3.2 billion is 8.4 per cent – at 8.4 per cent, sorry, would be \$269 million.

THE COMMISSIONER: Okay, what – can you just have a look at –

MR. HISCOCK: Sorry.

THE COMMISSIONER: – the screen and tell me where you are right now, 'cause I –

MR. HISCOCK: Yep.

If we could – we're at the \$4 billion – sorry, total cost. So, the total cost down at the bottom. Nalcor NL equity –

THE COMMISSIONER: Mm-hmm.

MR. HISCOCK: – in the bottom right-hand corner is \$4 billion, and of that the \$3.2 billion is for Muskrat Falls and the LTA.

THE COMMISSIONER: Okay.

MR. HISCOCK: The return on equity has generally been built in to the LIL, Commissioner, and not to the MFLTA, and that's the issue that I want to bring in here.

Have – if we were charging a rate – a return on equity of 8.4 per cent on the \$3.2 billion for Muskrat Falls and the LTA, that would be 2 point – or \$269 million. However, in the document we were just looking at, and that would be the 2018 ATIPPA release that we were looking at there, Exhibit P-04025. That provides no RROE on Muskrat Falls or the LTA in 2021.

MR. WARREN: That's not correct.

MR. HISCOCK: Okay. In what way is that not correct?

MR. WARREN: Oh sorry. Yeah, I see what you are saying, 'cause I think you're saying that where it's negative 3.6 million?

MR. HISCOCK: So, what I'm saying is that if we use the rate of return or return on equity of 8.4 per cent on the Muskrat Falls LTA amount, \$3.2 billion. We come up with figure \$269 million. When we go back to Exhibit 04025, under Muskrat Falls, the return on equity, we've got negative amounts in fact there –

MR. WARREN: Yeah.

MR. HISCOCK: With LIL, we have 125 allotted for return on equity. The same – we do not see the same, down on the LTA or the Muskrat Falls, right?

MR. WARREN: So, the way that Muskrat and the LTA is structured is through a life of project IRR of 8.4, so the shareholder receives its return over a different profile.

MR. HISCOCK: Yes, and that's what we are getting at, in fact, here.

So, it leaves a short fall, exceeding \$269 million to be generated in future years on the back end of the contract, we'll say. The return on equity that is built-in in 2021, the first column that we're looking at here, where we built-in the return on the equity on the LIL. If we were to use that same figure, the same return on equity 8.4 per cent, and we were to build it in on a current accounts basis – if we were paying our costs, as they came due, we'll say, including the return on equity for Muskrat Falls and the LTA, we'd have another \$269 million we would need to add to this.

Would you agree that if the revenue requirements were restated, on a cost of service basis – okay, now I understand that that's not what has been done – but if we were to use a cost-of-service basis that this cost would approach \$1 billion.

MR. WARREN: I guess so, but it's a hypothetical situation that what (inaudible) –

MR. HISCOCK: Well, it's a different method of accounting, correct, for the cost.

MR. WARREN: It's a different methodology than the one that's been approved to recover the cost.

MR. HISCOCK: Yeah, it's the same methodology that's used in almost every utility system in, well, everywhere, and it is the same system that's used on the LIL, correct? It's a cost-of-service model.

MR. WARREN: So, other – and, again, I'm not a regulatory specialist on opining on that. I know having gone through it – and we're talking about rate implementation and rate mitigation purposes – there are other jurisdictions that do implement or phase in rates on a different basis.

MR. HISCOCK: Okay.

MR. WARREN: So although, yes, typically, cost of services is followed, other jurisdictions in similar type of situations will have phased-in rates through other methodologies as well. So it's not as atypical as –

MR. HISCOCK: Okay, if –

MR. WARREN: But, again, that's based on my limited interactions with the regulatory –

MR. HISCOCK: But you would agree that when we're pricing out the cost of the LIL, for example, we are using cost-of-service –

MR. WARREN: That is –

MR. HISCOCK: – model for determining what the cost of the project is? What needs to be generated in any given year?

MR. WARREN: That's correct.

MR. HISCOCK: Okay.

And when we're dealing with Muskrat and the LTA, we're not, but if we were to use the cost-of-service analysis for Muskrat and the LTA, it would add a figure approaching or in a vicinity of a billion dollars to the cost – to what the stated costs would be.

MR. WARREN: Add another billion on top, or is that (inaudible)?

MR. HISCOCK: The revenue requirements were restated on a cost-of-service basis that the revenue requirements would approach the billion-dollar mark. There'd be another –

MR. WARREN: The total –

MR. HISCOCK: Sorry, another –

MR. WARREN: – is (inaudible).

MR. HISCOCK: – \$269 million.

MR. WARREN: Okay, yes.

MR. HISCOCK: Yes, right? And which would bring those costs up to close to a billion.

MR. WARREN: And at a high level, back-of-the-envelope –

MR. HISCOCK: Yes.

MR. WARREN: – following your logic, your logic that would – that's where I'd go as well, yes.

MR. HISCOCK: Okay.

How much export revenue is it reasonable to expect to offset these revenue requirements? You know, what are the prospects of recovering costs absent export revenues?

MR. WARREN: What are the costs absent export revenues?

MR. HISCOCK: Yeah, do we think we can do it –

MR. WARREN: So –

MR. HISCOCK: – with export revenue? And, if not, what else is there?

MR. WARREN: So are we now discussing rate mitigation?

MR. HISCOCK: Yes, I guess so.

MR. WARREN: Okay.

MR. HISCOCK: Yeah.

MR. WARREN: So, with regards to rate mitigation, my first caveat is that I can only help inform policy decisions. So, what we've seen – and I don't have any of the information, I don't think, at hand –

MR. HISCOCK: Mm-hmm.

MR. WARREN: – is that with export sales, I think that's roughly between \$50 and \$70 million per annum starting off. So that gives you a penny of mitigation. But going back to your first reference, the 22.89 versus the 18 cents, we're looking for four or five cents, which would – obviously, we're not – and based on my back-of-the-envelope calculation of \$330 million per annum –

MR. HISCOCK: Yeah.

MR. WARREN: – in the initial year –

MR. HISCOCK: Yeah.

MR. WARREN: – you will see that that fairly quickly reduces, because as you can tell from here that the returns for MFLTA does kick in fairly quickly as well –

MR. HISCOCK: Mm-hmm.

MR. WARREN: – in the ensuing three or four years. So that reduces the level of mitigation that's required. So on the face, export sales alone would be insufficient; however, you've got other levers such as the dividends and I guess other measures that are out in public discourse.

MR. HISCOCK: Do we know what fuel savings are going to be realized in 2021?

MR. WARREN: My understanding is that there probably was an estimate. I don't have that in – at the tip of my –

MR. HISCOCK: Okay.

And do we know what the shortfall that needs to be recovered through increased rates is? And you said – was that the figure you cited earlier? Would you hold to that?

MR. WARREN: So it's important to note I think the 330 that you brought me to, that was the June 2017 update.

MR. HISCOCK: Yeah.

MR. WARREN: And as you rightfully pointed out in the ATIPPAs that you went through, we have seen costs have come down –

MR. HISCOCK: Yes.

MR. WARREN: – by, I think you've used \$80 million.

MR. HISCOCK: Yeah.

MR. WARREN: So that's a penny and a third or whatever.

MR. HISCOCK: Yeah.

MR. WARREN: So, as we're going through and making updates to it, that information is being updated and being provided for policy.

MR. HISCOCK: Do you have a sense as to what it would be now? What the figure – the shortfall figure would be? It was 330, we had another figure after that but, you know, in the 270s I think it was. So what – do you know what the figure is now that we're looking to make up through increased rates or some other method?

MR. WARREN: I don't have it at the tip of my –

MR. HISCOCK: A ballpark?

MR. WARREN: I would think it's around the 200 that the province has. It is out there in the public realm.

MR. HISCOCK: What would be the impact on rates if the recovery of the return on equity on generation and transmission assets followed the cost-of-service approach that we use with the LIL? Would that tend to increase the cost of rates if we did use cost of service on the generating assets?

MR. WARREN: I don't recall any introduction of the province changing their policy direction on going from –

MR. HISCOCK: I'm not suggesting the province has suggested moving to a cost-of-service basis for Muskrat.

MR. WARREN: Okay.

MR. HISCOCK: What I'm asking is, I guess: What would be the impact on the rates or the needed rates if Nalcor were to move to a cost of service, were to finance this on a cost-of-service basis for generating assets? Would that increase the rates and increase them substantially. Would that be the impact?

MR. WARREN: I guess it depends. At a high level –

MR. HISCOCK: Yeah.

MR. WARREN: – if there was no mitigation through dividends –

MR. HISCOCK: Yes.

MR. WARREN: – then very likely it would increase. In the scenario that we're currently in, where there's mitigation that's going to be required from dividends, then my advice probably would be not to switch to a cost-of-service framework for that and move the dividend flow – or leave the dividend flow as it is right now in the back end, when rates – when it's more likely that you're going to actually be able to recover more dividends from the ratepayer, again, knowing that there's a balance between ratepayer and the taxpayer.

MR. HISCOCK: Are you confident that Nalcor can recover sufficient revenues through rates to recover its costs?

MR. WARREN: So what we've seen in our analysis doesn't raise issues to me, from what I see, that there is a path. It depends on the level of mitigation that's required.

MR. HISCOCK: Okay.

Does your analysis assume that the return on equity of 8.4 per cent on the Power Purchase Agreement is guaranteed? And, if so, then how is low effective demand for power accounted for?

MR. WARREN: So under the terms of the PPA –

MR. HISCOCK: Mm-hmm.

MR. WARREN: – the 8.4 is fixed –

MR. HISCOCK: Yeah

MR. WARREN: – and the quantity of energy that's required to be delivered is fixed. So that is – so on the Muskrat side –

MR. HISCOCK: Mm-hmm.

MR. WARREN: – that is, they are fixed amounts.

MR. HISCOCK: Would you agree that that's a little bit imaginary? You know, you can say that we're going to guarantee an 8.4 per cent but, in fact, there is no way to guarantee an 8.4 per cent. You know, it's not possible to actually guarantee a return on equity in that you can't guarantee that Newfoundlanders are going to buy the power at any price that you decide to sell it to them at.

MR. WARREN: So, when you introduce dividends as a source of mitigation, it will affect your overall IRR that you will receive. So as you reduce the dividends in the earlier years, the effective IRR will decrease; however, it depends on what form that mitigation takes. So, if the dividends are reinvested or geared towards rates, Muskrat will still earn its 8.4.

However, a certain portion of that return could be earmarked to go towards paying or assisting Hydro pay those rates.

MR. HISCOCK: So, I mean, to suggest that you've got a guaranteed 8.4 per cent but you might have to give it all back in order to keep your 8.4 per cent, it means you don't really have 8.4 per cent. You see what –

MR. WARREN: That's –

MR. HISCOCK: – I'm saying in that to say we're guaranteeing you a rate of 8.4 per cent but we don't know how much of that you're going to have to give back in order to guarantee the dividends keep flowing, this is –

MR. WARREN: So that – again, so that's a policy call that has to be made. All I'm – can explain to you is that there's financing agreements in place that ensure that Muskrat Falls, that that project entity will earn a return over the life of the project, at 8.4. And that's the mechanism that we come up with the supplier price.

MR. HISCOCK: Okay. But would you – yeah, and I understand you can – you are allowed to charge whatever you want through the flow through – to guarantee that 8.4 per cent. But at the same time, you can't guarantee that people are going to keep using as much electricity if you jack the price. Like, there's price elasticity and –

MR. WARREN: That's right.

MR. HISCOCK: – and so you've got a limited room. You can't really guarantee a rate of –

MR. WARREN: So that's when we worked –

MR. HISCOCK: – return on equity.

MR. WARREN: – that's when we worked towards mitigation.

MR. HISCOCK: Okay. If recovery of cost is – is recovery of cost possible when capital costs have doubled from 7.4 billion at sanction to 12.7 billion or so today?

MR. WARREN: Though, again, based on – depending on where you want to mitigate rates to and that, we see that there is a path available. Some of that path may involve, as mitigation's been discussed, discussions with Canada as well.

MR. HISCOCK: Is it possible to recover costs now that they've doubled, without the backstop, or without the federal government or the provincial government stepping in? Can Nalcor, on a business model, recover its cost?

MR. WARREN: Just – could you repeat that question? Sorry.

MR. HISCOCK: Yeah. Is cost recovery possible when capital costs have doubled from 7.4 billion to 12.7 billion if Canada and the

province don't step in, don't provide funds, taxpayer money?

MR. WARREN: I don't think there's been any analysis to say yes or no to that that I can really pin my hat on.

MR. HISCOCK: Would you agree that it would be very dubious to suggest that on a pure business case, that we could actually recover the costs of Muskrat Falls given the \$12.7 billion?

MR. WARREN: So, the actual recovery from ratepayers?

MR. HISCOCK: Yeah.

MR. WARREN: Understanding that they can't afford the 22.89? I understand your point, but I think that's part of – part of the net benefits analysis that we reviewed with Mr. Collins, is the dividends was viewed as or is viewed as a potential source, so.

MR. HISCOCK: Given non-recourse funding under the federal not loan guarantee, are there conditions where the province must indemnify the federal government for the failure of Nalcor, any of its subsidiaries to meet their debt-servicing obligations?

MR. WARREN: My understanding is that there's a standard commercial terms; however, I – I think you are asking me for legal interpretation and I'm not sure if –

MR. SIMMONS: Yes, Commissioner, that may be straying out of Mr. Auburn's area of expertise and then the roles he's played in the project, to start expressing opinions on the effects of the legal agreements between the parties.

MR. HISCOCK: Commissioner, I'm fine to move on to other issues there.

Next couple of questions I have for you is on the contingent liabilities of the province. If we could turn to Exhibit 00454 which is the GT report. And if we could go to Exhibit 00454 and then page 38 of that Exhibit, please, Madam Clerk?

And we'd just move down a little bit there – I'm going to this – here we go. The – yes, the –

down at line 15 is a section I'm just going to read a little bit out there. "The PPA provides specific remedies if Base Block Payments are not made.

"In particular, if NLH fails to make the necessary Base Block Payments while MFCo continues to be in compliance with this agreement, MFCo may provide notice to NLH it is invoking their rights under the PPA which requires that within 10 days of providing such notice, if NLH has not paid the outstanding payment, NLH is required to pay a lump sum amount equal to the full repayment of the debt financing (including principal, accrued interest and any premiums) plus any associated costs (including legal, advisory, transaction and administrative costs)."

If NLH cannot provided sufficient revenues – I'm moving on my own thing here now – if NLH cannot provide sufficient revenues to meet financial obligations, does this mean the province must provide the funding?

MR. SIMMONS: Once again, Commissioner, I'm not sure that that's a question that Mr. Warren is best placed to answer. This was – this is coming out of an expert report from Phase 1. It involves expressing an opinion on the legal agreements, so I don't know the usefulness of looking for Mr. Warren's opinion on that.

MR. HISCOCK: I think Mr. Warren probably does have an understanding in terms of the fact that NLH is the backstop payer under the PPA and the financial arrangement. If NL – if Newfoundland and Labrador Hydro doesn't have the money, that the requirements and the debts of NL – of Newfoundland and Labrador Hydro, that it's the province, ultimately, who stands behind Newfoundland and Labrador Hydro. Correct?

MR. WARREN: I'm – to be honest, I'm struggling to recall kinda that point. Like –

MR. HISCOCK: Okay, well –

THE COMMISSIONER: Or it seems – it's pretty – seems pretty self-evident that if you have – if Newfoundland Hydro can't meet their

requirements, then who stands in the place of Newfoundland Hydro? So –

MR. HISCOCK: Yes.

THE COMMISSIONER: – you know, a lot – that can be said about a lot of Crown corporations.

MR. HISCOCK: Yes, and the difference is here, though, that it is Newfoundland and Labrador Hydro that's really the backup in the power in this – in the PPA, and that's what Grant Thornton, I think, is pointing out here –

THE COMMISSIONER: Yeah.

MR. HISCOCK: – on this page, I was gonna put it to the witness.

MR. WARREN: And, I don't recall, is this – this document has gone through testimony and would reflect any changes. Like, maybe there wasn't any changes in – in this –

THE COMMISSIONER: (Inaudible.)

MR. WARREN: – document?

THE COMMISSIONER: This document is an up-to-date review of the PPA as it was concluded.

MR. WARREN: Okay, 'cause I know we did provide feedback on the legal agreements –

THE COMMISSIONER: That's correct.

MR. WARREN: – as –

THE COMMISSIONER: You did.

MR. SIMMONS: That's correct.

MR. WARREN: Okay.

MR. SIMMONS: I think what Mr. Warren's referring to is that there was an exchange of correspondence through Commission counsel, and there were some points made in respect to these agreements that the witness from Grant Thornton accepted prior –

THE COMMISSIONER: Right.

MR. SIMMONS: – to giving evidence. And what we don't know right now from looking at this is whether that's one of those particular issues.

THE COMMISSIONER: I don't think it is, but –

UNIDENTIFIED MALE SPEAKER: Okay.

MR. HISCOCK: If I would ask one more question on this particular piece, and that's to ask, from your – best of your understanding, is it true that the federal loan guarantee provides no recourse to the province from default by Newfoundland and Labrador Hydro even though Newfoundland and Labrador Hydro's debt is not subject to the guarantee?

MR. WARREN: Sorry, could you just repeat the question?

MR. HISCOCK: Yes, absolutely.

Is it true – and again, to the best of your knowledge – that the federal loan guarantee provides no recourse to the province, to Newfoundland and Labrador, from default by Newfoundland and Labrador Hydro even though Newfoundland and Labrador Hydro debt is not subject to the guarantee?

MR. WARREN: So are you asking is there a default mechanism in the financing agreements in the event of Hydro defaulting on its debt obligations?

MR. HISCOCK: Yes, exactly.

And the federal loan guarantee doesn't provide any recourse for the province under that circumstance, correct? That's your – is that your understanding?

MR. WARREN: I'm not immersed into the details of the financing agreements to that extent that I would have a recollection of whether or not Hydro's – a default of Hydro debt would impact the loan guarantee arrangements.

MR. HISCOCK: You're not aware?

MR. WARREN: I'm –

MR. HISCOCK: Okay.

MR. WARREN: Yeah.

MR. HISCOCK: I'm gonna move on to another series of questions.

If we could turn to an information note, and it's at Exhibit 03440. It's an information note summarizing assessments by Robert Noseworthy and Power Advisory.

THE COMMISSIONER: That'll be on your screen as well.

MR. HISCOCK: Yes, 03440.

And on page 1, the following statement is made, and I'll just come to it now. The term sheets – the term sheet – one second now. Yes, a little bit further down, I think. Sorry, back up a little bit there. “The Term Sheet does not contemplate any transmission charges resulting from Nalcor and Emera getting free transmission, even though NLH is paying all the costs.”

Do you agree with the statement that Nalcor will not charge transmission tariffs and that Emera will get free transmission? Is that about right?

MR. WARREN: So the terms and conditions – my understanding of the terms and conditions of the Emera agreement is that we are to deliver the Nova Scotia Block or the – yeah, the Nova Scotia Block to Nova Scotia – the Nova Scotia delivery point and there's no additional costs associated with it.

MR. HISCOCK: Right.

We pay the transmission costs to get it there, and Emera gets the benefit of free transmission to that point to –

MR. WARREN: Yes.

MR. HISCOCK: – to Nova Scotia, okay.

On page 2 of this report, it states – and we can move down through to it there: “In general, Mr. Noseworthy believes that NLH assumes all the risk and receives no benefit, while Nalcor assumes none of the risk and gets all” of “the benefits.”

Do you agree with that statement that in this arrangement, Newfoundland and Labrador Hydro gets all the risks and no benefit, while Nalcor gets all the benefits and none of the risks?

MR. WARREN: So, I'm not exactly sure of the date of this document –

MR. HISCOCK: Mm-hmm.

MR. WARREN: – but the overarching, I think, genesis – and it's probably a question better asked to Mr. Martin, but I think at the time, the overarching concept of this arrangement with Emera was that although they're getting the free ride to deliver Nova Scotia, it is opening up markets, and the primary benefit that Hydro is being provided is the least cost alternative of \$2.4-billion preference – again, at that point in time.

MR. HISCOCK: Okay.

“Mr. Noseworthy believes Nalcor does not have the same risk as an investor-owned utility ... and therefore, Nalcor's targeted ROE is extremely high when comparing it to the risk profile it is assuming.

“He is not aware” – it's suggested here – “of any other utility in North America that,” one, “Can generate its revenue at no cost;” two, “Gets transmission for free” –

MR. WARREN: Excuse me. Could someone –

MR. HISCOCK: Yes, Sir.

MR. WARREN: – just scroll –

MR. HISCOCK: Absolutely.

MR. WARREN: – down the –?

MR. HISCOCK: Yeah, if we could scroll a little further down here. There we go.

And it's right here: “He is not aware of any other utility in North America that: Can generate its revenue at no cost; Gets transmission for free; Has another entity assuming all of its risk; Generates its product at no cost; Is tax-exempt;

and Has the possibility of securing a federal loan guarantee.”

Do you have any comments on that?

MR. WARREN: So, the – I’m not sure about the securing the federal loan guarantee, whether or not – how relevant that is because, as I’ve noted to Mr. Collins, the benefit of the loan guarantee was fully passed on to the ratepayer.

MR. HISCOCK: Okay.

MR. WARREN: The transmission for free and revenue at no cost, I guess the view of – and it’s counter to what he’s indicating about the ROE – is when we did the Muskrat Falls LTA –

MR. HISCOCK: Yes.

MR. WARREN: – we landed on an 8.4 IRR. My understanding is at that time, an investor-owned company would be looking for returns that were actually probably a little bit higher than that.

MR. HISCOCK: Okay.

MR. WARREN: And at the time we looked at kind of the export sales and added that to the NLH block, and that yielded an IRR that was in the vicinity of 10 per cent. And that was justification to the shareholder, who is making the equity investment at the time, that along with the regulated revenue that you have in selling it to Hydro coupled with the export sales, it would yield you what an investor would expect from a similar type of – generation is viewed as a more riskier investment, and a return of 10 per cent was in line with that.

MR. HISCOCK: Okay, so you agree –

MR. WARREN: So I think that –

MR. HISCOCK: You would agree that you should generate a lower amount than the IOU – you’re saying you are generating a lower amount than an investor-owned utility.

MR. WARREN: So I’m actually kind of counter to what Mr. Noseworthy is –

MR. HISCOCK: Okay.

MR. WARREN: – indicating there.

MR. HISCOCK: Yeah, okay.

MR. WARREN: Because for generation – again, just based on my understanding –

MR. HISCOCK: Yeah.

MR. WARREN: – of the marketplace, that would be – what the 8.4 was representative was more of a regulatory type of a return, a lower risk return – the 8.4.

MR. HISCOCK: Okay.

MR. WARREN: And a generator – a company with generation – would look at yielding returns a little bit higher than that –

MR. HISCOCK: Okay.

MR. WARREN: – and that’s kind of the genesis, my understanding of why exports was put into Muskrat and not into a benefit of Hydro.

MR. HISCOCK: Okay.

MR. WARREN: The other reason why we excluded export sales from Hydro would be, again, for – as a part of the loan guarantee, my recollection of this is that we did it on a – we had to provide a non-guaranteed basis, investment-grade quality. And as a part of that, in coming up with a non-guaranteed, investment-grade rating, feedback that we were getting from our advisory team was, let’s keep it simple and take the exports out of it. ’Cause as you – when you introduce export sales into your business case, it makes it very difficult to get value out of it from the finance community.

MR. HISCOCK: Being conscious of time, I’m gonna move through a couple of other sections here, Commissioner, as quickly as I can.

If we could turn to Exhibit 00043, which relates to the letter of commitment.

THE COMMISSIONER: It’ll be on your screen as well.

MR. HISCOCK: It will be on your screen in a moment there, now. And – yeah – Exhibit

00043, and if we could go to page 12 of that – describes the free cash and please note the amount of free cash rises dramatically after 2046. Note as well that this chart is based on the original schedule with first power in 2017. How would you interpret the concept of free cash?

MR. WARREN: So in this point, free cash flow is the dividends that are being returned to the equity holder.

MR. HISCOCK: Right. In the context of public utilities, the cost of equity is an important part of the overall cost of capital. Is the free-cash concept a variance with that?

MR. WARREN: Sorry – could you repeat the – ?

MR. HISCOCK: Yeah. In the context of a public utility, the cost of equity is an important part of the overall cost of capital, right?

MR. WARREN: Yes, and this returns when you look at the – what you don't see in the 2017 – the 2012 period –

MR. HISCOCK: Yes.

MR. WARREN: – would be the equity investments –

MR. HISCOCK: Right.

MR. WARREN: – that are required and when you take in that – that – those cash flows you will see – if you calculate this it will be 8.4 per cent and that's what your project IRR is. So, you are – this free cash flow – it's the underpinning of the PPA. So this is what is yielding, returning to the equity holder: an 8.4 life of the project IRR.

MR. HISCOCK: Yeah. This free cash is the dividend – the 8.4 per cent dividend payments, and this is how it's been scheduled. Rather on a cost of service, the dividend payments are out near the end of the project or pushed towards the end of the project, and that's what we're describing as free cash flow here?

MR. WARREN: Correct.

MR. HISCOCK: Okay. How would ministers interpret Annex B? Would they assume that the project will cover all costs and will eventually generate a plethora of dividends? And on what basis can it be assumed that this dramatic increase in dividends will occur?

MR. FITZGERALD: Commissioner, I object to the question. Asking this witness how a minister would interpret a document, like – such as this – I mean, this gentleman has no idea how a minister would interpret such a document.

MR. HISCOCK: Or how would a government – how would government use this? When they look at that, would they be expected to assume that this large amount of dividends is going to come forward? And on what basis can we assume the dramatic increase will occur?

MR. SIMMONS: Commissioner, I'm going to add my voice to the objection here. This is a broad, general question; it's not tied to Mr. Warren's role or the evidence that he presented. It's – I don't see this as being a useful line of questioning here today – useful use of time.

THE COMMISSIONER: I'm trying to figure out – I can understand there is some interest in this for some people, but I'm trying to tie this now to what I'm trying to do here. And I guess what you're asking is that if you were given this particular chart, and if you didn't know too much about what you were doing, then it would like you were getting all this money back. And your question is what about the cost to pay for it. Is that what you're asking?

MR. HISCOCK: Yes, and, you know, I think this is entirely within this gentleman's – I mean, this is the modeller; these are the models that we are working with that have been projected out that are, you know, our entire return on investment is pushed out is really, you know, this – after 2046 is when we expect we'll gonna get all of this bevy of money back. What the basis of this is, is I guess, the grounding question there.

THE COMMISSIONER: Maybe we could ask that question. So what would be the basis of us being able to say that we're get all of this money back after 2046?

MR. WARREN: So what – a couple of points in this chart – and it's a great chart – is as you can see, that it does spike up after 2046. And what that reflects is, at the time, the debt servicing. So, what you see is in the first 30 years – 30 years?

MR. HISCOCK: Mm-hmm.

MR. WARREN: Yeah. Is after the 30 year – after your debt is repaid, you have additional funds, free cash flow available. So, just a reminder of how this was implemented into rates, and I don't know if this a DG2 or a DG3 document, but recall at the – in either case, the construct of the model was that based on using this PPA approach, we had an escalating supply and an escalating supply price. And when we looked at the rates going out to this time period, we can see that once in place, we actually saw that rates on a real basis were actually decreasing, so they weren't – on a nominal basis, rates weren't going up more than 2 per cent, more than inflation, so they weren't keeping up with inflation. So the concept of this chart, of all this airy-fairy money out in post-2048, was a reflection of the equity holder's willingness to defer its return of capital –

MR. HISCOCK: Mm-hmm.

MR. WARREN: – until the debt was taken care of. But when you blended it in with the Labrador-Island Link cost-of-service framework, it allowed, again, that smoothing of rates.

MR. HISCOCK: Okay.

MR. WARREN: So I can't speak to what ministers or officials could be thinking, but the business case under pending this was that rates were achievable and comparable to the alternative, if not better than the alternative, especially out in the post-2046, '48 period, and that was the case.

MR. HISCOCK: The last couple of questions I have are on financing costs. If we could turn to Exhibit 01561, which is September 30, 2017, report of the Oversight Committee. If we could turn to page 11 of that. So that's Exhibit 01561 and page 11. Could you read the – read through those four bullets there?

MR. WARREN: Out loud?

MR. HISCOCK: Yes.

MR. WARREN: Sure.

2.3 Financing & Other Costs: "Financing & Other Costs include interest on debt financing, and Allowance for Funds Used During Construction as well as other costs, which are amounts required for pre-funded financing reserve accounts, financial closing related costs and some pre-commissioning costs.

"These amounts are capitalized and/or funded during the construction period and form part of the 'all-in' cost of the project at in-service.

"The pre-funded financing reserves are set aside at in-service as part of the financing arrangements, but refunded over the debt repayment period.

"The June 2017 estimate of Financing & Other Costs is \$2.6 billion."

MR. HISCOCK: Can we turn to page 12 of this exhibit? The next page.

And would you agree that this explains the concept of interest during construction and that IDC, or interest during construction, is shown as \$1.4 billion and is by far the largest component of the \$2.6-billion total?

MR. WARREN: Yes.

MR. HISCOCK: Okay.

If we could turn to page 13 of this exhibit, and the first two bullets there are the "AFUDC is the return that will accrue on equity invested to fund project construction," and the "LITL uses a utility cost of service model for cost recovery and will accrue AFUDC. The cost recovery profile under this model goes from high in the early years to low in the later years."

Would you explain what is meant by those two bullets, in terms of the "LITL uses a cost of service ... and will accrue AFUDC"?

MR. WARREN: So as a part of utility cost-of-service framework –

MR. HISCOCK: Mm-hmm.

MR. WARREN: – again, not as a regulatory guru, but from my best understanding is as the rate base is increasing, it is attracting a return on that rate base which, during the construction period, is AFUDC. So it's effectively the cost of equity on the equity that's being invested during construction period.

MR. HISCOCK: Right. And would you agree that the \$2.6 billion includes \$440 million of AFUDC toward the LITL or the LIL?

MR. WARREN: That's my understanding, based on what I just read.

MR. HISCOCK: Right. Why is there no AFUDC for the Muskrat Falls generation assets?

MR. WARREN: So as we've discussed, the cost recovery for the MFLTA –

MR. HISCOCK: Yeah.

MR. WARREN: – follows a different approach. It's a PPA based on escalating supply –

MR. HISCOCK: Yeah.

MR. WARREN: – escalating supply price. And it calculates – it looks at what is the equity injections –

MR. HISCOCK: Yeah.

MR. WARREN: – during the construction period. And then it determines, based on that fixed supply, the Island supply, based on the fixed amount of energy that's being delivered –

MR. HISCOCK: I understand.

MR. WARREN: – escalating at 2 per cent, what does my rate have to start with in order to yield an 8.4 over the life of the project, from start to the end of the term, at 8.4 per cent.

MR. HISCOCK: Okay.

The fourth bullet on this page here: "The MF/LTA cost recovery is based on an increasing price and increasing volume of electricity, and is therefore lower in the early years ... higher in

the later years." With a cost recovery of 8.4 per cent the IRR "on equity invested is generated over the term of the power purchase agreement with NLH, but AFUDC does not accrue."

Is that bullet telling us that the methodology used for generating assets and for the LTA is different from the cost-of-service approach? That's my understanding, right?

MR. WARREN: Yes, that's –

MR. HISCOCK: And –

MR. WARREN: – what I just –

MR. HISCOCK: Yeah, exactly.

And does it tell us that there's no provision for AFUDC for those assets, correct?

MR. WARREN: So under the PPA approach –

MR. HISCOCK: Yeah.

MR. WARREN: – it's clear that it doesn't follow a cost-of-service framework.

MR. HISCOCK: Mm-hmm.

MR. WARREN: Under the PPA approach you're looking for a life of the project IRR, so that you know that you're getting a return of 8.4. So, although you don't see it adding up into a balance account, you can see by the calculation looking at the cost outflows and the free cash flow afterwards –

MR. HISCOCK: Yeah.

MR. WARREN: – that it returns at 8.4 per cent IRR. So there's –

MR. HISCOCK: Yeah.

MR. WARREN: – there is no calculation like that.

MR. HISCOCK: Right

Do you agree that at least the rates, doing – using this methodology that was chosen, rather than cost of service, leads to rates in the early years that do not fully recover government's

equity investment? And what I mean by that is we hear the number 22.89 cents, but if their AFUDC charge on the generating assets – if we use the cost-of-service approach, 22.89 cents would have to go up to meet the true cost. Correct?

MR. WARREN: So, again, that's a hypothetical question but, in reality, where the equity holder, being the shareholder, landed was that they were willing to defer their returns to a later period in time –

MR. HISCOCK: Yeah.

MR. WARREN: – and still be able to recover and yield an 8.4 return on that investment.

MR. HISCOCK: Okay.

While we understand that the cost recovery is going to be different for each of the two recovery mechanisms – I understand that – the omission of financing costs for equity from the calculation of the project costs – that seems difficult to justify in some ways, doesn't it?

MR. WARREN: So I disagree with you that financing costs were omitted. That's not the case.

MR. HISCOCK: Okay.

MR. WARREN: Again, when we – and we clearly laid this out in – through the PUB process and everything during DG2, DG3, it was abundantly clear that we were implementing or bringing in service, Muskrat, following a PPA approach. And it was clear that there was a deferral – timing deferral of the province's return of equity – return on equity.

MR. HISCOCK: Yeah.

MR. WARREN: So the financing costs associated with the 8.4 IRR is baked into that chart that you just put in to me that we just reviewed. It's just – it's a part of your supply price. There's no separate line for return on equity.

MR. HISCOCK: Yeah, but – yeah, okay. I mean, I think the Commissioner understands

where we are with this so I'm not going to flog this horse anymore.

But if we look at the total equity investments, would you agree that about two-thirds of the project's equity is invested in Muskrat Falls, plus the LTA, and about one-third in the LILTA – LILT. That's –

MR. WARREN: That –

MR. HISCOCK: – the basic breakdown, roughly.

MR. WARREN: Eight over four? Yeah, it's around – I can't do that mental math at this point, but I would –

MR. HISCOCK: It's about two-thirds equity in Muskrat Falls and LTA, about –

MR. WARREN: Sure.

MR. HISCOCK: – a third over on the other side.

MR. WARREN: Yeah.

MR. HISCOCK: On – if you take the \$440 million in AFUDC for LILT and you use that as a rough calculation for what AFUDC would've been on Muskrat Falls plus the LTA, you know, we'd be looking at a figure of about a billion dollars.

MR. WARREN: I would not hazard that back-of-the-envelope calculation because, again, as I've said in my testimony, it's timing of cash flows. So you'd actually have to look at the timing of – and, again, it's on a hypothetical basis. The spend profile for Muskrat is different than the spend profile for the Labrador-Island Link. So what we've seen is that the spend for Muskrat was a lot slower and a lot lower in the earlier years, versus what was for the Labrador-Island Link. So –

MR. HISCOCK: Okay.

MR. WARREN: – you really, again, not having –

MR. HISCOCK: It –

MR. WARREN: – been into the details of these models –

MR. HISCOCK: Yes.

MR. WARREN: – but I – but being around them I have an appreciation that there's so many different factors that that one I would caution against using that type of a back-of-the-envelope.

MR. HISCOCK: I don't believe that Mr. Meaney or Mr. Sturge had a big deal of difficulty with – would it surprise you, I guess, to find out that Mr. Sturge and Mr. Meaney didn't have a big deal of difficulty accepting that AFUDC would be about a billion dollars based on those figures and wouldn't be too far off?

MR. WARREN: I don't know, other than I can just give you my personal interactions with these models –

MR. HISCOCK: Yeah.

MR. WARREN: – because I'm not the type of person that would freely say yes or no to a back-of-the-envelope analysis with respect to that.

MR. HISCOCK: Okay.

MR. WARREN: Sorry.

MR. HISCOCK: If we were to accept that they would have a comparable rate of AFUDC, and then it would be about a billion dollars, that would raise the financing costs to about \$3.6 billion instead of the \$2.6 billion. The cost of it had been put out to the public of a financing cost of \$2.6 billion. We would have to add a billion dollars to that figure to account for equity for AFUDC for the return on equity used during construction.

MR. WARREN: So –

MR. HISCOCK: And that would put – actually put the cost of this project, rather than the advertised \$12.7 billion, at around \$13.7 billion.

MR. WARREN: No. That's not correct because what you're not getting is that baked into your costs are that return. It's difficult to pinpoint, but one point of reference is in DG2 we had – in the

Nalcor submission there was, I think, a point there that they looked at the – what this escalating supply and escalating supply price was designed, was on an NPV basis it would yield similar, and so when you looked a cost-of-service framework and compared – because I think there were some questions at that time – we saw that there wasn't a significant impact to rates.

So, at my core, I don't – I can't see how that one extra billion dollars of AFUDC – because that is built into the supply price. It's built into what you see, what – how you recover it.

MR. HISCOCK: Well, no, it's built into the rising rates over time. It's not built into what the advertised capital cost of the project is. The advertised capital cost of the project, including financing, is \$12.7 billion –

MR. WARREN: Right.

MR. HISCOCK: – right?

MR. WARREN: But, again, I just re-echo my point that I feel that it was fairly evident as we were going through the DG2 and DG3 process that the differences between the cost-of-service framework and the PPA approach, that that was – that was known.

MR. HISCOCK: Yeah. I mean, I'm not suggesting it was unknown.

What I'm suggesting is that – for the public and for the Commissioner, for everyone else – that if we had used the cost-of-service analysis and if we were looking at the AFUDC, if we had chosen that accounting methodology – which is what utilities in Newfoundland have traditionally used and what we have, in fact, used for the LIL even on this project – that we would have increased the advertised capital cost substantially. We would have to account for an AFUDC in the actual financing cost on paper; the \$2.6 billion would actually be \$3.6 billion under that system. If instead of looking to (inaudible) it in rates after 2046, if we put it on paper today, this is the cost of the project – the capital cost, the AFUDC is – that it would really be a \$3.6-billion financing cost.

MR. WARREN: Right. But again, we were – I’m comfortable that decision-making was – at the time, was aware of that difference in methodology.

MR. HISCOCK: Right. And I’m not suggesting they weren’t, but I’m asking you to agree that that would be the effect, that that is a real cost of this. And when it’s pushed out into the future, it’s hard to see when people talk about the capital costs and financing costs today –

MR. WARREN: Yeah.

MR. HISCOCK: – because of the accounting method chosen. I’m not suggesting that it was right or wrong.

MR. WARREN: Yeah.

MR. HISCOCK: It’s not my call. But, either case, when people talk about it costing you \$2.6 billion in financing, there’s kind of a hidden billion dollars there that we’re expecting to generate through very high rates out into the future.

But if we were using a cost-of-service approach, we wouldn’t be talking about a \$2.6-billion financing cost, we’d be talking about a \$3.6-billion financing cost. We wouldn’t be talking about a \$12.7-billion cost of the project, we’d be talking about a \$13.7-billion cost of the project, if we were accounting for it in the present day in a cost-of-service world.

MR. WARREN: So I can see what you’re saying, I just – I don’t know whether or not – like, I don’t like the hidden aspect. Like – because the hidden aspect is that all those costs associated with it is – like, when you say hidden billion-dollar AFUDC, what I hear is that it’s not in the rates, and it is in the rates.

MR. HISCOCK: It’s in the rates, it’s not in the advertised capital cost and financing costs of the project.

MR. WARREN: No – now, at this point, I think they advertised capital cost, it was just the actual capital cost with a footnote saying that it doesn’t include AFUDC and IDC and financing costs.

MR. HISCOCK: Those are my questions.

THE COMMISSIONER: Thank you, Mr. Hiscock.

MR. WARREN: Thank you.

THE COMMISSIONER: All right.

Edmund Martin.

MR. SMITH: Harold Smith for Edmund Martin.

I will be brief. As a colleague mentioned to me before the lunch break, you get the feeling sometimes you’re in a script review for a television program called *The Big Bang Theory*. It’s a bit daunting with it, so I’m going to try my very best at, you know, trying to determine a few points, and I won’t be very long.

First of all, you have used the words “high level” on – at least 16 times during my count at my desk. And I want to know what you mean by high-level analysis or high-level discussion?

MR. WARREN: Okay.

So when I say high level I generally mean that it’s – it is a rough estimate. It’s not that all models have been updated. It’s not that all permutations of the details behind it have been flowed properly through a model. It is a rough estimate of looking at a couple of different factors. It doesn’t take into, as I said, the thousand factors that I estimate.

MR. SMITH: So if we look at one of the documents or pieces of material that you referenced as done at a high level – document 03992, Madam Clerk.

THE COMMISSIONER: 03992, that would be at tab 9.

MR. SMITH: And we look at this document, you described it – I believe, you described it as one of the things that was done at a high level.

MR. WARREN: Absolutely. And it was – at this point in time, as well, it was definitely a work-in-progress. I turned my attention to it at 1:32 a.m. When I looked at it at 1:32 on

Saturday night, Sunday morning, I asked Terry and Gord, who were working on the modelling side for my team, to – that we'd have to go through this.

MR. SMITH: Okay.

So if it's high level, it's rough, it's maybe even a draft of some sort, but I would suggest to you that relying upon that document would be of a concern, particularly for purposes of informing the senior members of government or senior members of the Nalcor executive.

MR. WARREN: Yes, so those caveats would definitely have to be used and would be used.

MR. SMITH: Now, I'd like you to compare that to 03993, please.

THE COMMISSIONER: That would be at tab 11.

MR. SMITH: Are you familiar with that one, that document, 03993?

THE COMMISSIONER: That won't be on your screen because I don't think it's –

MR. WARREN: It's an Excel spreadsheet, I believe.

THE COMMISSIONER: Right, we didn't put it in the book.

MR. WARREN: That's okay.

So, again, this would be – I would deem this as a high level as well because, again, the models wouldn't be fully process – it was – it's probably a combination. And this is a combination of – it's more of a presentation, it's combining different lines – yeah.

MR. SMITH: Okay.

So, once again, in terms of this particular document, you would give the same caveat or caution that you have to be careful in looking at this document and drawing conclusions from it because of its – the nature of it being draft or, as you said, rough – rough draft.

MR. WARREN: Yeah. And, again, I don't have a recollection of reviewing this with anyone above me.

MR. SMITH: Okay.

MR. WARREN: But looking back at how I would normally present these, again, high-level calculations that I generally would give – well, I would always give the caveats –

MR. SMITH: Yes.

MR. WARREN: – anyone who's ever interacted with me on rough analysis understands that I – I would explain that at a very high level that it's – and explain the nature of the analysis and what I – what the team did –

MR. SMITH: Okay.

MR. WARREN: – to get there.

MR. SMITH: And when I look at this analysis – this rough analysis – it seems to demonstrate that the CPW preference declined from 2.4 billion to 2.17 billion as between it and presumably the Isolated.

MR. WARREN: Yes.

MR. SMITH: Okay. But there was no work done, to your knowledge, on the Isolated?

MR. WARREN: No. As I mentioned to Mr. Collins earlier – that's one of the biggest drawbacks of the way that this is presented, is that it's – it's only focusing on two or three different areas. In this case, two or three different areas even though there's buildup from three or four different models.

MR. SMITH: Now, you're able to confirm, though, that from a proper analysis there was 300 million in financing savings as between DG3 and financial close.

MR. WARREN: So, at this point in time – in those emails –

MR. SMITH: Yeah.

MR. WARREN: – that email that I sent Mr. Martin –

MR. SMITH: Yes.

MR. WARREN: – that was based on full iterations of models and based on estimates still because it was – it wasn't financial close as per se. Those models reflect, kind of, the supply price – the revenue requirement. So – and that was how we built that up.

MR. SMITH: I think you explained that during your directives.

MR. WARREN: Yes.

MR. SMITH: Yeah. Now – and equally the hundred million projection in additional sales – was that done in accordance with your more –

MR. WARREN: So, again –

MR. SMITH: – professional practice.

MR. WARREN: So, that again was a – not back-of-the-envelope, but it was – it was taking the models that were – we had at the time and just changing one factor. So, that's kinda how I would reflect that – is that we were – we up – we had the best models that we had at the time and we just opened up the Nova Scotia delivery point as a market.

MR. SMITH: Now it's – there's been some evidence through your earlier testimony about the fuel cost but I understood the fuel cost was part of the Isolated Island project, not the – your CPW, I should say, not the – necessarily the Integrated System. Am I wrong?

MR. WARREN: So in Isolated, that's predominantly – it's much more of a fuel-based scenario versus the infeed. It does have a little bit of scenario – bit of fuel in the diesel but that is common between the two scenarios.

THE COMMISSIONER: And I think you said earlier as well if there was a delay in the schedule then you'd also have to get – have to add the additional fuel you would use in the extra winter –

MR. WARREN: That's right.

THE COMMISSIONER: – to the other part. So there is – fuel is taking part, both diesel and as well to the delayed schedule.

MR. WARREN: It would impact the infeed depending on the schedule, yes.

MR. SMITH: And again, if I look at 03993, is there – it has a DC – sorry, a delayed COD in that particular one?

MR. WARREN: No – yes, it does.

MR. SMITH: Yes. It does. In the centre block delayed two point –

MR. WARREN: Yeah, that's – it's one –

MR. SMITH: One point –

MR. WARREN: – 169, I believe.

MR. SMITH: I can't read it in the red.

MR. WARREN: Which is the summation of the 206 – 206 on line 16 next to the orange 5,942. And the reduction of the 37 which because of the delay, there's a change in the capital profile – capital spend profile reduces that by 37. So the net was 169.

MR. SMITH: And it looks like the delay that's referred to – or maybe you can tell me, what was the delay in relation to determining the fuel cost? What was – what delay is being adjusted? Because I heard from July to December, but because of December was the beginning of the winter, they'd have to cover the entire winter.

MR. WARREN: So what the 206 reflects is eight months from July to March 1.

MR. SMITH: Okay.

MR. WARREN: So it includes January and February.

MR. SMITH: And my understanding is at that time, it was believed the project would conclude or be finished by December of 2017, is that correct?

MR. WARREN: I'm not sure; like, on the construction schedule at that point. What we

were working on in this instance was what we were putting in the financing agreements.

MR. SMITH: The reason I say that is, my understanding is that the original DG3 estimate was July but by the time they got to financial close they were really looking at December of '17 at that time. Is that your understanding as well?

MR. WARREN: I can't recall –

MR. SMITH: You don't know.

MR. WARREN: – sorry.

MR. SMITH: Because I'm wondering, if that's the case why we'd be at oil until March when you would have presumably the LIL to bring in recall power or possibly even the Maritime Link to bring in power from the – because that's a lot cheaper power than burning oil.

MR. WARREN: Yeah. The – and I think I mentioned to Mr. Collins that this was part of probably discussions during the financing arrangements, so it's important to note the decoupling from project schedule versus what's in scheduling for financing arrangements with Canada, and as part of that discussion would be with Jim's team. Jim would take the lead on those discussions and interact with the project team on it, but I understand your point that you potentially could. Very likely, we were probably trying to do a worst-case scenario and brought it out to March 1. But again, as I mentioned to Mr. Collins this morning, I don't have that great of a recollection of that time period.

MR. SMITH: Okay. So – but if I – what I've suggested is correct and that is the plan, the project would be complete by the end of 2017, taking the oil all the way to March would be, really, worst-case scenario, but more likely would be a possible use of recall power or power on the (inaudible) market from – through the Maritime Link. These two options were available to Hydro in order to supply power to the Island, is that not correct?

MR. WARREN: Yes, especially at that time –

THE COMMISSIONER: I think –

MR. WARREN: – they'll look at whatever –

THE COMMISSIONER: – I think we're really getting in beyond what this man can actually testify about because he's already told Mr. Collins that he doesn't know the basis of that anyway.

MR. WARREN: Yeah.

THE COMMISSIONER: So it's –

MR. SMITH: He does know that basis that it's – with respect, Mr. Commissioner, he does know the basis that the oil aspect is a projection from July until March.

THE COMMISSIONER: We don't know if the July or the March date or the February or the December date or whatever date was first power or complete power; I guess we'll have to find that out from someone else.

MR. WARREN: Yup.

MR. SMITH: I – well – I agree with you, Mr. Commissioner.

So the final point I think I wanted to mention is have – or has your team updated the benefits – that's the Exhibit 2 – I think it's 00254, I think – yes, 00254.

THE COMMISSIONER: Tab 1.

MR. WARREN: I don't recall, like –

MR. SMITH: Has that been updated?

MR. WARREN: – I don't recall. We may have done some, again, one-off analysis on the Interconnected. But I know once we passed through DG3, I don't recall updating the Isolated scenario.

MR. SMITH: And have you seen, in terms of the Interconnected total benefits – nominal versus present value – have you seen any information that would seriously impair the document here that says it would be around \$60 billion [sp. million] in benefits in nominal value.

MR. WARREN: So in nominal, looking at the lines – I think Mr. Collins walked me through it

– CPW, depending on – the CPW probably would have, if you’re just looking at Interconnected –

MR. SMITH: Yeah.

MR. WARREN: – probably would have increased, which would have – to reflect the new rates, and dividends would have increased as well. But – and the induced would have – the cost, the CPW would have been a 30 per cent, as I mentioned to Mr. Collins.

Income, as Mr. Collins pointed out, would have increased just on the Interconnected. Treasury, likewise. Export sales, compared to the day, I’d have to rerun it, but it probably is in that realm – probably a little bit better because of the preferred market in Nova Scotia or the newer market in Nova Scotia. Water rentals I don’t think would have changed because that was based on the 4.9 terawatt hours being outputted. And carbon, I don’t think it would be that significant of a change other than, obviously, as Mr. Commissioner rightfully pointed out, was the change in the schedule would have – could potentially have impacted carbon costs a little bit more in the Interconnected as well.

MR. SMITH: So in summary would you say that the quote, unquote total benefits have changed all that much?

MR. WARREN: It’s really hard to do without doing the Isolated, and I wouldn’t –

MR. SMITH: That’s (inaudible) –

MR. WARREN: – I wouldn’t opine upon the – that change.

MR. SMITH: That’s my point, you have to have done the other side of the equation in order to make those –

MR. WARREN: Yup.

MR. SMITH: – comments, is that correct?

MR. WARREN: That’s a important part of it, yes.

MR. SMITH: Okay. Thank you, that’s all the questions I have.

THE COMMISSIONER: Thank you.

Former Provincial Government Officials ’03-’15?

MR. T. WILLIAMS: No questions, Mr. Commissioner.

THE COMMISSIONER: Thank you.

Julia Mullaley, Charles Bown.

MR. FITZGERALD: Oh, no thank you, Commissioner.

THE COMMISSIONER: Thank you.

Consumer Advocate.

MR. PEDDIGREW: Good afternoon, Mr. Warren.

MR. WARREN: Hi.

MR. PEDDIGREW: A long day for you I’m sure. I won’t be too long.

Just following up on a question Mr. Smith just asked, and I’m gonna leave a lot of – I guess this exhibit, 00254, perhaps to Mr. Collins, as he’s much more familiar with it than I am. But I think one thing, if this analysis was done today, certainly the Isolated Island Option, knowing what we know now about the price of fuel, would certainly bring down the cost of the Isolated Island Option. Would you agree with that?

MR. WARREN: Yes, in the (inaudible) I would agree to that, too.

MR. PEDDIGREW: Just like to bring you to Exhibit P-00127, which we looked at earlier.

MR. WARREN: What was the reference, sorry?

THE COMMISSIONER: 03127?

MR. PEDDIGREW: P-00127.

THE COMMISSIONER: Okay, that’ll be on your screen.

MR. PEDDIGREW: And page 19, please.

Actually, I may have the page number wrong. Actually, there was a page, and I believe it was on this, and if we can't find it I may be able to –

MR. WARREN: Yeah.

MR. PEDDIGREW: – get my question out without actually referring to the document, but there was a page in one of the presentations that set out the rates and set out the figure of 22.9 cents.

MR. WARREN: It's the next page –

MR. PEDDIGREW: Next page –

MR. WARREN: – I believe.

MR. PEDDIGREW: – okay, thank you.

And so this document is dated June 2017, am I correct?

MR. WARREN: Yes.

MR. PEDDIGREW: Okay.

And so the type of analysis that was carried out on page 20 of this document – when did this type of analysis, as to what the rate would be based on the cost, start to be carried out by the – by your team with Nalcor? Was this something that was done each year, each time there was a cost update, was it not done until between, say, DG3 and 2017?

MR. WARREN: So generally we would, for the cost updates, we would generally – that's one of the things that we look at is the impact on rates. So we would run an updated rates analysis based on cost updates, or if we're trying to inform rate mitigation –

MR. PEDDIGREW: When you say cost updates do you mean an approved AFE or –?

MR. WARREN: Well I guess it's generally around those changes in the AFE. So yeah. So, at that.

MR. PEDDIGREW: Okay. So I guess my question is, in say, you know, 2013, 2014, 2015,

2016, was this type of analysis carried out in each of those years?

MR. WARREN: I would think so, yes.

MR. PEDDIGREW: Can you say for certain – with certainty?

MR. WARREN: With certainty? At this moment, no. I would – I would be like 90 plus per cent that I would be – that rates analysis would have been done.

MR. PEDDIGREW: And what was the purpose of the rates analysis?

MR. WARREN: Again, it's just trying to see the impact to ratepayers and see how – where the rates were going.

MR. PEDDIGREW: When you say see the rates, do you mean for Nalcor's own purposes or to inform government or to inform the public?

MR. WARREN: I think it was probably a combination of all of that for – whatever discussions that we were having, if we were having rate-mitigation discussions to help inform how the rates are looking on an unmitigated basis and for that to be – for us to be mindful of the impact.

MR. PEDDIGREW: And was the information – assuming it was done, assuming that the rate analysis was done – was that always released to the public each time it was done by – carried out by Nalcor?

MR. WARREN: And that's where I – I'm not sure. I don't recall whether or not in 2013 or '14 whether or not – I vaguely recall that there would probably be some discussion of impact on rates but –

MR. PEDDIGREW: You don't know if, say, between 2013 and 2016 whether Nalcor's calculations on what the rates would be would have been released to the public or not.

MR. WARREN: Without having gone through my emails, probably no, not at this point, sorry.

MR. PEDDIGREW: Okay.

I'd just like to bring you to Exhibit P-03986 please, one we looked at earlier today.

THE COMMISSIONER: That would be at tab 3.

MR. PEDDIGREW: So this is some discussions and email from Mr. O'Rielly to Rob Henderson, yourself and Kevin Goulding and I'd just like to read it to you. So the email starts: "The dates I quoted are from memory and are anchored to MHI 1. 250 MWh each year. Kevin should validate.

"For the waterfall..." – and I'm assuming this is referring to the waterfall presentation we were looking at earlier – "...could we just assume the only change is in MF in-service? The value associated with this would simply be the delta in fuel between the isolated DG3 and the infeed DG3 fuel cost from July 2017 to March 1 2018."

So I think this is some of what we were just –

MR. WARREN: Yes.

MR. PEDDIGREW: – discussing with –

MR. WARREN: Yeah.

MR. PEDDIGREW: – Mr. Smith. So then we move down to, "This approach would eliminate all impacts from different load to changes in fuel price." It goes on there.

And then if we go down to the next page. That's an email from Rob Henderson to Terry O'Rielly, Kevin Goulding. You weren't on this email, but you were brought in on the next one.

MR. WARREN: Yeah.

MR. PEDDIGREW: And so Mr. Henderson says: "I didn't realize we had the draw down happening that early. I thought we had it 6 months prior to the infeed. I suggest we be consistent with DG3 to prevent there being another impact to explain." Do you know what Mr. Henderson meant by that?

MR. WARREN: No, I think he was – no, I don't.

MR. PEDDIGREW: Any – no idea at all what he would be talking about in terms of?

MR. WARREN: So on the six month prior to the infeed, I have no – that's more – I think that's more of a discussion between he and Kevin Goulding, and I wouldn't hazard a guess on the – 'cause what we're doing here is, I think, is the production profile that Kevin Goulding was taking care of. So it seems like this was discussion between he and Kevin. Likely with the – to be consistent with DG3 is to – was probably Rob looking for a simplifying assumption to focus that the delay COD that Terry was working on, it was just related to the timing of the going from July 2017 to March 1, 2018.

MR. PEDDIGREW: March 1. Okay.

And then – so March 1, 2018, was that the date that was envisioned that you'd have access to a certain amount of the Muskrat Falls power? Enough to shut down Holyrood, was that the assumption at that time?

MR. WARREN: That was my – that's my understanding, having gone through the emails, that that would be the point in time that – again, probably Jim Meaney, working with the team. 'Cause it was more on dates – date certain and some other dates in the financing agreements. That's what it appears. And when I look at the calculations of the emails in the past week, that's what it – that's the dates that I see.

MR. PEDDIGREW: Okay.

THE COMMISSIONER: Again, if I can, I think it's pretty much explained in – on page 3 in the bottom email, which talks about the fact that the plan was to have only one unit at Muskrat on as of March the 1st, meaning there would only be 206 megawatts. That wouldn't be enough to replace the 467 megawatts, so maybe that's the explanation.

MR. PEDDIGREW: Right. And does this shed any light on that, Mr. Warren?

MR. WARREN: Yeah. I'm not familiar enough with it to – and, again, this is more of a production profile discussion –

MR. PEDDIGREW: (Inaudible.)

MR. WARREN: – that I wouldn't have that much of a background.

MR. PEDDIGREW: So, I guess my understanding is – or the understanding of Nalcor at this time was that as of March 1st, you'd have access to enough power that you would not – we'd no longer need Holyrood, but going beyond that, you'd still need to purchase power which would add cost – sorry, purchase fuel.

MR. WARREN: Could we just scroll up with the timing because I – six – okay.

MR. SIMMONS: Commissioner, the whole email chain is in the book that Mr. Warren has, and with these – we're kind of going in reverse order with them.

MR. PEDDIGREW: Sure.

MR. SIMMONS: So I don't know if it would make more sense to –

MR. PEDDIGREW: Yeah.

MR. SIMMONS: – at least look through from the beginning and maybe if we're trying to piece together what this means that might be –

THE COMMISSIONER: Yeah. Your point –

MR. SIMMONS: – a more productive way to do it.

THE COMMISSIONER: Your point is well taken, because if you look at page 12, it even is more indicative of what's going on.

MR. PEDDIGREW: Okay. So, if perhaps we could go to page 12.

You can let me know when you've had a chance to review, Mr. Warren.

MR. WARREN: Okay.

Okay.

MR. PEDDIGREW: Okay, so I guess my question or my point is that at this point, you

were trying to quantify the cost of the fuel you would have to purchase to keep Holyrood active for a period of time, and your understanding at this point – Nalcor's understanding – was that you would need to do that until March 1. After that you would no longer need to purchase fuel.

Had you been aware of schedule risks of still needing to purchase fuel after March 1? That would certainly have added to –

MR. WARREN: No, and I think that's where I'm struggling is – like, I see some emails here, but I don't know if there was discussion or anything like that that – on the schedule side, we see one unit here, I think, in an email – in a different email. That's why – I was trying to struggle with the dates. I see that there's three units or – I'm very unclear.

MR. PEDDIGREW: You don't recall.

MR. WARREN: I don't recall –

MR. PEDDIGREW: Okay.

MR. WARREN: – like, the timing of units with regards to this, and I know, at that time – again, this is earlier October. This is when the bids were actually coming in – that this was likely something that Terry was working as a one-off, ad hoc analysis, and he was probably working fairly closely with Jim Meaney to, kind of, come up with what is – based on where the project finance agreements were going, what is the best underpinning assumption. And where they landed was the March 1.

MR. PEDDIGREW: Okay.

So, I'll move on from that, I guess, to a slightly related topic, and just following up on some of Mr. Smith's questions about the high-level nature of some of this analysis.

And, so, we're approaching the point of no return – it's been referred to, financial close – in this time frame. There seems to be some sense on the project team of doing a comparison to see if DG3 CPW had – numbers had changed. You know, people seem to be going their own things, ad hoc or high level, whatever you want to call it.

Was there any direction from Nalcor executive or anybody else to do a detailed analysis of whether the DG3 numbers had changed –

MR. WARREN: I don't –

MR. PEDDIGREW: – prior to financial close?

MR. WARREN: – recall any – that type of direction.

MR. PEDDIGREW: Why were you and your team carrying out these ad hoc or high-level types of analysis? What was prompting you to do that?

MR. WARREN: So, on the \$300-million financing savings, my recollection of that, that that was actually – the genesis of that was more so for me, and it was just trying to – I – as we discussed with Mr. Collins earlier, we could see that the quality of the guarantee, the credit – the quality of the credit substitution, and we were seeing that the margins were coming down. We saw that the base rates were coming down, and I wanted to see –

MR. PEDDIGREW: How much.

MR. WARREN: – how much –

MR. PEDDIGREW: Okay.

MR. WARREN: – the hard efforts of the financing team, what that actually translated in.

MR. PEDDIGREW: We're looking at that, looking at the impact of having to continue to purchase fuel for a period of time. If we just go for a moment to document 03992, which we've looked at already.

THE COMMISSIONER: Tab 9.

MR. PEDDIGREW: Okay.

So, you're analyzing impact of exports to ratepayers, the other thing that Mr. Collins brought you through in earlier evidence. So I guess what my question is: How did this arise? Were you asked to do this? Did you – did your team come up with the idea of doing this type of analysis by yourselves?

MR. WARREN: I don't have a specific recollection of what sparked all of this waterfall analysis. I think it's part and parcel of talking about the financing costs. We also wanted to kind of – very likely, the guys started looking at other impacts. The delayed COD, as you just – as we went through just now, that email chain actually started in early October, so it's likely that there was some discussion, not that I can recall, but there was some discussion around that at that point. So that was probably just – again, in a quick evolving period, that probably was added into the analysis.

MR. PEDDIGREW: But you don't recall if you were instructed or whether you decided on your own to carry out the analysis?

MR. WARREN: I don't.

MR. PEDDIGREW: Okay.

And so, I mean even if it is high level, we do see a decreasing gap between the DG3 preference, from 2.4 down to, you know, possibly 1.5 – I think 2.1, in the document 03993. Was there any sense that, you know, the gap is getting smaller, maybe we should do a more fulsome – you know, something more so than just a high-level analysis to make sure that there's still that?

MR. WARREN: I don't recall having any of that type of discussion or thought process. Again, at this point, we were just trying to provide, again, a rough estimate of where some things could've changed. We were focused on –

MR. PEDDIGREW: The (inaudible).

MR. WARREN: – doing the financial close.

MR. PEDDIGREW: Okay.

And just bear with me there, Mr. Warren. A number of questions I had have been asked, so I don't wanna duplicate. Just quickly, P-02206, this is a slide we've – slide 21.

THE COMMISSIONER: Tab 21.

MR. PEDDIGREW: Page 29. Thank you, Commissioner.

This is a page we've looked at a number of times throughout the Inquiry. Page 29, please, Madam Clerk?

And so, I guess based on the fact that it was a high-level type of analysis that was done with respect to whether the DG3 numbers had changed, I think there was some question put to you whether this slide was, in fact, accurate, and think you were reluctant to say whether it is or whether it isn't, you know, without knowing what type of analysis was done, whether any analysis was done with respect to the Isolated Island.

I mean, would you agree that, at a minimum, this slide is based on incomplete information?

MR. WARREN: So, again, as I mentioned to Mr. Collins, I don't have the benefit of my recollection of discussion of those \$200-million items.

MR. PEDDIGREW: I realize that.

MR. WARREN: So –

MR. PEDDIGREW: You have said that the analysis that you did carry out on things that would factor into whether the DG3 numbers changed, you did – you have already said that that analysis you did was just high level, was not complete. So, if that analysis had been carried out at more than a higher level and was more complete, it could certainly factor in, to this slide, couldn't it?

MR. WARREN: So, I guess a part of it is those waterfalls were work in progress –

MR. PEDDIGREW: Right. And if they weren't, what could (inaudible) –?

MR. WARREN: I could've reviewed it with the teams and decided that it was – there was – it was too unknown. Or it could've been discussed. I don't have a recollection of it and –

MR. PEDDIGREW: You're not prepared to say that, based on the fact that the analysis – the waterfall analysis was not complete, doesn't necessarily mean that the information in here is not complete. You're not prepared to go that far?

MR. WARREN: No. Because, again, what I am struggling with is my recollection at that point in time on, on the discussion of those items.

MR. PEDDIGREW: Okay. Last area of questioning, just the option of – that Mr. Smith raised of importing power, would that be from Nova Scotia?

MR. WARREN: So, it could be through either – through New York, so down through the LIL depending on if the LIL is in service, or through the Maritime Link.

MR. PEDDIGREW: Right. And there is no firm agreements in place or no – you don't know what the cost of that would be?

MR. WARREN: No. Would – very likely be spot market or could be an actual contractual –

MR. PEDDIGREW: Contractual.

MR. WARREN: – contractual arrangement.

MR. PEDDIGREW: And, my understanding – and maybe this is something that will come further in the Inquiry, but my understanding is: Even if power is brought in through the Maritime Link and brought as far as the Avalon, there is an issue with it getting from the Avalon into the greater St. John's area. Do you know anything about that?

MR. WARREN: So, that is definitely an electrical engineering question –

MR. PEDDIGREW: Okay.

MR. WARREN: – that is – what I can say is I think – in actual reality, is that we have imported some power in the interim over the last year or so in my –

MR. PEDDIGREW: But you don't know where that power was used.

MR. WARREN: No, I'm not sure.

MR. PEDDIGREW: Okay. All right.

Okay. Those are my questions, thank you.

MR. WARREN: Thank you.

THE COMMISSIONER: Thank you.

All right, Former Nalcor Board Members?

MS. G. BEST: No questions, Mr. Commissioner.

THE COMMISSIONER: Okay. Nalcor Energy?

MR. SIMMONS: Thank you, Commissioner.

Mr. Warren, you have the benefit of it being 5:12, so that means I have to try and cut things a little bit short.

MR. WARREN: Okay.

MR. SIMMONS: I do want to bring you, though, to an issue that you were questioned at some length by Mr. Hiscock, concerning this \$1 billion in extra financing costs that he was talking about, which I don't quite understand.

So can we go to exhibit P-01561, please?

THE COMMISSIONER: Sixty-one, okay. That will be on your screen.

MR. SIMMONS: It'll be on the screen and I'm going to go to page 10. This was Oversight Committee report in September 30, 2017, and we'll bring up page 10 now in a moment. So there's a chart here and I'm just going to this because I'm just gonna use the last line in this chart which has the June 2017 project capital cost of \$10.12 billion and it lists the financing and other costs at \$2.6 billion for a total of \$12.72 billion. So I think that's kind of – that's the current numbers that we're working with.

MR. WARREN: Yes.

MR. SIMMONS: And the \$2.6 billion in Financing and Other Costs, that's listed there, are those nominal values or are those a present value?

MR. WARREN: They are "as spent" dollars, so they're – they are not more nominal.

MR. SIMMONS: What does that mean "as spent"?

MR. WARREN: So it's – my understanding is that it's a dollar that was incurred in 2012 is – in 2012, so –

MR. SIMMONS: Mm-hmm.

MR. WARREN: – it's similar to a nominal concept –

MR. SIMMONS: Yes.

MR. WARREN: – versus it's not – that's not at a point in time, it's – as you spend the dollars –

MR. SIMMONS: Mm-hmm.

MR. WARREN: – it goes into this account or this –

MR. SIMMONS: Okay. So –

MR. WARREN: – (inaudible).

MR. SIMMONS: – and I – this is as much – trying to understand as anything else. So the actual financing costs for the project will be incurred over 30, 35 years, right, many of the costs. There will be payments made on debt, in the future –

MR. WARREN: Yes.

MR. SIMMONS: – for the – in order to raise the money for these capital costs to build the project. So on what basis are those future payments of interest figured into this \$2.6 billion of financing and other costs?

MR. WARREN: So the future debt costs are not associated in this –

MR. SIMMONS: Okay.

MR. WARREN: – number.

MR. SIMMONS: All right, I see, okay. All right then.

THE COMMISSIONER: Can I just –

MR. SIMMONS: So I'm not going –

THE COMMISSIONER: – ask one question just as a result of that, just – you sparked my interest now.

So are we actually paying financing costs right now?

MR. WARREN: Yes, yeah. So what this 2.6 reflects, as Mr. Hiscock mentioned, the largest component is IDC, which is interest during construction.

THE COMMISSIONER: Mm-hmm.

MR. WARREN: So whereas we got \$5 billion of guaranteed debt in December 2013, every six months we have to pay interest on those loans –

THE COMMISSIONER: Right, but you haven't –

MR. WARREN: – and that's going into this as spent.

THE COMMISSIONER: Right, but just – because I heard this from someone else – but you also didn't spend the \$5 billion in December of 2013. You got financing for \$5 billion in 2013.

MR. WARREN: That's right.

THE COMMISSIONER: You didn't spend \$5 billion.

MR. WARREN: No –

THE COMMISSIONER: So what happened to the \$5 billion?

MR. WARREN: So the \$5 billion went into an account –

THE COMMISSIONER: Mm-hmm.

MR. WARREN: – or multiple accounts.

THE COMMISSIONER: Earned interest or –

MR. WARREN: Earns interest, reduces –

THE COMMISSIONER: So is that incorporated in this \$2.6 billion –?

MR. WARREN: Yes.

THE COMMISSIONER: Okay –

MR. WARREN: Yeah.

THE COMMISSIONER: – so this is a net number.

MR. WARREN: Yes.

THE COMMISSIONER: Okay.

Thank you, Mr. (inaudible).

MR. SIMMONS: Yeah, thank you.

So am I correct then that this is – I'll try this example: I'm going to build a house and it's gonna take me 10 months to build the house, and I'm going to be – I'm going to set my mortgage at the outset and I'm gonna draw the money on the mortgage as the house gets built, but I'm not paying off the mortgage until the house is finished and I start making payments.

MR. WARREN: Yes.

MR. SIMMONS: So is that like here and – but while I'm building the house and drawing the money, I'm accumulating an obligation to pay the interest on the money that I've drawn, and I don't actually start paying it until the house is finished and the regular monthly payments are set up.

MR. WARREN: So it's a little bit of both, actually.

MR. SIMMONS: Yeah.

MR. WARREN: So in AFUDC –

MR. SIMMONS: Yeah.

MR. WARREN: – you're not making any payments –

MR. SIMMONS: Mm-hmm.

MR. WARREN: – you're not reducing that, so it's just accumulating –

MR. SIMMONS: Right.

MR. WARREN: – accumulating – that’s on the LIL side.

MR. SIMMONS: Right.

MR. WARREN: On – as I just went through with Mr. Commissioner, we actually are paying the interest costs, so that flows into the debt drawdown, the equity calls and all that.

MR. SIMMONS: Right, okay.

So we know that part of the project is structured on the cost-of-service basis, which is the LIL, and the other part of the project, being the Muskrat Falls generation plant and the Labrador Transmission Assets. The transmission line from Churchill Falls to Muskrat Falls is being paid for through this Power Purchase Agreement, not on a cost-of-service basis, and that the cost-of-service basis does use this AFUDC concept that we talked about.

MR. WARREN: Yes.

MR. SIMMONS: And the AFUDC that – which is the, sort of, the cost – the price you have to pay to use the money you’re borrowing while you’re building the plant.

MR. WARREN: Yes, other than it’s not borrowing, it’s technically investing from –

MR. SIMMONS: Investing, okay.

MR. WARREN: – the shareholder.

MR. SIMMONS: And that’s included in the \$2.6 billion we see here for financing cost, right?

MR. WARREN: Yes.

MR. SIMMONS: Right. Okay.

Now, if we were to say – and this is purely hypothetical because this is not what has happened and not what was done.

MR. WARREN: Yeah.

MR. SIMMONS: Purely hypothetically: If we were to do the Muskrat Falls plant and the LTA – the other transmission line – on a cost-of-

service basis, then there would have been more AFUDC to put in this number and this 2.6 number would’ve been bigger.

MR. WARREN: Yes.

MR. SIMMONS: Right?

MR. WARREN: Yeah. That –

MR. SIMMONS: But – but – the amount that we have to pay under the Power Purchase Agreement, would that have been less because you no longer have to pay off –

MR. WARREN: Yes –

MR. SIMMONS: – in the future?

MR. WARREN: – it’s being recovered through amortization –

MR. SIMMONS: Right.

MR. WARREN: – of your asset.

MR. SIMMONS: Right. So it’s not as simple as saying: If we had done it all on cost of service there’d be financing costs of an extra whatever the number is. By doing it that way there’d also be a saving on the other side in that the power purchase costs would be lower.

MR. WARREN: Yes, your depreciation –

MR. SIMMONS: Right.

MR. WARREN: – would’ve increased and your return would’ve decreased.

MR. SIMMONS: Yeah. So if we wanted to do a true comparison of would it have been better to do it all on a cost-of-service basis – aside from the fact that rates would’ve been higher at the beginning and trailed off more – if we wanted to do a total cost comparison you’d have to model both scenarios and take into account both the increase in AFUDC upfront, if you went cost of service versus the savings from the reduced power purchase cost.

MR. WARREN: Yes.

MR. SIMMONS: Yeah. Okay.

So I'm not off track there?

MR. WARREN: No.

MR. SIMMONS: Okay.

MR. WARREN: But that would be a hypothetical exercise.

MR. SIMMONS: Yes.

MR. WARREN: Yeah.

MR. SIMMONS: Okay. Because, of course, the arrangements are made and it would –

MR. WARREN: Yeah.

MR. SIMMONS: – take a complete change to the financing arrangements in order to do anything different.

MR. WARREN: Yeah, yeah.

MR. SIMMONS: Okay, all right.

Now, I just want to go through with you for a moment, sort of, how you came to be involved in giving some of the evidence that you've given here. And is it correct that we started with requests from Commission counsel to look into how the \$300 million of financing cost savings had been calculated and how the \$100 million of extra export revenue benefit had been calculated, and that those requests went to you and you had to kind of dig into the records and talk to people to try to answer those questions?

MR. WARREN: Correct.

MR. SIMMONS: Right. And in the exhibits – there's two exhibits where both those questions were reported on back to Commission counsel.

MR. WARREN: Yes.

MR. SIMMONS: We haven't turned them up, but they're there.

MR. WARREN: Yeah.

MR. SIMMONS: And within the last week or two, then this waterfall chart came to light in the documents. And prior to that, had you had any

recollection of there having been anything done to look at how the CPW might have changed at financial close?

MR. WARREN: No. Like, again, if you ask me what I was doing in October –

MR. SIMMONS: Mmm.

MR. WARREN: – it would be the financing package and kind of the \$300 million.

MR. SIMMONS: Right.

MR. WARREN: The \$100 million of NPV, EAA savings –

MR. SIMMONS: Mm-hmm.

MR. WARREN: – I think that was done earlier and I would remember that one because that was a part of the EAA discussions and I remember being prompted on that.

MR. SIMMONS: Mm-hmm.

So the evidence you've been able to give us about the waterfall chart and what's in it and what happened to it, that's based on your review of the emails and the documents that we've seen in the last week or two in preparing for your evidence to be given here today.

MR. WARREN: Yeah, in the last week.

MR. SIMMONS: In the last week.

MR. WARREN: Yeah.

MR. SIMMONS: Right, okay.

So let's go – oh, the other question I had was – the net benefits document that we looked at – we don't need to go there, it's Exhibit P-00254. That net – the creation of that, that was an entirely separate exercise from the CPW work that was done at sanction at DG3?

MR. WARREN: Yes.

MR. SIMMONS: Right, for a different purpose?

MR. WARREN: For a different purpose, it was – again, looking at the files, started development in October –

MR. SIMMONS: October of ...?

MR. WARREN: 2012, sorry.

MR. SIMMONS: 2012, yes.

MR. WARREN: And I think it was more Ed looking kind of to see – look at the bigger picture –

MR. SIMMONS: Mm-hmm.

MR. WARREN: – as I guess he was moving towards –

MR. SIMMONS: Right, so –

MR. WARREN: – developing sanction.

MR. SIMMONS: So, then, whereas the CPW analysis done at sanction was a comparison of the two options for supplying power to the province to determine which would have – be predicted to have the lowest rates for the buyers of electricity, the net benefits analysis was a more holistic view to see what the total benefits to the province might be from undertaking the Muskrat Falls Project.

MR. WARREN: Yes, compared to –

MR. SIMMONS: Compared to –

MR. WARREN: – selecting the second alternative.

MR. SIMMONS: – (inaudible) other alternative.

MR. WARREN: Yeah.

MR. SIMMONS: Okay, all right.

Now, can we bring up, please, Exhibit P-03986, which Mr. Peddigrew just brought you to.

THE COMMISSIONER: Okay, that would be at tab 3.

MR. SIMMONS: So this is a 16-page chain of email messages. I'm not going to walk you through it all, but if you go to the very beginning, this – these are messages that were exchanged, I think, over two days, October 5 and 6, 2013. Correct?

MR. WARREN: Yes.

MR. SIMMONS: Yeah, okay.

MR. WARREN: It appears so.

MR. SIMMONS: And there is within this – it seems to be a fair bit of discussion of how to tackle analyzing what the effect of a delay in the COD date would be on fuel costs burned at Holyrood. That seems to be the discussion that's under way here.

Now the Commissioner, I think, pointed out page 12. So I'll bring you there for a moment. Can we scroll up, please, to the bottom of page 11, which is the start of this message. Okay.

So this is a message from Terry O'Rielly to Kevin Goulding. So who's Terry O'Rielly?

MR. WARREN: Terry O'Rielly was my manager of economic analysis. At that time, I believe he was working closely in the financial models –

MR. SIMMONS: Okay.

MR. WARREN: – driving the financial models.

MR. SIMMONS: Now you've spoken of your team, you've spoken of the guys who do this work. Was Mr. O'Rielly one of the guys who actually does hands-on the financial modelling work for you?

MR. WARREN: Yes.

MR. SIMMONS: And who else?

MR. WARREN: Would have been also Gord Alexander, I've referenced as well –

MR. SIMMONS: Yes.

MR. WARREN: – so Gord was driving the L-I-L models –

MR. SIMMONS: Mm-hmm.

MR. WARREN: – the LIL models –

MR. SIMMONS: Yeah.

MR. WARREN: – and Tom Garner from PwC would have been driving the MFLTA models. And each one of them would have teams. So in Barnes Road, we had our meeting room down on the first floor – just a little bit of context –

MR. SIMMONS: Mmm.

MR. WARREN: – and upstairs, they actually had their own modelling corral. So c was in one side, the other team working the LIL models were in the other side. So there was probably a team of probably three or four from each side, so about eight –

MR. SIMMONS: Right.

MR. WARREN: – ten modelling –

MR. SIMMONS: So you're the manager of the team, so I take it then that you don't do the hands-on work of this modelling. It's the team, the people you've identified who do the hands-on work and report it up.

MR. WARREN: Yes –

MR. SIMMONS: Yeah.

MR. WARREN: – yeah. And I also had Craig Hippert who was working with me as my manager of investment analysis, who would be downstairs with me and also upstairs – not supervising but working with the team.

MR. SIMMONS: Okay.

And if we can go back to the next page, page 12 again for a moment, please. Just bear with me a moment.

So you've already been brought to the paragraph there where Mr. O'Reilly writes to Kevin Goulding, and Kevin Goulding was – what was his role?

MR. WARREN: My understanding was he's the gentleman that worked on the production

profile, so how the Island resources were used in order to meet the demand forecast.

MR. SIMMONS: So he was on the Hydro technical side of – involved in management of the power system –

MR. WARREN: Yes.

MR. SIMMONS: – for want of a better word.

MR. WARREN: Yeah.

MR. SIMMONS: Right. So he says: "This forecast was requested to reflect the delay COD for LCP." So, first of all, can you shed any light on who requested this?

MR. WARREN: I don't remember.

MR. SIMMONS: And then it says: "As such it will underpin the waterfall chart that will be presented to Ed next Wednesday." Do you know who Ed is?

MR. WARREN: That would be Mr. Martin –

MR. SIMMONS: Okay.

MR. WARREN: – the CEO.

MR. SIMMONS: Okay. So do you – can you tell us anything more other than what we see here about what Mr. Martin's involvement was and whether this information was presented to him on the next Wednesday, which would've been some point early in October?

MR. WARREN: So when I went through this last – during the last week, as you noted –

MR. SIMMONS: Mmm.

MR. WARREN: – I looked, and we actually had a meeting with Ed on the 10th, which was the Thursday.

MR. SIMMONS: Tenth of October?

MR. WARREN: Tenth of October.

MR. SIMMONS: 2013?

MR. WARREN: It was an LCP financing update.

MR. SIMMONS: Mm-hmm.

MR. WARREN: But I don't see any distribution of it and I don't recall whether or not we reviewed or discussed that at that point.

MR. SIMMONS: Okay. And, as we go through this chain, I'm going to – there's discussion about how to do this work. And I'm gonna bring you up to page 8, which I think is the first point where we see you having any – putting your two-cents worth in here. So this the same day, October 5, 2013. Scroll down a little bit, please. And you write: "Hi all,

"Recall this will be presented to Ed et al as a high level illustrative view -- with large caveats that true build up would be required." So does this reflect the kind of evidence you've given earlier about the way you looked at the type of work that was being done here?

MR. WARREN: Absolutely. Again, I wanted to make sure that people understood and appreciated that we're looking for rough estimates, and that the message would be relayed that large – that a true buildup would be required. So just to help focus the –

MR. SIMMONS: Right.

MR. WARREN: – the team –

MR. SIMMONS: Yeah.

MR. WARREN: – that were working on this.

MR. SIMMONS: Okay. And if we go next, please, to P-03992.

THE COMMISSIONER: Tab 9.

MR. WARREN: Nine.

MR. SIMMONS: You've been brought to this email previously by a couple counsel. This is now the 26th of October, 2013. It's noted as being a Saturday and the time on this email is 10:31 p.m. And again, it's from Mr. O'Reilly and it's to you, copied to Gordon Alexander.

And at this point, do – if I understand correctly, you were working out of the Barnes Road house at that point, the team –

MR. WARREN: Yes.

MR. SIMMONS: – was, the –

MR. WARREN: Yeah.

MR. SIMMONS: – financing team, and that the pressure was on to finish the financing proposal that was being prepared, that was going to go out to the banks to solicit financing information, or proposals for actual financing of the project.

MR. WARREN: It was, yeah, trying to – after having gotten their proposals –

MR. SIMMONS: Yes.

MR. WARREN: – we were actually leaning or starting to make the decision on which lead arranger we were going –

MR. SIMMONS: Okay.

MR. WARREN: – to –

MR. SIMMONS: And –

MR. WARREN: – tap and proceed with the financing.

MR. SIMMONS: And you've told us already that the next day, on Sunday, there was a planned meeting at 3 o'clock, including Mr. Martin and, you know, the invitations included Mr. Bown and a number of other people.

MR. WARREN: Yes.

MR. SIMMONS: So, when did the – and the purpose of that meeting was what, on Sunday?

MR. WARREN: It was to go through the RFF –

MR. SIMMONS: Right. Okay, and –

MR. WARREN: – each recommendation.

MR. SIMMONS: – in relation to this message that we see here at P-03992, when did the RFF

proposal actually go out the door, from the team on Barnes Road –

MR. WARREN: Yeah, so it was –

MR. SIMMONS: – up to the people who were going to be talking about it at the meeting the next day?

MR. WARREN: Three hours later, it was 1:30 a.m.

MR. SIMMONS: Okay.

So fair to say that at this point, your focus was on getting your main deliverable out the door.

MR. WARREN: Absolutely.

MR. SIMMONS: Okay.

Now we don't have it in evidence, but there is an email chain that we brought to the attention of Commission counsel, so it can be produced if necessary, I think, which follows on this in which you actually reply to this message, back to Mr. O'Rielly.

MR. WARREN: Right, 1:32 –

MR. SIMMONS: Well, 1:32 –

MR. WARREN: – a.m.

MR. SIMMONS: – in the morning.

MR. WARREN: Yeah.

MR. SIMMONS: And you say what?

MR. WARREN: I'd say, one is exports to taxpayer –

MR. SIMMONS: Yeah.

MR. WARREN: – and we're gonna need to get back together, hopefully before 3 p.m.

MR. SIMMONS: Okay. And did you make any arrangements then, to get together with Mr. O'Rielly and –

MR. WARREN: Yeah, so the next –

MR. SIMMONS: – and Mr. –

MR. WARREN: – morning –

MR. SIMMONS: – Alexander? Yup.

MR. WARREN: – I let the guys sleep –

MR. SIMMONS: Yeah.

MR. WARREN: – that night, but the next morning we – Gord was right up at it early –

MR. SIMMONS: Mmm.

MR. WARREN: – and we coordinated to meet at around 1:30.

MR. SIMMONS: Okay.

Now is this things you remember or is this something you've reconstructed from –

MR. WARREN: This is –

MR. SIMMONS: – looking at –

MR. WARREN: – reconstructed –

MR. SIMMONS: – the chain of emails?

MR. WARREN: – based on the email.

MR. SIMMONS: Right, so you know then, based on the email, that you'd gotten together at 1:30 on Sunday, the next day, and that then there was the meeting with Mr. Martin and others at 3 –

MR. WARREN: Yes.

MR. SIMMONS: – and do you – and decide from the RFF proposal, do you have any recollection at all of how or whether this information in this waterfall chart got dealt with at that meeting?

MR. WARREN: No.

MR. SIMMONS: No. Okay.

I'm going to bring you to one other document, and that's at P-00993 [sp. P-03993], which is the next one.

THE COMMISSIONER: That'll be on your screen.

MR. SIMMONS: And it will come up, yes. I'm not sure if it's in your book, but I know it's going to come up on the screen. It's a spreadsheet –

THE COMMISSIONER: (Inaudible.)

MR. SIMMONS: – and Mr. Peddigrew, I think, brought you to this also. Now this file – this excel file is named Waterfall DG3 versus RFF V3 – version 3.

MR. WARREN: Yes.

MR. SIMMONS: Now, do you – are you aware of when this version of the waterfall chart work was done, from reviewing the file?

MR. WARREN: So my understanding looking at the save date and all that –

MR. SIMMONS: Mm-hmm.

MR. WARREN: – it was that Sunday –

MR. SIMMONS: Mm-hmm.

MR. WARREN: – or Monday. It's either Sunday night or Monday morning, early Monday –

MR. SIMMONS: So –

MR. WARREN: – Monday morning.

MR. SIMMONS: – in either event, the metadata, I guess –

MR. WARREN: Yup.

MR. SIMMONS: – the properties information for this file is leading you to believe that this work was done following the meeting at 3 o'clock on Sunday.

MR. WARREN: Yes.

MR. SIMMONS: Okay.

And you're relying on the review of the documents in the files rather than a specific recollection in order to say that.

MR. WARREN: That's correct.

MR. SIMMONS: And I'll bring you, please, finally, to Exhibit P-02206, another one you were shown earlier. So we're moving through chronologically now.

This is now November 6, 2013, and we can skip ahead to page 29, which is where you were brought before in this one. This is the one where it says facilities capital costs are increased by about \$300 million, financing costs decreased by about \$300 million and excess sales are increased by about \$100 million.

So let's go back to the email, back to page 1 of this document please.

So this – the last email in the chain here is from Mr. Martin to someone called Bev Tucker, saying "Please print 4 copies" You're not copied. Now when I go down through – you can take your time and look at this – but when I go down through the chain of emails, I don't see you included anywhere here.

MR. WARREN: No.

No. As I indicated to Mr. Collins, I don't recall working through this – the deck. I probably was, again, off doing the financing.

MR. SIMMONS: Okay. So do you know whether you had any involvement in the preparation of this presentation deck?

MR. WARREN: I don't recall.

MR. SIMMONS: Okay. You don't recall whether you did or didn't, or don't recall being involved? This is like –

MR. WARREN: Sorry.

MR. SIMMONS: – (inaudible) months.

MR. WARREN: I don't recall being involved.

MR. SIMMONS: Okay.

MR. WARREN: Yeah.

MR. SIMMONS: Yup.

Okay. Thank you, Mr. Warren. That's all my questions.

THE COMMISSIONER: Redirect.

MR. WARREN: Thank you.

MR. COLLINS: No questions.

THE COMMISSIONER: Okay. I just have one question. I'd like to go back to Exhibit P-03991, if we could please.

If you bring up – just bring up the spreadsheet, if you would.

That's not the right one; I'm looking for version 3, the one that was just referred to by – what was your – what was the number on that?

MR. SIMMONS: 03993.

THE COMMISSIONER: 03993, sorry. Excuse me. 03993.

Okay. Did you say that this spreadsheet, according to the metadata that you checked, was prepared on Sunday or Monday?

MR. WARREN: After Sunday 3 p.m. meeting, yes.

THE COMMISSIONER: And that was in October, was it not?

MR. WARREN: Yes, October 27 or 28.

THE COMMISSIONER: Okay.

Okay.

Good. Thank you very much. That's just what I thought I heard you say.

All right. Thank you, Mr. Warren, for bearing with us.

We're adjourned 'til tomorrow. I'd like to start tomorrow morning at 9 o'clock. We're going to be starting with Paul Harrington. My

understanding from counsel who will be examining Mr. Harrington is that she expects to be the whole day with him tomorrow, so that will give us the whole day on Thursday because we won't be sitting on Friday this week. So we'll start at 9 tomorrow just to be safe.

All right.

CLERK: All rise.

This Commission of Inquiry is concluded for the day.