COMMISSION OF INQUIRY
RESPECTING THE MUSKRAT FALLS PROJECT

Transcript | Phase 2 Volume 4

Commissioner: Honourable Justice Richard LeBlanc

Wednesday 20 February 2019

CLERK (Mulrooney): This Commission of Inquiry is now open.

The Honourable Justice Richard LeBlanc presiding as Commissioner.

Please be seated.

THE COMMISSIONER: All right.

Good morning. All right.

Cross-examination of Mr. Shaffer.

Mr. Shaffer, you remain affirmed at this time.

MR. SHAFFER: Yes, Sir.

THE COMMISSIONER: Province of Newfoundland and Labrador?

MR. RALPH: No question, Commissioner.

THE COMMISSIONER: Okay. Nalcor Energy?

MR. SIMMONS: Good morning, Mr. Shaffer.

MR. SHAFFER: Good morning.

MR. SIMMONS: We've met before, Phase 1, Dan Simmons –

MR. SHAFFER: Yeah.

MR. SIMMONS: – for Nalcor Energy.

You've had a long day in a bit, going through a long report, so I'm not going to track through the whole report, again. But I'm going to try and go as much as I can, in sequential order, just to ask some follow-up questions about a number of things from your report. And I know it's a bad sign, but I'm going to start at the first paragraph.

So, Madam Clerk, that is – you have the exhibit up, I think, P-01677, and we're going to go to page 4.

It's just in the background, and there's a statement there – it's just a general statement introducing the project, in lines 5 and 6, where it states that: The Newfoundland and Labrador crown corporation, which owns Muskrat Falls Corporation – that Nalcor is the Crown Corporation that owns Muskrat Falls Corporation with Emera Inc.

Now, you probably know that Emera owns the Maritime Link and has an investment in the Labrador-Island Link portion of the project, which is the transmission line portion, but that Emera has no ownership interest in Muskrat Falls Corporation.

Did you understand that? Is that correct?

MR. SHAFFER: Well, I do now, okay.

MR. SIMMONS: Okay. All right.

So, that's a fairly fundamental background fact, which I'm going to suggest is misstated at the very outset of the report here. And I know on the way through your evidence yesterday and the day before, you've identified a number of other errata – numbers that were incorrect in various parts of the report and a number of things that you've said could be corrected in the report.

So, is there in an intention to file either a corrected report or some soft of errata, so that the public record will have a correct version of this report available?

MR. SHAFFER: There was not, Mr. Simmons. I mean, the corrections that I testified to is in the course of our ongoing quality control and review in this 40 or 50,000 word report.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: And my plan was to do it as we go along through testimony.

MR. SIMMONS: Okay. All right.

'Cause, of course, the report, itself, is on the public record on the Commission's website at this point, so there's no intention to file a document, which has those correction, which would go on the public record as well.

MR. SHAFFER: It was not.

MR. SIMMONS: Okay. All right.

Now, you've just mentioned quality control.

Maybe you can give me a description of what sort of quality control processes were used in the preparation of the report to ensure that it is as accurate as possible.

MR. SHAFFER: Well, the report was drafted by myself and with the assistance of two other folks within Grant Thornton's St. John's office. And in the process of going through it, we were tracing all these – tracing the report to the source documents that are referenced in the report. And it was read quite a number of times by the three of us.

At that point, once we finalized it, it was then read by a gentleman by the name of Tim Fahey, who is the managing partner of the St. John's office, and then by Jennifer Fiddian-Green, who's the national head of forensics for the Canadian firm.

MR. SIMMONS: Okay. All right. Thank you.

Page 5 of the report, please.

So this is the scope of work section, and on the bottom of that page, it quotes from some of the terms of reference of the Commission setting out what the mandate was of the investigation here. And in a number of the terms of reference, the term best practice is used.

You know, we had some discussion in Phase 1 about what our best practices are, and I'm interested now in your comment as to how you approached determining what is a best practice. Because my understanding is, although it's a term that's commonly used, there's probably no single place or source we go to that gives us a single definition of what best practices are in construction and in project management.

Am I correct about that?

MR. SHAFFER: Well, I mean, Nalcor themselves – Internal Audit group define the best practices by the PMBOK publication, for starters, so that was used. In addition, we had, of course, the Merrow publication, who's a founder and the CEO of IPA. And those – those were the really two primary sources that we were looking at. So that's really what we depended on –

MR. SIMMONS: Okay.

MR. SHAFFER: – for the most part.

MR. SIMMONS: So, if something is addressed in the PMBOK – that's project management PMBOK publication – or it had been addressed by Mr. Merrow in his book, which you bought and referenced, you treated those things as being a best practice.

What about for aspects that may not have been directly addressed in those publications? How did you approach determining what best practices might be?

MR. SHAFFER: Well, I – can you refer me in the report, where that would be that we didn't – that we quote it as a best practice? Where necessarily in the report are you referring to?

MR. SIMMONS: Okay.

Well, maybe what we'll do on the way through: if we encounter those, I'll raise them with you –

MR. SHAFFER: Fair enough.

MR. SIMMONS: – at the time. But from what I understand, you've given me two sources, and generally there's no other – you don't have any other information to give about what kind of standard you set up or used for determining what's the best practice other than those two sources?

MR. SHAFFER: Well, I mean, I guess it depends what we're talking about.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: I mean there's no doubt PMBOK was one of them. There's no doubt we've used Merrow.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: There's also no doubt we looked at what the experts – Nalcor's own experts said about things.

MR. SIMMONS: Okay. So you'd take into account information from Westney, for example, or other consultants that were used by Nalcor?

MR. SHAFFER: Sure.

MR. SIMMONS: Okay.

On page 7 of the report, it's the section dealing with your Reliance on Third Parties and Nalcor's Internal Audit Function. You've identified that you had retained Block Consulting, Williams Engineering and Miller Thomson and the different areas that you had them look at. And we have their reports here. And I understand we will hear from Mr. Gilliland from Williams, but we're not going to hear, I don't think, from Mr. Hennessey from Block who prepared his reports or from Mr. Atcheson from Miller Thomson.

So, in the case of Mr. Hennessey and Mr. Atcheson, can you give me some description – as best you can – of what – of his credentials, of what his background is and why you selected him as being someone who is appropriate to provide the reports that you've included in the submission?

MR. SHAFFER: Sure. Mr. Hennessey basically made the cut, R.W. Block. We went through a process of vetting, looking for firms that could help us in terms of matters in this case where we had to rely on outside expertise. And we had probably five or six responses that I sent out to National Association of certified construction auditors. I got five or six responses back, and in particular I was looking for folk that hydro experience and megaproject experience.

And through the course of that vetting process, Mr. Hennessey's firm, along with him, had hydro and megaproject experience. And as a result, we decided to use him.

MR. SIMMONS: Okay.

And what about for Williams Engineering? How did you – what process did you go to to retain Williams Engineering to provide the advice that they gave, and what qualifications did they have that you considered suited them for doing this work?

MR. SHAFFER: Basically, the same process. So, the Canadian firm reached out to an internal network. And I believe they got four or five responses of engineering firms that basically were not conflicted as a result of this project. And, in the end, they were chosen because of their experience in northern climates.

MR. SIMMONS: Okay. What can you tell me about Williams Engineering's experience and work on hydroelectric projects?

MR. SHAFFER: I know it's not a lot, if any.

MR. SIMMONS: If any. Do you know if they have any experience on hydroelectric projects?

MR. SHAFFER: They have – I believe they have some in renewable energy. I don't think it's hydro, though, necessarily.

MR. SIMMONS: Okay.

What about in what we consider megaprojects? What's their experience in megaprojects?

MR. SHAFFER: I believe they have large structural – structure experience on variety types of structures. I don't know if it's what I would consider a megaproject, anything over a billion dollars, as defined.

MR. SIMMONS: Hmm.

What do you mean by large structural experience? What is that?

MR. SHAFFER: From what I read from Mr. Gilliland's résumé, it was really more along the lines of, like, office buildings and things like that, from what I recall. I would have to look at his résumé again to refresh my memory, though.

MR. SIMMONS: Mm-hmm. Okay.

I did look at the Williams Engineering website just recently and the section dealing their sample projects, and it did appear that the vast majority are buildings.

MR. SHAFFER: Yeah.

MR. SIMMONS: And there doesn't seem to be anything there that's equivalent in any way to the Muskrat Falls Project. Am I correct on that?

MR. SHAFFER: I think you are correct on that, yeah.

MR. SIMMONS: Okay.

Well, given that, why did you select them to provide opinions on project management for the – for this project, given that they did not, as a company, appear to have experience in that area?

MR. SHAFFER: Again, it was more along the lines of the northern climate –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – experience that they had, that we were told. And, in addition, I think the questions that we were asking them was more along the lines of things like the contingency and mitigation, when do you reduce the contingency? Is it when the mitigation occurs or is it when it's planned to occur? Things like that.

MR. SIMMONS: Okay.

Did you also have them look at things such as the use of the ICS –

MR. SHAFFER: Correct.

MR. SIMMONS: – structure and planning of the project and execution of the project –

MR. SHAFFER: Correct.

MR. SIMMONS: – as well? You did?

MR. SHAFFER: Correct.

MR. SIMMONS: And you were comfortable having them do that even though they did not have any direct megaproject experience of that sort?

MR. SHAFFER: Well, again, it's because of the northern climate experience. We would think they would have experience with ICS, given that they are involved in cold-weather projects and –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – so that's why we asked them to look at that.

MR. SIMMONS: Do you know if anyone in their organization has actually had involvement with the use of an ICS-type structure in the north?

MR. SHAFFER: I don't know. I know he had a staff working with him on this, so I'm not sure.

MR. SIMMONS: Okay.

We have a report from Mr. Gilliland from Williams Engineering. Of course, we will be able to examine him on that.

Did you receive a draft of that report for review before it was finalized?

MR. SHAFFER: I did.

MR. SIMMONS: Okay.

Did you provide comment on the draft before it was finalized?

MR. SHAFFER: We did. It was just thoughts that we had and we were asking him questions on some of the things that were in the report.

MR. SIMMONS: Okay.

And you were satisfied with the final version of the report when it was provided to you and the one that's been filed as an exhibit here with the Commission, were you?

MR. SHAFFER: Well, satisfied in the extent that it was the work product that he got in the end – that we got in the end.

MR. SIMMONS: Well, what does that mean, satisfied to the extent that it was work product you got?

MR. SHAFFER: It means, for example, and let me give you a concrete example, I mean, one of the things that he said was the boreholes –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – being on every tower foundation. Again, I testified on direct intuitively that I'm not sure if that made sense to me.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: But, I mean, it's his report at this point.

MR. SIMMONS: Right. So I take it then that you received the report, had had that in it, you didn't go back and question that or request any particular follow-up on that point with Mr. Gilliland?

MR. SHAFFER: No, no.

MR. SIMMONS: Okay, okay.

And you've evidence already regarding your reliance on Nalcor's Internal Audit function. So we don't need to return to that.

In the financial close section, if we can go to page 11, please, of the report. So, this is the table that I understand from your evidence that you prepared in order to determine at what point contingency would be considered exhausted following the DG3 approval of the project, and the receipt of bids or proposals for the various work packages. Okay.

Now, for – in this particular table, the first column there is: Work Package. The second one is: Date RFP Reponses Received. So, I take it that this is the date of the receipt of an initial response to the RFP, not the date of contract award for the particular work package.

MR. SHAFFER: Correct.

MR. SIMMONS: Correct?

MR. SHAFFER: Correct.

MR. SIMMONS: Okay. And from your understanding of the contracting process and the procurement process that was used, am I correct that for many of the significant work packages there was a period of review, consultation, even negotiation that followed the receipt of RFP responses prior to the award of contracts?

MR. SHAFFER: Correct.

MR. SIMMONS: Okay. And that that process could result in changes from what had been proposed by the successful bidder to what actually found its way into the work scope, the pricing, method of compensation in the final contract?

MR. SHAFFER: Absolutely.

MR. SIMMONS: Okay.

So, in this table, while the values that are listed here for the initial RFP responses may be an indication of what the final contract award would be, it's not until you get to the final contract award that you know what the actual award costs of that contract is.

MR. SHAFFER: True, but this table is an excerpt from what the project management team provided us.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: And it was in a section that they wrote that indicated that they knew – because of what they're calling market conditions and labour risk – that these bids were coming in higher than what the DG3 estimate was.

MR. SIMMONS: Right.

MR. SHAFFER: And so, my point here of doing this was to compile the data –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – and to really say at what point the contingency would've been exhausted, and then at what point at financial close – what was the difference to make up the $600 million. And the whole point of all this is to really come to the conclusion that at least the project management team knew potentially there was a problem here.

MR. SIMMONS: Right.

So there were indications that the contingency would be used up based on the dates of submission and the amounts that were being submitted in these RFPs. That's the point of the table you've got there.

MR. SHAFFER: There's that and also Jason Kean told us in an interview that when the

Astaldi contract was entered into, in essence, the contingency was used up.

MR. SIMMONS: Right.

And the Astaldi contract, I believe, was entered into in November of 2013.

MR. SHAFFER: Yes.

MR. SIMMONS: Which was – at the time, essentially, of financial close.

MR. SHAFFER: Yes.

MR. SIMMONS: Right.

Do you know if – in the arrangements that were made for financial close – if they were based on the $6.2-billion DG3 estimate figure or if they were – or if the commercial arrangements were based on some different figure at that time?

MR. SHAFFER: I thought it was based on somewhere near $6.5 billion.

MR. SIMMONS: $6.5 billion.

MR. SHAFFER: That's my recollection.

MR. SIMMONS: Okay. What's your – and why do understand that? What's your source of that information?

MR. SHAFFER: I don't recall, but I just remember either I read it or remember hearing something about it.

MR. SIMMONS: Okay.

So $6.5 billion would've been about $300 million higher than the $6.2-billion figure that was used at DG3 in December of 2012. Okay.

And so, if I look at your report, page 12, this is really in, I guess, the first four lines there. I gather that what you're saying there is that by commercial close, by your calculation, the amount committed at that point for contracts for which bids had been received was about $230 million more than the $6.2-billion figure that had been used at DG3.

You can have a look. But have I – am I reading that correctly?

MR. SHAFFER: Can you repeat that for me, please?

MR. SIMMONS: Okay.

So if you – let's just read down the first couple of sentences.

"As indicated above, prior to financial close, bids were received from contractors whom ultimately were hired which collectively, exceeded the DG3 budget by approximately $600 million, a twenty five percent (25%) overage. The amount of this overage exceeded the DG3 tactical contingency amount ($368 million) by over $230 million."

MR. SHAFFER: Correct.

MR. SIMMONS: Now, the DG3 contingency amount of $368 million, we know, was included within the $6.2-billion budget, correct?

MR. SHAFFER: Correct, correct.

MR. SIMMONS: So the amount by which – the amount of overage at commercial close was $230 million, by your calculation –

MR. SHAFFER: Correct.

MR. SIMMONS: – over the DG3 budget.

MR. SHAFFER: Based on the table on page 11, yeah.

MR. SIMMONS: Right. And I understand that you are telling me, now, that you're aware that the numbers used at financial close was in fact $6.5 billion, which would've been $300 million over the DG2 budget number.

MR. SHAFFER: DG3 budget number.

MR. SIMMONS: Right. Okay.

MR. SHAFFER: Right.

MR. SIMMONS: In fact a bit more than the $230 million you've identified at line 4.

MR. SHAFFER: Correct.

MR. SIMMONS: Right. Okay.

So at page 14, of this section where you are reviewing the federal loan guarantee terms, you have a section there dealing with the Cost Overrun Escrow Account, or COREA. And I believe you've explained that to be a provision in the federal loan guarantee financial terms that generally says that on an annual basis, if the forecast cost of the project exceeds a certain amount then there has to be funds deposited into an account to be used to pay the forecast cost overrun. And those funds are deposited – have to come from the – from the government, in this case, as an equity contribution.

MR. SHAFFER: Yes.

MR. SIMMONS: In general terms?

MR. SHAFFER: Generally, yes.

MR. SIMMONS: Now, in Phase 1, Mr. Brockway gave us a report and provided some opinion in which he described and interpreted the provisions of the federal loan guarantee arrangements. In preparing this portion of your report, did you consult with Mr. Brockway for his views?

MR. SHAFFER: No. But I did read his testimony regarding this provision.

MR. SIMMONS: Okay. Now, he's – Mr. Brockway is with Grant Thornton.

MR. SHAFFER: Yes.

MR. SIMMONS: Right. But you did not consult him or involve him in assessing the operation of the COREA account when you prepared this report –

MR. SHAFFER: No.

MR. SIMMONS: – this part of the report?

MR. SHAFFER: No. I read his testimony.

MR. SIMMONS: Okay.

And, of course, the COREA provision is part of a legal agreement and did you obtain any legal opinions concerning the operation of that account based on the actual terminology in the legal agreements?

MR. SHAFFER: No.

MR. SIMMONS: Okay.

The next part of this section, beginning on page 15, deals with the Independent Engineer Report, and let's go to page 16. And at the top of page 16, you've identified that you reviewed three versions of the independent engineer report. There was a draft report dated November 15, 2013, and then an interim final report dated November 29, 2013, and a final report dated December 30, 2013. And at lines 8 and 9 on that page, when you're talking about the first of those, which is the draft from November 15, you say: "It is unclear to us as to the reason why a report prepared by a manager was released to Nalcor and Canada without Mr. Argirov's review being complete."

So I wondered if you could expand on that a bit and tell us what if anything more you know about the circumstances of the release of that report and what Mr. Argirov's position was on whether it should or shouldn't have been released in the form that it was?

MR. SHAFFER: Well, the reason why I said that is just in my office we just wouldn't do that: release a draft report to a client without having someone senior looking at it, typically a partner or managing director. That's number one. Number two –

MR. SIMMONS: And why would you do that? Why would you not do that? What would be the concern about releasing a report before someone like a managing director or a more senior person had a chance to review it?

MR. SHAFFER: Just in terms of our quality control, our internal quality control.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: Those are rules that Grant Thornton has.

MR. SIMMONS: Right, and quality control is something that's meant to ensure the accuracy of the report and the reliability of the information in it, correct?

MR. SHAFFER: One of the – that's one of the things –

MR. SIMMONS: Okay.

MR. SHAFFER: – in addition to just getting the message across in a clear manner –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – is another reason.

MR. SIMMONS: Okay. All right, continue.

MR. SHAFFER: I understand, subsequent to this report, I was told that Mr. Argirov did not analyze the contingency that was analyzed by the manager, as I understand it, who – and I was also told that the manager is a older gentleman –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – and that, again, Mr. Argirov did not have anything to do with the contingency. And that I did not know until this weekend.

MR. SIMMONS: Okay.

Was there any significance to the fact that the manager was an older gentleman?

MR. SHAFFER: Well, I mean, he has experience.

MR. SIMMONS: (Inaudible.)

MR. SHAFFER: To me, then, he would have experience.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: A manager in my office –

MR. SIMMONS: Mmm.

MR. SHAFFER: – is typically a younger person.

MR. SIMMONS: Right, okay.

So then the report that went out on November 29, 2013 – was it your understanding that that was one that had gone through the proper review process and did have Mr. Argirov's input?

MR. SHAFFER: It did have Mr. Argirov's input, correct –

MR. SIMMONS: Yes.

MR. SHAFFER: – that's my understanding.

MR. SIMMONS: And in the table that you've included on this page – if we scroll down a little bit, please, Madam Clerk. Okay, there. You've gone through this before, and on this point about the typical contingency in the column headed interim final, November 29, 2013, on example one, it's noted there that: "The IE typically sees contingency allowances in the range of 6 percent to 10 percent at this state of project development."

And I think you've said that – you've determined that the contingency used for tactical contingency on the Muskrat Falls Project was in the range of 7 per cent, which would have fallen within this range given by the independent engineer in this report?

MR. SHAFFER: Correct.

MR. SIMMONS: Correct?

MR. SHAFFER: Yep.

MR. SIMMONS: All right.

Now, do you know when financial close was?

MR. SHAFFER: November 29, I believe, 2013.

MR. SIMMONS: So, as of financial close, the information available to those who had received the independent engineer's report was that the contingency was within an acceptable range as determined by the independent engineer?

MR. SHAFFER: It's within the range, absolutely.

MR. SIMMONS: Yes. Okay.

And then you've gone on here, in the next column, to point out that in the final December 30 report, the numbers were changed somewhat from 8 per cent – to a range of 8 per cent to 12 per cent, and that now is at the bottom end – is a little bit higher than the seven that was used on the Muskrat Falls Project?

MR. SHAFFER: Correct.

MR. SIMMONS: Right.

But of course that report is now after financial close.

MR. SHAFFER: Absolutely.

MR. SIMMONS: So that information would not have been available to any of the parties who participated in the financial close on the 29th of November, 2013?

MR. SHAFFER: True, but again, when you take into account the information on page 11 in the table, obviously the – Nalcor knew there was a problem with the contingency at that point.

MR. SIMMONS: And why do you say that?

MR. SHAFFER: Well, because it was based on the way the bids were coming in. The –

MR. SIMMONS: Well, no, my question concerned the information from the independent engineer. There was no – as of financial close, the parties to the financial close would have seen that the contingency being used on the project was consistent with what the independent engineer was recommending or recognizing?

MR. SHAFFER: I agree to – I agree –

MR. SIMMONS: (Inaudible.)

MR. SHAFFER: – with that, yeah.

MR. SIMMONS: Right, and that the change in that view expressed in the December 30, 2013 report came after financial close, so it would not have been available for anyone to take into account at the time of financial close?

MR. SHAFFER: Correct.

MR. SIMMONS: Yeah, okay.

Section 2 of the report begins on page 18. It's headed: Costs – Estimate and Actual. And only one point I wanted to ask you about here, and that concerns AFEs. There's – much of this section of the report deals with comparing information about assessment of the forecast cost of the project to the time at which AFEs, which are authorizations for expenditure, are entered into.

So, first, can you tell me what you understand to be – about what the use and purpose of the authorization of expenditure document is on this project?

MR. SHAFFER: My understanding is the board of directors of Nalcor authorizing the use of the funds for the additional increase in dollars.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: That budget amount – that new authorization for expenditure for the project.

MR. SIMMONS: And you're aware that there were project documents that set out the – a fairly clear process for how funds were authorized for use, what the different levels were that – of authority for people in the hierarchy of the company for the commitment of those funds, and where decisions have to be made for contracts of a particular value and that whole process.

MR. SHAFFER: (Inaudible.)

MR. SIMMONS: It was well set out.

MR. SHAFFER: I would assume it exists.

MR. SIMMONS: Yeah.

MR. SHAFFER: I would assume it exists. I've seen a lot of documents here. I'm sure I've seen that at some point along the way.

MR. SIMMONS: Okay. All right then. Well, we can assume that there's a process laid out like that in the project documentation.

Now, my question to you was going to be: Is the AFE at the pinnacle of that process, where what the AFE, authorization for expenditure, does is grants an approval for commitment of funds to the project – for commitments to expend funds?

MR. SHAFFER: That's my understanding.

MR. SIMMONS: All right.

And that's a bit different than a process that attempts to predict what future requirements for funds may be.

MR. SHAFFER: It's a different process, yes.

MR. SIMMONS: Right.

So, the authorization for expenditure document, as I understand it – we'll hear from other witnesses on this who will be able to explain it more fully – is that an authorization for expenditure is required before the project can enter into binding commitments to actually spend the money.

MR. SHAFFER: I agree with that.

MR. SIMMONS: Okay.

And so, the timing of an AFE would be driven by when the need arises to make expenditure commitments, as opposed to the assessment of future needs that might arise.

MR. SHAFFER: Was that a question?

MR. SIMMONS: Do you agree with that? Does that sound right to you?

MR. SHAFFER: It sounds right.

MR. SIMMONS: Okay.

Okay, let's go to the review of the CH0007 contract, which was the construction of intake, powerhouse, spillway and transition dams, and begins on page 27 of your report. I'm going to go to section 3.4, which is – begins on page 28. That deals with the RFP, which is request for proposals and bidding.

So my understanding of the procurement process in a very general sense was that the work on the project was divided into different packages of work, and this particular package dealt with the concrete structures of the powerhouse, the transition dam and the spillway. And all that was included within one package of work.

The process of getting to where a contract is awarded includes design, carried out by SNC, the development of a contracting strategy document, then a process of identifying qualified bidders and approving bidders who would be invited to make proposals. Then there's a request-for-proposal package which goes to those pre-qualified bidders. They make responses as to how they propose to do the work, how they propose to charge for it, how they propose to get paid.

And there is a bid – a prescribed bid-evaluation procedure, which is then used to evaluate those proposals. And there may be a process of clarifications with bidders, negotiations with bidders, ultimately leading to a document, which is a bid evaluation and award recommendation, which goes to the senior authorities in the organization and then an award is made and a contract is entered into.

Does that fit with your conception –

MR. SHAFFER: Sounds –

MR. SIMMONS: – of the way it all works?

MR. SHAFFER: – my understanding, yes.

MR. SIMMONS: Okay.

MR. SHAFFER: Sounds like that.

MR. SIMMONS: All right.

So, then on page 28, in line 8, you have a table there that lists the four bidders who were approved to submit proposals, and what's described is the total evaluated price in billions for their proposals, and the total labour hours.

MR. SHAFFER: Which does not include the LMax hours.

MR. SIMMONS: Right.

MR. SHAFFER: That's excluding LMax.

MR. SIMMONS: Okay.

So on the top of page 29, there's a quote there from Mr. Merrow, Edward Merrow, in his book titled *Industrial Megaproject: Concept Strategies and Practices for Success*, and you write that he says the following as it relates to taking a very low bid, and then the quote is there about what happens to that.

Now, I don't see discussion here or analysis as to whether any of the four bids that were received were considered to be a very low bid.

MR. SHAFFER: In the Merrow publication –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – I believe, if I recall correctly, that what he considers a low bid would be $100 million apart; $100 million difference.

MR. SIMMONS: Okay.

Now, you have a fair bit of experience, I think, in construction claims and you've seen a lot – you've probably seen a lot of bidding disputes and so on in your career?

MR. SHAFFER: I have.

MR. SIMMONS: Okay.

It's not uncommon, when a contractor's bid on a contract, for there to be a fairly wide range of prices bid?

MR. SHAFFER: It depends on the scope of work.

MR. SIMMONS: Right.

And sometimes there will be a price that's particularly high or particularly low compared to the rest of the prices. Have you seen that?

MR. SHAFFER: I've seen that.

MR. SIMMONS: Right.

Now, in my experience, that's the case where you would consider a low bid to be suspect because it is much lower than the other group of bids, and that's where there would be a concern that it requires some closer evaluation.

Does that sound correct to you?

MR. SHAFFER: It does.

MR. SIMMONS: Okay.

Now, if we look at the bids here, which are listed in – on page 28, lines 8 to 9. We have four total evaluated prices there, and we'll accept these as presented in the table. Two were higher: IKC at $2.05 billion and Aecon Joint Venture at $2.03 billion, and two were lower: Astaldi at $1.14 billion and Salini Joint Venture at $1.16 billion.

Now, how would you apply Merrow's concept of how you treat very low bids, to those, considering that they are two similar bids that are higher and two similar bids that are lower?

What do you do about it?

MR. SHAFFER: In terms of what? What do you mean? What do I do about it?

MR. SIMMONS: The – you've included a quote from Merrow here and you're talking about very low bids, so I'm assuming, although it doesn't say so in your report, that that is in some way being critical of the selection of the Astaldi bid because it is lower than the IKC bid and the Aecon bids.

Is that what's intended by the report?

MR. SHAFFER: Well, I mean based on the – and I noted on lines 14 through 18 – the – on page 28, that when you look at the bid scoring –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – it was gonna be weighted toward the low bidder. No matter what was gonna happen here the low bid was gonna win, and that's the whole point that, you know, when you read Merrow, they were taking the low bidder and the question is: Was there a problem in doing that?

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: When you look at these bids you have to scratch your head a little bit and say: Gee, they're kind of far apart, what's going on?

MR. SIMMONS: Well, two of them, the two low – two of the low bids were practically the same.

MR. SHAFFER: True.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: True.

MR. SIMMONS: I mean, I'm not following because anytime you request bids there are going to be – often there are some that are high and some that are low. Now, the general expectation of the public is going to be, that all things being equal, you take the low bid, rather than choose to take the higher one.

MR. SHAFFER: Well, I equate it this way, I mean, if I'm – if I need plumbing work done and I call in four plumbers and two of them are bidding at $2,000 and two of them are bidding at $20,000, I'm going to sit and then scratch my head and ask myself: What's going on? What's wrong?

MR. SIMMONS: Right. And you'll do more than ask yourself, you'll also ask the plumbers.

MR. SHAFFER: Absolutely.

MR. SIMMONS: Right? And you'll explore whether they have considered what needs to be done on the job and whether they have the technical expertise and are willing to make the commitment to do it for that price. Correct?

MR. SHAFFER: Agreed.

MR. SIMMONS: Right.

Now, on this project, you've pointed out that the weighting is heavily on commercial value and – but it – the other weighting is there are – is other consideration of scoring on other areas including execution of the work and the technical score was a part of this evaluation.

Do you know how Astaldi scored on the technical score compared to the other three bidders?

MR. SHAFFER: I believe about the same, from what I recall, maybe even a little higher. I just –

MR. SIMMONS: Okay.

MR. SHAFFER: – that's what I recall.

MR. SIMMONS: Right.

And I think you're correct in recalling that Astaldi had a high technical score, as well as a high score for their commercial presentation and the price that they presented.

MR. SHAFFER: Which was based on a lowest price.

MR. SIMMONS: Hmm, right.

So, all things being equal, I'm having trouble seeing why, if the technical score that Astaldi had was as good or better than the other bidders and their price was lower, that somehow the Astaldi bid should be rejected and one of the other higher bids accepted.

Is that what you're saying should have happened here?

MR. SHAFFER: From my perspective, when you have a major piece of work like this –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – which is basically the whole project really when you think about it –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – if you have bids that are coming in like this –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – and there's such a difference in hours –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – I think – and two-thirds of the scoring is going to be based on low bid and you look at what Merrow says about it, yeah, I potentially think they should have thought about it a little bit more, absolutely.

MR. SIMMONS: Okay.

So what did you do to explore how much they thought about it?

MR. SHAFFER: I don't understand. What do you mean?

MR. SIMMONS: Okay, well, you're saying potentially they, I assume those –

MR. SHAFFER: Nalcor.

MR. SIMMONS: – people involved in the evaluation of these bids should have thought about it more.

What did you do in your investigation to assess how much they considered these concerns you're raising?

MR. SHAFFER: We reviewed the bid evaluation recommendation –

MR. SIMMONS: Mm-hmm

MR. SHAFFER: – for award summary.

MR. SIMMONS: Mm-hmm. Okay.

So, if the Astaldi bid had not been accepted, I'm presuming you would have the same concern about the Salini bid –

MR. SHAFFER: I would.

MR. SIMMONS: – because it was for the same price and for fewer labour hours than Astaldi –

MR. SHAFFER: I would.

MR. SIMMONS: – anticipated using.

MR. SHAFFER: I would.

MR. SIMMONS: So I presume then if neither of those were accepted, it would've been either the IKC bid or the Aecon bid that would have to have been accepted for the project.

MR. SHAFFER: I would assume so.

MR. SIMMONS: Right. And based on the numbers that they have bid, right from the start, the contract price would have been $800 or $900 million higher than it was for Astaldi.

MR. SHAFFER: In all likelihood, yes.

MR. SIMMONS: In all likelihood, okay.

Now, if we look at page 29, and you have a table there in section 3.5 which tracks the contract award amount and tracks the amount by which the Astaldi performance – the payment for Astaldi's performance grew. So the contract was awarded at $1.024 billion, correct? That's what I'm reading correctly.

MR. SHAFFER: Yes.

MR. SIMMONS: And after contract award, the supplemental agreement you've described increased the contract price by $884 million. And there were approved change orders of 18 and unallocated budget of 33, so let's assume that goes on the contract.

So, post-contract award, the value of the Astaldi contract, the amount paid to them grew by about $900 million.

MR. SHAFFER: Correct.

MR. SIMMONS: Is that correct?

MR. SHAFFER: Correct.

MR. SIMMONS: Right. Which is really the same as if the contract had been awarded to IKC or Aecon in the first place.

MR. SHAFFER: I guess ignoring any schedule slippage, yes.

MR. SIMMONS: Mm-hmm. Okay.

MR. SHAFFER: In terms of dollars.

MR. SIMMONS: And we know, of course, which ever contract it was – contractor received the contract, if it had been, say, Aecon at $2.03 billion, there's still potential for growth in that contract price due to things like change orders and the more typical things that happen on a construction project.

MR. SHAFFER: Potentially, sure.

MR. SIMMONS: Yeah. So the cost – had that been accepted, the cost could in fact have been higher than $2.03 billion.

MR. SHAFFER: Potentially.

MR. SIMMONS: Mm-hmm. Okay.

So, in effect, having accepted the Astaldi bid, and, as you say, putting the schedule impact, having accepted the Astaldi bid even with the changes that have been made to the compensation that was given to Astaldi, the cost for that package of work is really no higher than it would have been had one of the higher bids been accepted in the first place.

MR. SHAFFER: If you ignore schedule slippage –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – and (inaudible) effects as a result –

MR. SIMMONS: Yeah.

MR. SHAFFER: – of that, sure.

MR. SIMMONS: Okay.

Section 3.6.2, which is on page 34, please?

This is the section headed Productivity of Astaldi and you've done – have a number of quotes included here from Mr. Don Delarosbil from Astaldi, who was a project manager on the site.

MR. SHAFFER: The current one, yes.

MR. SIMMONS: Of the current one.

MR. SHAFFER: Well, until they were terminated, yes.

MR. SIMMONS: Right.

So you were aware that he wasn't on the site or involved in the project prior to 2015 –

MR. SHAFFER: I am.

MR. SIMMONS: – correct?

MR. SHAFFER: I am.

MR. SIMMONS: Right.

So, some of the comments he makes here concern the time period before his involvement in the project.

MR. SHAFFER: Well, I mean, his comments was really – at least the first one on '12 through '14 were talking about the winter months –

MR. SIMMONS: Yes.

MR. SHAFFER: – which – I mean, the winter's the winter, regardless of what year it is.

MR. SIMMONS: Okay.

So, in looking at Mr. Delarosbil's comments here, where he said, "*if you start in November instead of June you're not just losing four months, you're probably losing ten months. You almost lost a year of construction*."

Did you look at the timing of when it had been proposed to start the work on the Astaldi contract package, when the work actually started, what commitments were made by Astaldi at the time contract was made, in order to assess?

MR. SHAFFER: Assess –

MR. SIMMONS: (Inaudible.)

MR. SHAFFER: – what?

MR. SIMMONS: In order to evaluate those comments that Mr. Delarosbil was giving and whether there was any consideration given by Astaldi at the time to – asking about starting the project later rather than starting it when they did.

MR. SHAFFER: No, I know there were delays as a result of the financial close and then –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – the environmental assessment. I know that the intent was for Astaldi to start sooner.

MR. SIMMONS: Yes.

MR. SHAFFER: But – and I know there was a limited notice to proceed in September.

MR. SIMMONS: Right.

MR. SHAFFER: And then the contract was signed in November.

MR. SIMMONS: Right.

MR. SHAFFER: And that's really all I know about it.

MR. SIMMONS: Right.

So the – and so you're aware that, originally, it had been intended to award the contract that went to Astaldi in September of 2013. The contract was assigned at the time of commercial close in November of 2013.

Do those dates sound correct?

MR. SHAFFER: Yes.

MR. SIMMONS: Okay. And that although commercial close didn't occur until November, the Limited Notice to Proceed, LNTP, was entered into with Astaldi in September, at the time that it had originally been planned to enter into the contract.

MR. SHAFFER: Agreed.

MR. SIMMONS: Correct?

MR. SHAFFER: Yep.

MR. SIMMONS: And that the purpose of the Limited Notice to Proceed was to allow Astaldi to actually start doing work – the work that it would have to do prior to its final contract being entered into and the contractual commitments being made.

MR. SHAFFER: I didn't hear a question, Mr. Simmons, I'm sorry.

MR. SIMMONS: Okay.

Is that – do you – am I correctly stating what the purpose of the LNTP, Limited Notice to Proceed –

MR. SHAFFER: I would –

MR. SIMMONS: – would be?

MR. SHAFFER: – have to review it, but I'll take your word for it that that was the intent.

MR. SIMMONS: Okay, all right.

Do you know when it had, according to the – at the time that the RFP for this project first went out, even before Astaldi bid – do you know what the date was for when this powerhouse and spillway sites were to have been turned over to the successful contractor, eventually Astaldi?

MR. SHAFFER: Do I know the dates of what?

MR. SIMMONS: Yes, when the site for the spillway and the powerhouse were to have been turned over to that contractor?

MR. SHAFFER: Not off the top of my head, no.

MR. SIMMONS: Okay.

Okay, well I think there's going to be evidence that it was around November of 2013. That was the plan dates when the excavation contractors would be complete and Astaldi would move in. Do you know when Astaldi was given access to the powerhouse site and the spillway site?

MR. SHAFFER: I don't have any direct knowledge of when they were actually on-site for the powerhouse and spillway.

MR. SIMMONS: Okay.

So you can't help us with that?

MR. SHAFFER: No.

MR. SIMMONS: Now, did you look at the contract documents that were entered into between the project and Astaldi in November of 2013 to see what the commitments were that Astaldi made?

MR. SHAFFER: I did review it. And in terms of the commitments, I just don't remember.

MR. SIMMONS: Okay.

Are you aware that Astaldi made express commitments to meet the project schedule milestones for its work and the completion date for the contract, as had been previously scheduled?

MR. SHAFFER: I have general knowledge, and based on what I read from the – from Nalcor on the –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – attainability of first power, I understand that all the contractors agreed to that.

MR. SIMMONS: Okay.

But specifically you understand that Astaldi signed the contract agreeing that they would meet the milestone dates and the completion date that was in the integrated project schedule –

MR. SHAFFER: That's –

MR. SIMMONS: – at that time?

MR. SHAFFER: – my general understanding.

MR. SIMMONS: Okay. All right then.

So, your section on page 38, Integrated Cover System – that's section 3.6.3 – a couple of questions for you about that.

So, you've given us a description of your understanding of what the integrated cover system, or ICS, was intended to be. And you've described it, I think, as essentially a large steel building like a warehouse that would erected over the powerhouse site in order to allow concrete work and construction of the powerhouse to proceed inside this enclosure during winter weather.

MR. SHAFFER: That's my understanding.

MR. SIMMONS: Yeah.

MR. SHAFFER: I've also seen a picture of it when it was half built.

MR. SIMMONS: Yeah. Okay.

The – in the Williams report, there's description of the ICS as being built over the dams. Now, I don't know if Mr. Gilliland is just being loose in his language about that, or if there was some misunderstanding of what the ICS was intended to be covering.

And, I just wonder is that a point that you picked up and did you make an inquiry of him about that?

MR. SHAFFER: No.

And as far as that, I mean that's something you're going to have ask Mr. –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – Gilliland.

MR. SIMMONS: Okay

So, on – in construction contracts generally, and I think these arrangements are no different, the project sponsor, the owner – in this case it would be the Nalcor companies – they specify the work to be done. The design that's provided to the contractor is of the end-product work that is to be constructed and achieved by the contractor.

The methods and means that are used by a contractor to perform the construction are within the contractor's authority to determine. Correct?

MR. SHAFFER: Correct. Right.

MR. SIMMONS: That's practically universally standard in the construction world.

MR. SHAFFER: Yes.

MR. SIMMONS: Yes, it is.

And would you agree with me that the ICS is what would be considered a means or method of carrying out the work and not the final permanent end product of the work.

MR. SHAFFER: I do agree with that.

MR. SIMMONS: Okay.

Did you review the contractual arrangements or have anyone do that to confirm that the design of the ICS – the implementation of the ICS – was a means or method that was within Astaldi's authority and jurisdiction to determine how it was to be done and how to execute it?

MR. SHAFFER: Yeah, I don't recall, but understand I'm not critiquing the ICS.

MR. SIMMONS: No.

MR. SHAFFER: Right.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: I'm just stating facts of what we understand it to be.

MR. SIMMONS: Right. Okay.

Well, on page 38 here, you – there's quotes from an interview of Mr. Georges Bader, who is described as the Astaldi deputy project manager.

MR. SHAFFER: Yes.

MR. SIMMONS: And there's this one point there I wanted to refer to, and that's in line 11. Mr. Bader says: "*The ICS was reviewed and approved by Nalcor*."

And that would seem to be inconsistent with the idea that it's a means and method which is subject to design by Astaldi. Did you make any further inquiry or make any assessment of whether that statement is correct or not?

MR. SHAFFER: No.

MR. SIMMONS: Okay.

On the same page in – starting at line 21 – you've described engaging Williams Engineering to review the temporary structure and one of the things that you quote them saying – beginning in line 24 is: "*Using the temporary building to support a grid of cranes to move buckets of concrete from concrete trucks to the placement location is … not standard.*"

Now, I'm told that the design did not involve moving concrete by buckets. Is that your understanding? You're nodding your head. Is that something you've heard since?

MR. SHAFFER: I was told that too, over the weekend.

MR. SIMMONS: Okay.

So, that's not a correct statement there?

MR. SHAFFER: Potentially, it seems to be some confusion over it, there's no doubt.

MR. SIMMONS: Okay.

And then the last line of that quote – last sentence – lines 28 to 30: "*Regardless of the ICS, SLI*" – which is SNC-Lavalin Inc. – "*did not believe that the required concrete placement schedule was achievable and anticipated including a contingency to address this risk*."

So, my question there is: Do you know what the source is for that statement, that SNC did not believe that the concrete placement schedule was achievable?

MR. SHAFFER: The only thing that I could think of is the email between Paul Lemay and Jason Kean back in May of 2012.

MR. SIMMONS: Hmm.

MR. SHAFFER: That's the only thing I can think of.

MR. SIMMONS: Right. So, this is a question for Mr. Gilliland –

MR. SHAFFER: Yeah.

MR. SIMMONS: – as to how he came to that conclusion?

MR. SHAFFER: Yes.

MR. SIMMONS: Oh, and the other point arising out of that, it's – I think there's a statement in here that Astaldi was the only contractor to propose the use of an ICS, but I believe that's incorrect also. There was another contractor proposing to do that.

MR. SHAFFER: That's – you're going to have to have Mr. Gilliland that one too.

MR. SIMMONS: Okay. All right.

But you're nodding your head. You're understanding is two different proposals included enclosure structures for performance of work.

MR. SHAFFER: I don't know of two different ones. I have heard that other contractors did – two other ones did agree to work in the winter.

MR. SIMMONS: Okay. But you haven't looked at it any more closely than that.

MR. SHAFFER: No, I just went back off the recommendation for award summary document, what it said in there.

MR. SIMMONS: Okay.

And then in the concluding section of the analysis of the C0007 contract – it's on page 39 and this is section 3.6 headed: Observations and Findings. And you've, in bullet form, I think summarized some of what's presented in the earlier part of this section.

The fourth bullet is the one that reads, "Nalcor did not perform a formal analysis to consider replacing Astaldi until Westney's March 2016 report despite knowing that for two years Astaldi was having performance issues."

So, I read that as a statement of fact that there was no –

MR. SHAFFER: That should be February '16, by the way.

MR. SIMMONS: February, okay.

So I read that as a statement of fact that that is the first time a formal evaluation was done, when Westney did the formal evaluation. And I think you've said – if I recall correctly – that in speaking to Mr. Clarke that you had learned that there had been – aside from this formal evaluation, this issue had been under discussion and under analysis for some time before that?

MR. SHAFFER: I didn't speak to Mr. Clarke. I saw testimony of Mr. Clarke's.

MR. SIMMONS: That would be an interview transcript of some sort?

MR. SHAFFER: I think it was an interview transcript. It was shown me over the weekend.

MR. SIMMONS: Right, okay.

MR. SHAFFER: And let me say that what I mean by formal analysis is the same type of analysis that would have been done, like, what Westney did. Really looking at the – looking at this and really doing a cost benefit and doing the calculations to see financially where they would be better off.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: As far as I know, that was not done until the Westney analysis as of February 2016. At least I haven't seen anything otherwise.

MR. SIMMONS: Okay.

Is that an issue that you explored in interviews that you conducted from the project staff?

MR. SHAFFER: I recall asking questions, and the way I put it to people was the go-no-go decision on Astaldi, when was that actually done? I thought everybody told me it was in '16.

MR. SIMMONS: Mm-hmm. Okay.

So your observations and findings – this is similar with a lot of what's in the report here. You've made a statement here, which is a statement of fact, that the formal analysis was done in 2016. And there's no analysis in here of whether that's good, whether that was bad, whether it should have been done before, to what extent it should have been done before. Was it part of your mandate and your analysis here to look into that question, or are you merely presenting your findings of what the facts were about when that analysis was done?

MR. SHAFFER: I'm presenting the findings of the facts –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – when that analysis was done.

MR. SIMMONS: Okay.

So you're not expressing any opinion on whether a formal analysis should have been done earlier or not?

MR. SHAFFER: Well, if you're asking me, I mean, as I sit here –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – I mean, they fell behind immediately.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: You knew by – Nalcor did an analysis in the mid-2015 that they knew they were $500 to $800 million in terms of additional scope – in terms of additional dollars that will be needed to finish that scope of work. I mean I would think it could've been done sooner.

MR. SIMMONS: Mm-hmm. Okay.

So on that issue, when the analysis was done, you've told us that the result of the analysis done in 2016 – and I'll try and paraphrase this very simply – was that the cost of paying additional compensation to Astaldi and keeping them on the job to finish the work was less than what the cost would have been if Astaldi did not complete the work and another contractor had to be brought in to finish it.

MR. SHAFFER: I think Westney's words was: least-cost exposure.

MR. SIMMONS: Right. Okay.

And you've also said that in a situation where you have to remove a contractor from a site and bring a new one in, there's going to be a significant premium to be paid to the new contractor.

MR. SHAFFER: There's no doubt there's going to be costs; there's no doubt there's going to be premiums. The – my only question here is –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – should that analysis – could that analysis been done sooner?

MR. SIMMONS: Right.

And I would presume that the earlier in the performance of the work that you make a change from one contractor to another, the greater the amount you're going to have to pay to the new contractor to complete the work.

MR. SHAFFER: Wouldn't know until you negotiate that.

MR. SIMMONS: Mm-hmm. Okay.

A new contractor coming in, though, in that sort of situation, they're going to have a lot of leverage about what they can charge and how much risk they're going to be willing to accept for the completion of the work.

MR. SHAFFER: It's all subject to negotiations at that point.

MR. SIMMONS: Okay, but you would agree with me that they are going to have more leverage in that situation than they will have at the outset when they're in a competitive bidding process –

MR. SHAFFER: It depends –

MR. SIMMONS: – when there's time to evaluate it.

MR. SHAFFER: It depends whether or not that new scope of work is going to be bid out too.

MR. SIMMONS: Mm-hmm. Okay.

And bidding out the new scope of work would, of course, require the time in order to go through the processes that would be required in order to obtain competitive bids and evaluate them.

MR. SHAFFER: No doubt, again, the critique is that analysis was not done.

MR. SIMMONS: Okay, as far as you know?

MR. SHAFFER: As far as – I haven't seen anything; right.

MR. SIMMONS: Okay.

So I just want to jump ahead a little bit right now because there's another reference to Astaldi farther on that I want to ask you about. This may be an appropriate time. Page 70, please.

You're going to have to start using larger fonts for your page numbers.

MR. SHAFFER: I agree, Mr. Simmons.

MR. SIMMONS: So, page 70 is the end of section 9, and section 9 deals with retaining and dealing with contractors and suppliers. And this is the end of that section where the Observations and Findings are. And the second bullet, the very last paragraph on this page, says: "Generally, with the exception of Nalcor's oversight of Astaldi's work (as described in section 4 of this report), their conduct in retaining and subsequently dealing with contractors did not contribute to project cost increases and project delays."

And my interest is in the exception that's quoted there.

MR. SHAFFER: Should be section 3 of the report, by the way.

MR. SIMMONS: Should be section 3, not section 4. Yeah, so let me fix that.

Now, so, the exception – it's saying: with the exception Nalcor's overnight of Astaldi's work as described in section 3.

Now, I got back to section 3, and I can't find anything in here which is a description of Nalcor's oversight of Astaldi's work. And I wonder if you can direct me as to where I find the part of section 3 that describes why there is an exception made here for this finding.

MR. SHAFFER: It's really – what I meant by that is really just the two-year delay in performing – in engaging Westney to perform the analysis.

MR. SIMMONS: That's it?

MR. SHAFFER: That's it.

MR. SIMMONS: Nothing more?

MR. SHAFFER: No.

MR. SIMMONS: Okay. All right then.

So, the next one is – and I'm not going to go through all the contracts with you, but I had a couple of things now about the Valard contract. It starts on page 40, which is section 4 of the report. There's some discussion in here about the geotechnical data that was available and the impact that that had.

First of all, from what you've seen, the geotechnical issues are power line issues. There's nothing that arose out of any geotechnical concerns that caused any particular problems to the powerhouse, spillway sites, that you're aware of?

MR. SHAFFER: I'm not aware of any, right.

MR. SIMMONS: Okay.

So, the – this discussion begins on page 46 in the section: Geotechnical Conditions, and continues onto page 47. You've already told us that I think you had some skepticism about the recommendation that every single tower site should have had a borehole, recognizing the impracticality of doing that and probably the very high cost upfront –

MR. SHAFFER: I do.

MR. SIMMONS: – of doing that. You agree with that?

MR. SHAFFER: I do.

MR. SIMMONS: So there's an element of cost-benefit analysis in here as to whether you go to that depth of investigation beforehand, isn't it?

MR. SHAFFER: I absolutely agree with that.

MR. SIMMONS: Right.

So, on the second paragraph on page 47 there's a quote there from Williams comment on it and at page 8 –

MR. SHAFFER: Line 8?

MR. SIMMONS: Sorry, line 8, it says: "*Best practice is to attend each tower location and complete a minimum of one borehole per tower location.*"

So, this is an example of where the term best practice is used and I'd like to know, if you can tell me anything about what the source is for the determination that that is a best practice?

MR. SHAFFER: It's a good question for Mr. Gilliland.

MR. SIMMONS: Okay.

The next section there on the bottom of that page deals with the Conductor Proud Stranding. Now, just remind us of what that's all about.

I understand from your evidence that this concerned the conductor, the wire on the HVDC transmission line and the large cable that transmits the electricity is actually composed of a series of strands of wire, there's a core in the middle and then there are circles of strands that are wrapped around and they're twisted as they go along. Does that sound like a reasonable description from your understanding?

MR. SHAFFER: Yes.

MR. SIMMONS: I think we can probably hear evidence in the future to describe that better than either of us can.

And the problem that developed after some of the line had been installed was that one of these strands was popping out of place, so that that section had to be removed and had to be replaced and there was cost involved in that.

And you've identified, I think, that the total cost was in the range of, I think, maybe $57 million or so and that there was an insurance recovery of $25 million. So, there was an amount that wasn't recovered from the insurance company.

MR. SHAFFER: Yes.

MR. SIMMONS: Okay.

Were – did you determine in your investigation or are you aware – and this is publicly known, publicly reported – that there is a lawsuit where the insurance company has sued the supplier of the cable to recovery the money that was paid on the insurance claim and that that lawsuit also includes a claim for funds, in excess of the insurance coverage and there's an arrangement for some of that to come back to Nalcor?

MR. SHAFFER: I had no direct knowledge of it.

MR. SIMMONS: Right, okay, and if that is successful then those funds will serve to reduce the overage on this particular contract.

MR. SHAFFER: Absolutely.

MR. SIMMONS: Page 49, please.

Yes, this is where the insurance claim is mentioned, but there's – at the top of page 49 there's a section headed: Unawarded Scope, and we had some discussion about this yesterday, and the Commissioner asked you some questions, I think, about it as well.

And for a number of these work packages there are line items that have been included in your calculation of the overage, which are described as unallocated budget or, in this case, unawarded scope. And here, for this particular one, there's actually a note in this paragraph here that says that of the – and I'll paraphrase this – of the $40 million of unallocated budget, that's listed as an overrun in the Valard contract, at the time of your report, the current forecast was $32.5 million with a variance of $4.9 million to be returned to contingency.

So, just so we understand, when something is presented as being unallocated budget, that doesn't mean that all that money will end up being spent, 'cause in this case we can see that some of it wasn't and was returned to contingency.

MR. SHAFFER: That's correct.

MR. SIMMONS: Right. And those amounts that are not spent, of course, would reduce the total amount of overruns on those work packages.

MR. SHAFFER: That's correct.

MR. SIMMONS: And the other point here that I think is very clear now is that in 4.8 Observations and Findings at line 17 you refer to budget transfers, and I think we clearly understand now that transfers of work scope from one work package to another do not change the overall budget for the project.

MR. SHAFFER: Correct, and as – in essence, those transfers zero out, they net to zero for the –

MR. SIMMONS: Right.

MR. SHAFFER: – whole project.

MR. SIMMONS: Okay.

So, that brings us now to – we're going to go to contract CH0009, which is in section 6 of the report. That's the Construction of North and South Dams beginning on page 53.

So, much of the discussion here beginning on page 54, in the sections: RFP and Bidding and Contract concerns the information that's quoted from Mr. Turpin's email to Mr. Marshall, and from your interview of Mr. Turpin, and from the review of the bid evaluation and award recommendation document for this contract, which is the construction of the north and south dams.

And I gather from your evidence yesterday that you did not have time to conduct any further investigation into the matters that were raised by Mr. Turpin. And so consequently, you did not speak to anyone else from Nalcor, or interview anyone else from Nalcor on this issue.

MR. SHAFFER: Correct.

MR. SIMMONS: Correct.

Okay.

Nor did you submit any written requests or questions to Nalcor for response concerning this issue.

MR. SHAFFER: We just couldn't; we didn't have the time. We had to get the report issued.

MR. SIMMONS: Okay.

So, this – what's presented here was kind of the beginning of an investigation, rather than any kind of conclusion of it.

MR. SHAFFER: That's a fair observation.

MR. SIMMONS: Okay.

So, from your review of the construction management documentation used on the project, as we said earlier, you're aware that there's a fairly elaborate process ultimately leading to an award recommendation. There's bid evaluation plans and there's an award and recommendation document; all that's fairly well structured.

One of the things that's said in your report here, which is reported as having been told to you by Mr. Turpin, is on the top of page 55. You say: "We asked him whether his team's evaluation was completed and submitted and he responded *It was. We put a nice bow on it and said here you go guys…here's the package.*"

So, do you – did you determine when, in relation to the ultimate award of the contract, that was supposed to have happened?

MR. SHAFFER: When he gave it to the –

MR. SIMMONS: Yes.

MR. SHAFFER: – to everybody?

I know there was a delay here in the final award so I'm assuming before he left the team.

MR. SIMMONS: Okay.

So, were you aware that Mr. Turpin had been involved as part of the original bid evaluation team with Mr. Lewis; Mr. Turpin was reassigned to work on the North Spur project and eventually – and Mr. Lewis retired?

MR. SHAFFER: Okay.

MR. SIMMONS: Were you aware of any of that?

MR. SHAFFER: I was aware about Mr. Turpin. I wasn't aware Mr. – that Mr. Lewis retired.

MR. SIMMONS: Okay.

And, you had mentioned also that some effort had been made to try and find a bid award, a recommendation document from the time that Mr. Turpin said it was prepared and provided.

MR. SHAFFER: We attempted, yes; we searched TRIM for it. We couldn't find it.

MR. SIMMONS: Okay.

And when you say TRIM, that's the Commission's document management system that contains all of the documents that have been produced to the Commission?

MR. SHAFFER: Yes.

MR. SIMMONS: Okay.

You did say there were some technical problems with doing that?

MR. SHAFFER: We did – while we were doing it there was a hang-up with TRIM so I'm not saying it doesn't exist; I'm saying –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – we just couldn't find it and, as I testified to earlier, we had to get the report issued.

MR. SIMMONS: Right. Okay.

So, when you did review the bid evaluation and award recommendation document that's described here as having been dated August 5 – August 2015, which was when this contract was ultimately awarded, what did you learn about the process that was followed for the award of this contract and the extent to which there may have been any additional steps or measures taken after the original proposals were received from the approved bidders?

MR. SHAFFER: Well, the new bid evaluation team did what they had to do in order to bring this thing to contract.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: And they took the steps they were supposed to have taken.

MR. SIMMONS: Okay.

Were you aware that the original bids were regarded as being high and that there needed to be work done to try and determine how to lower the cost of this contract package?

MR. SHAFFER: I think we state that in our report.

MR. SIMMONS: Yeah.

And you were aware as well that there was, in fact, time to do this because the delay with Astaldi's work meant there was more time available before this particular contract had to be awarded?

MR. SHAFFER: I believe that's stated in my report.

MR. SIMMONS: Right. Okay.

And you do mention in your report on page 54 that Nalcor decided to explore a cost-reduction program. That's in line 13 on page 54. So, what did you learn about what that cost-reduction program was and what it involved?

MR. SHAFFER: I would have to go back to the documents.

MR. SIMMONS: Do you know – can you confirm that it involved further discussions with bidders, some changes in scope of the work and the submission of new proposals from the bidders?

MR. SHAFFER: I would have to go back to the documents.

MR. SIMMONS: Okay.

Do you know whether or not the final bid award was based on evaluation of the new proposals, not the original ones?

MR. SHAFFER: I believe – and I want to get this right – I thought it was the new proposals.

MR. SIMMONS: The new proposals? Okay.

And you also make the comment in here that – this is on the bottom of – I'm going to go to page 55, again, to lines 27 to 32. There's a quote here from the bid evaluation and award recommendation – the one that was, ultimately, issued in August of 2015, that recommended the award to contractor Barnard Pennecon.

And the quote says: "… *the BET* …" – that's bid elevation team, I believe? –

MR. SHAFFER: Yes.

MR. SIMMONS: – "… *believed that an alternative evaluation methodology would be more suited to the nature of the work. More specifically, the BET believed that the evaluation should focus more on project execution, schedule and quality of the proposed project management teams.*"

And you go on then to say that this wasn't – that this would amount to a change from the original criteria that were set out in the bid evaluation plan, and that better practice is to stick to the original criteria.

MR. SHAFFER: Well, my words are in black and white – what I said.

MR. SIMMONS: Okay.

Have I correctly, kind of, summed – we can read it out, if I – is that what you intended to convey –

MR. SHAFFER: Well –

MR. SIMMONS: – here?

MR. SHAFFER: – my intention here was that the – based on the – Nalcor's bid evaluation and award recommendation policy –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – the criteria should be established prior to completing the bid evaluation.

MR. SIMMONS: Right. Okay.

Now, we don't have the bid evaluation and award recommendation for CH0009 in evidence as an exhibit right now, so I can't refer you to it on the screen, but this morning before we started, I did give you a copy of the first 10 pages –

MR. SHAFFER: Yes.

MR. SIMMONS: – from that document?

MR. SHAFFER: Yes.

MR. SIMMONS: And I know you've had very little time to have a look at that, but you did skim through it, I guess, did you?

MR. SHAFFER: I had to skim through it.

MR. SIMMONS: Okay.

So, I'll tell you what my understanding is of what that document says now about how this bid evaluation was carried out.

There was the process, as I described, of soliciting new proposals, which were on a somewhat of a different basis than the original proposals were. And that the bid evaluation team, as you quoted here, thought – expressed a view that a different evaluation method would be appropriate.

But when we read the bid evaluation, we see that the original method was used, and the result of that was that Barnard Pennecon was the preferred contractor.

MR. SHAFFER: Okay.

MS. O'BRIEN: Sorry to interrupt, Mr. Simmons. Can I just get some clarity here?

You are referring to the document referenced in footnote 256 of Grant Thornton's report?

MR. SIMMONS: Two-fifty-six –

MS. O'BRIEN: Two-fifty-six – I'm on page 56.

MR. SIMMONS: Oh, yes. It's on page 55 as well, yeah.

MS. O'BRIEN: Okay.

Is it the document at footnote – if you could just give me the proper footnote, please?

MR. SIMMONS: Yep. It's referenced at (inaudible) – it's NAL0018340.

MS. O'BRIEN: Sorry –

MR. SIMMONS: Wait now, 56 – no. (Inaudible), no. If we look at page 55 of the report –

MS. O'BRIEN: Yes.

MR. SIMMONS: – and take, for example, footnote 254, which is the footnote for the quote that I just read out to Mr. Shaffer, and 254 refers to the, "Bid Evaluation and Award Recommendation CH0009 … Construction of the North and South Dams – August 5, 2015 …."

MS. O'BRIEN: Okay.

My record is that document we've – has not yet been cleared by –

MR. SIMMONS: Correct.

MS. O'BRIEN: – Nalcor to be put into evidence.

MR. SIMMONS: Correct.

MS. O'BRIEN: So you're referring the witness to a document that we haven't got cleared for evidence yet.

MR. SIMMONS: Correct. Now, I can confirm this with Mr. Shaffer, but Mr. Shaffer, this was a document – the full – this full document was available for – to you for your use in preparing your report.

MR. SHAFFER: Yes.

MR. SIMMONS: It was. So – and there's a quote from it in the report, and I just want to put to Mr. Shaffer that there is more contained in the document that he relied upon than the quote that is included in the report.

MS. O'BRIEN: That's – I understand –

MR. SIMMONS: Mm-hmm.

MS. O'BRIEN: – the purpose of your question. Just for fairness, for other counsel coming –

MR. SIMMONS: Yes.

MS. O'BRIEN: – behind, though, if other people wanted to refer to that document and take him to other places there, it's not yet in evidence, so perhaps –

MR. SIMMONS: Right.

MS. O'BRIEN: – if we could get that expedited for clearing so maybe we could get it even in this morning if that's possible.

MR. SIMMONS: Right.

Well, what we can do, perhaps when on the break we can have a look 'cause what we have here is just an excerpt of the first 10 pages. It may be able to do – possible to do something for other counsel on that.

MS. O'BRIEN: Thank you.

MR. SIMMONS: Okay.

So – and by all means Mr. –

THE COMMISSIONER: Just a second now.

So I'm not sure exactly where this leaves other counsel. So if you're gonna ask a question about a document that –

MR. SIMMONS: Mm-hmm.

THE COMMISSIONER: – you're – you know, that Nalcor right now has not yet cleared, I'm not sure I'm gonna let you ask that question –

MR. SIMMONS: Mmm.

THE COMMISSIONER: – until it is cleared –

MR. SIMMONS: Okay.

THE COMMISSIONER: – so that other counsel do have the –

MR. SIMMONS: Well –

THE COMMISSIONER: – opportunity to have it. In fairness, I think that's what needs to happen here.

MR. SIMMONS: Yeah.

Well, Commissioner, my purpose in giving Mr. Shaffer the copy of the first 10 pages was, knowing that he has already referred to the full document and had it available when the report was prepared, to give him an opportunity to refresh his memory.

THE COMMISSIONER: Right.

MR. SIMMONS: And that's –

THE COMMISSIONER: I have no –

MR. SIMMONS: – simply the purpose –

THE COMMISSIONER: I have no issue with that.

MR. SIMMONS: – at this point.

THE COMMISSIONER: I have no issue with that.

MR. SIMMONS: Mm-hmm.

THE COMMISSIONER: But I'm just looking at where we go with this from here.

MR. SIMMONS: Mm-hmm.

THE COMMISSIONER: And I – and as I said, I'm not prepared to let you ask a question at this time –

MR. SIMMONS: Mm-hmm.

THE COMMISSIONER: – on a document that's not yet been cleared – that I can make sure it gets in the hands of other counsel at this stage. So can you – maybe what we could do is you could assess this –

MR. SIMMONS: Mm-hmm.

THE COMMISSIONER: – and we could figure out – I could let you ask this question later on, or whatever, once we figure out if we're gonna get this document cleared and get it in the hands of counsel so that they can have a look at it, you know, with a reasonable amount of time to read it. Because you're giving – you're referring to 10 pages, which I assume this document is far bigger than 10 pages.

MR. SIMMONS: Yes, it is.

THE COMMISSIONER: All right?

MR. SIMMONS: Yes.

THE COMMISSIONER: So can we just sort of hold back on that for the time being –

MR. SIMMONS: Sure.

THE COMMISSIONER: – when we figure out what direction we're gonna go?

MR. SIMMONS: Yeah. We'll certainly have a discussion with Commission counsel on it on the break, and there may very well be something that we can work out on that.

THE COMMISSIONER: Okay.

Mr. Fitzgerald.

MR. FITZGERALD: Commissioner, I agree with you.

From my perspective, for my clients, this goes back to the submissions that I made during the hearing and how we were gonna proceed in Phase 2 and this is the type of thing that I raised and I was concerned would happen as a matter of fairness.

I agree with you that if the document is going to be put to the witness it needs to go in, and I also don't think it's fair that 10 pages or six pages or five pages should be cherry-picked from a document. So if this document is gonna go in, it should all go in or it should all stay out, as a matter of fairness.

THE COMMISSIONER: Okay.

And we'll – we're gonna deal with this now. I don't want to spend too much more time on this. Mr. Simmons is not going to ask a question on it and we'll figure out how we're going to proceed from here.

I don't disagree with your statement that it's not just going to be five or 10 pages. My problem at this stage in the game is that I'm not certain whether or not this is a contract that is within that group – I see there are some redactions here, so I have to be very careful here with regards to this too. So I don't want to make a blanket statement right at the moment that the whole document is going to go in. So let's just – we'll take a breather in a few minutes, anyway, for our break, and then we'll figure out how we're going to deal with this.

Thank you, Mr. Fitzgerald.

Mr. Simmons.

MR. SIMMONS: Yeah, thank you, Commissioner.

So, Mr. Shaffer, let's go to section 9 next and, Madam Clerk, that begins on page 64 of the report, and this is the section dealing with Retaining and Subsequently Dealing with Contractors and Suppliers. And I'm going to bring you first just to 9.1 on the first page, and this is the quote under the heading Mandate, where you've quoted the section of the Inquiry Terms of Reference, that I take it you're addressing in this part of your report.

Is that correct?

MR. SHAFFER: Yes.

MR. SIMMONS: Okay.

And this part of the mandate is: "… *whether (i) Nalcor's conduct in retaining and subsequently dealing with contractors and suppliers of every kind was in accordance with best practice*" – that's where we have our best practice term again – "*and, if not, whether Nalcor's supervisory oversight and conduct contributed to project cost increases and project delays* …."

So I just want to confirm what your conclusions were on that. So if we go to page 70, section 9.7, Observations and Findings, please. I'll just read part of this, starting on line 12. "When considering Nalcor's conduct in retaining and subsequently dealing with contractors we reviewed Nalcor's policies and procedures. Our review was focused on considering if Nalcor's supervisory oversight and conduct contributed to project cost increases and project delays."

So that seems to fit pretty squarely with the mandate that we looked at in paragraph 9.1, I think.

MR. SHAFFER: Okay.

MR. SIMMONS: Yes?

MR. SHAFFER: Yes.

MR. SIMMONS: And then the first bullet there deals with the review of the documented policies and procedures, and concludes, starting on line 19, "Therefore, we have concluded that the documented policies and procedures governing Nalcor's conduct in retaining and subsequently dealing with contractors were in accordance with best practice."

So that's a positive finding there.

MR. SHAFFER: Yes.

MR. SIMMONS: And then we've already looked at lines 23 to 25 concerning the exception for Nalcor's oversight for Astaldi's work, which you said was related to not getting a formal review of the cost benefit of replacing Astaldi until Westney's work was done in 2016.

So I'm gonna leave – I'm gonna read it leaving out the exception part, and then it says, generally their, Nalcor's, "conduct in retaining and subsequently dealing with contractors did not contribute to project cost increases and project delays."

So, I'm understanding correctly then that for this part of the mandate described in 9.1, the conclusion of your investigative and forensic audit work was that Nalcor's conduct, both in the way it – contractors were retained and in how they were dealt with, did not contribute to project cost increases and project delays, 'cause that's what I'm reading there.

MR. SHAFFER: With the exception of Astaldi.

MR. SIMMONS: Okay, good.

Section 10 then starts on page 71, and it's dealing with contractual and commercial arrangements between Nalcor and the various contractors. And this is the one – the two contracts reviewed are the Astaldi contract and the Valard contract. We'll talk about the Astaldi contract a little bit, but before we do, on page 71 you have another quote there from Mr. Merrow. It's in – begins I guess at line 11 and goes down to line 21.

And at line 15, in the quote it says, "No contracting approach guarantees success; most contracting approaches can succeed." So I gather that this was, in part, the basis for your determination that the contracting approaches selected by Nalcor for the different contracting packages, that they were within the range of reasonable approaches that could be taken for this contract.

MR. SHAFFER: I'm sorry, I lost you there, Mr. Simmons.

Could you repeat that one more time?

MR. SIMMONS: Okay. So I think your – the conclusion here was that Nalcor had acted reasonably in selecting the contracting approaches it did for the various work packages.

MR. SHAFFER: Based on my prior conclusion in 9.

MR. SIMMONS: Yes.

MR. SHAFFER: Yes.

MR. SIMMONS: Right. And that's consistent with what Mr. Merrow has said here as well.

MR. SHAFFER: Yes.

MR. SIMMONS: Yeah, okay.

And then he goes on to make some comments to the general effect that – I take it to be that – contractors will do whatever they can to take advantage of contractual arrangements to get whatever extra payment they can out of a contract. And I'm paraphrasing a lot here, but that's what I take out of what he said.

Do you agree with that?

MR. SHAFFER: I've sort of looked at it a different way, but –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – you can interpret it the way you interpret it.

MR. SIMMONS: Yeah.

And then in line 22 you say: "Notwithstanding the above, in order to fulfil this portion of our mandate …" and you go on. And I'm just curious about what you meant by notwithstanding Mr. Merrow's comments?

MR. SHAFFER: That basically that most contracting approaches can succeed.

MR. SIMMONS: Mm-hmm. Okay.

On the next page, page 72, you describe your use of the –

THE COMMISSIONER: I wonder, is this an appropriate time to take a –

MR. SIMMONS: It certainly is.

THE COMMISSIONER: – break before you get into that?

MR. SIMMONS: It certainly is, Commissioner.

THE COMMISSIONER: Okay. It's 11 o'clock, so let's take 10 minutes now.

MR. SIMMONS: Yep.

CLERK: All rise.

Recess

CLERK: Please be seated.

MS. O'BRIEN: Sorry, Mr. Simmons, before you continue, I can advise, Commissioner, that the document that Mr. Simmons was referring to before the break has now been cleared by Nalcor and it's available to go into evidence. We have it tentatively marked as Exhibit P-01870.

I would note, though, that this is – it's only now been cleared, so counsel for parties withstanding will not have had an opportunity to see it in advance. It is now up on kiteworks. It is available to them. It is approximately a 50-page document, so I just wanted to give you that information prior to your proceeding. But it is definitely a document that we do want to have entered into evidence and so I am seeking an order at this time.

THE COMMISSIONER: All right.

Is there any comment from any of the counsel?

MR. BUDDEN: Yes, Mr. Justice, I'm not really casting aspersions on anybody, but what we have here – at a time that it's convenient for Nalcor, half way through examinations of witness, this document emerges. We now have it on kiteworks. You know, it puts us in a very difficult position and a very unfair position.

And again, Nalcor had the document, Nalcor is basically controlling the time of the release of the document, and this document only. So I just wanted to make a note I don't think that's fair to all of the counsel.

THE COMMISSIONER: Any other – just before I hear from you, Mr. Simmons, any other counsel wish to speak to this?

All right.

Mr. Simmons, a response?

MR. SIMMONS: Yeah, Commissioner, there's been an ongoing process of review for commercial sensitivity of quite a few documents we've been working in diligently with Commission counsel as we get notice and work things through. And these things are being dealt with as quickly as possible.

We were able to determine on the break that this one has, in fact, passed the review within our system and the message had not gotten to us to communicate on yet to Commission counsel to have it formally entered. We're going to continue to do everything we can to move these things through as quickly as possible certainly, yeah.

THE COMMISSIONER: Okay.

Commission counsel have anything they wish to state?

MS. O'BRIEN: No, other than I would reiterate what Mr. Simmons has said. We are dealing with an awful lot of documents, and we know it's not – you know, the speed with which we're able to process them is not always giving counsel as much time as I know that they would like. But people are working very hard at this to keep it moving and keep documents being cleared as, you know, expeditiously as we can. So I'll just leave it with you, Commissioner.

But I am seeking to have that Exhibit P-01870 entered into evidence. That may be a separate question as to whether Mr. Simmons's questions on it today or whatever other decision you might take.

MR. FITZGERALD: Commissioner, if I may. just in terms of the procedure here, you know, I just was thinking about this. I mean, should Mr. Simmons be the one asking for the order for this document to go in as opposed to Commission counsel? I mean, I appreciate the Commission counsel is working very hard to move the matter forward, but we're here this morning. Mr. Simmons had the document before anybody else. It's 50 pages. I agree with Mr. Budden. We haven't seen it.

And if he wants this document to go in, he should have made an application, gave us notice and then sought the order. I don't think it's right the way this is proceeding here.

Thank you.

MS. O'BRIEN: Sorry, Commissioner, may I just clarify? This was a document that we, as Commission counsel – we had identified as a document that we wanted to put into evidence. So this was something that was already in the works that we had made that decision to have it go into evidence. We want it to go into evidence for our own purposes, quite separate and apart of Mr. Simmons's use of it today. We weren't intending to use it today, but we do ultimately want this document examined by you.

THE COMMISSIONER: Okay.

MR. FITZGERALD: Commissioner, one thing – and I just wonder where their dividing line is between Commission counsel and Nalcor on this. They see the documents, they talk, we don't have any of that. And this – Mr. Simmons was the one that tried to put this in this morning, not Commission counsel. I just – procedurally, I just don't think it's fair.

MR. SIMMONS: Commissioner, if I might, we – I did not ask to have the document entered. This is a document that we know had previously been available – fully available – to the witness and I wanted to ask him a question arising out of the fact that this information was available to him based on what was reported in the report. And for that purpose, in order to make it easier for him, I provided him with a copy – before examination began – of the first 10 pages in case he needed to refresh his recollection on it.

So it was not our – and we recognize it's not our place to introduce exhibits. There are all done through Commission counsel. So I understand Mr. Fitzgerald's concern, but it was not our request to have it put on the record at this time.

THE COMMISSIONER: Okay. Thank you, Mr. Simmons. Thank you, Mr. Fitzgerald. And Mr. Budden.

I am – look, this is a not a perfect process. We've been trying to deal with this issue of documents from day one. It's been a headache, if I can utilize that terminology at this stage of the game, but that would be an understatement.

I guess, from my point of view, I want to make sure that all counsel here have an opportunity to fairly participate in this process. So, I understand the frustration of counsel. And, in fact, this is not the first time I've been aware of the fact that there's been a bit of – there's been some disagreement with the way – how soon documents are getting out or whatever, and I'm recognize that as an issue. And I can assure you that, from my perspective, and I know from Commission counsel's perspective, 'cause I'm talking about this all the time with them, that we're trying to get – trying our best to make sure that you get disclosure early enough to review it.

In this particular case, I understand that this document was not cleared, and that prevented us from getting this document out. So, the preferred process for me here – and I'm not being critical of Mr. Simmons, because Mr. Simmons has been very helpful to this Commission in getting documents cleared when we needed to get them cleared – is that if this was going to be raised this morning, and if it's raised in the future, then I would expect, particularly if it's Nalcor who is raising it, that in the circumstances, they check to make sure the documents are cleared in plenty of time, so that counsel are well-versed in whatever it is that Mr. Simmons is going to ask about. That didn't happen here and that's fine.

Luckily, we have two days for this witness. So, I haven't seen this document and I'm going to look at it, and I'm going to – 50 pages. I'm not going to look at it over lunchtime. So, counsel will have an opportunity between now and tomorrow. If any one of you start today and you wish to ask a question about this document after you've had an opportunity to review it overnight then, in the circumstances, I will permit that.

So, I guess, the understanding that we're going to have is that tonight, when we break, the document will hopefully be in all of your hands. It's on kiteworks now, so – is it on kiteworks now?

MS. O'BRIEN: My understanding is yes.

THE COMMISSIONER: Okay.

So it's on kiteworks now, so it's available to you. You'll have the opportunity over the evening time to review it. And, as I said, I'll make sure that tomorrow everyone who wants to ask a question about this document is given that opportunity to do so.

Is that satisfactory to everyone or is anybody else going to disagree with me? It may be fruitless to disagree with me, but I'm certainly prepared to hear what you have to say, if you have anything else to say. And we will try to avoid this problem in the future.

So, Mr. Simmons, if you are going to be asking about documents or whatever just make sure that they're cleared first in plenty of time.

MR. SIMMONS: Yes. Thank you, Commissioner.

And I expect that as we move a – as day by day we move, the body of documents that are on the record is going to grow and it will become less likely that there'll be issues like this that will arise.

THE COMMISSIONER: (Inaudible.)

MR. SIMMONS: The two-week break coming up after our time in Labrador is certainly going to help immensely with that as well.

THE COMMISSIONER: Okay.

And can I just add one other thing that I want to add to what you said. You said that all documents will go in through Commission counsel, that's not my understanding.

MR. SIMMONS: Mmm.

THE COMMISSIONER: My understanding is that counsel here, any of you have an opportunity to produce documents, but what we're asking you to do is to contact counsel, Commission counsel, ahead of time, so that we have them up and our clerk is able to bring them up and whatever when it is – when it comes time for you to introduce a document.

So, it's not just the Commission counsel that's going to introduce a document. We'll do it if counsel asks us to do it. We want to be notified about that ahead of time for logistical reasons, but any counsel can basically introduce documents on behalf of their client, as long as they're relevant, obviously, and legitimate documents.

So, I just wanted to clarify that point as well.

MR. SIMMONS: Thank you, Commissioner.

THE COMMISSIONER: All right, Mr. Simmons, you can continue on.

MR. SIMMONS: Thank you.

Mr. Shaffer, let's go back to CH0009, as to where we left off, which was – concerned the Bid Evaluation and Award Recommendation process.

And where I think I left off and the question I was going to pose to you was that on page 55 of your report in lines 27 to 30 you'd quoted a portion from the Bid Evaluation and Award Recommendation that stated that the evaluation team believed that an alternative methodology would be more suited to the nature of the work.

Now, I'll just summarize for you my understanding of what actually happened, and I'm just going to ask you if you're aware from your work whether that's correct or not.

And what I understand happened is that there – as I'd said – there had been revised proposals received from two bidders for this – two short-listed bidders for this project of building the North and South dams, that the Bid Evaluation and Award Recommendation document from August of 2015 discloses that they were evaluated based on the original criteria and Barnard-Pennecon was the favoured bidder. And, as a check or a sensitivity, it was described as: they were also evaluated using the alternative evaluation methodology that the bid evaluation team would be – would consider appropriate and that Barnard-Pennecon was also the favoured bidder when that was done.

And from your recollection of having reviewed the Bid Evaluation and Award Recommendation does that sound correct to you or not? If not, we'll deal with it in other evidence later.

MR. SHAFFER: Can I quote off of this document?

MR. SIMMONS: Sure.

MR. SHAFFER: Okay.

There is a paragraph in here on page 4 that, in addition to where it says: The bid evaluation team believed that an alternative evaluation methodology be more suited. There's also a paragraph in the middle of the page 4 that says: Both evaluation methodologies have determined and arrived at the same conclusion, that the selection of BPJV is best for the project – which is in quotes. And then it says: There are additional qualitative schedule factors that further support the recommendation.

MR. SIMMONS: Okay. Good. Thank you very much.

And so we've moved on to section 10 and if I can bring you, please, to page 72, section 10 is the section that deals with the review of contractual and commercial arrangements between Nalcor and contractors and specifically reviews the Astaldi contract and the Valard contract. And on page 72 there's a section headed: Use of Third Party Expert Services where you identify Miller Thomson LLP and R. W. Block Consulting, which was Mr. Hennessey.

My question is just to confirm that Williams Engineering was not involved in this part of the process.

MR. SHAFFER: Correct.

MR. SIMMONS: Okay.

The Astaldi contract review begins on page 73; 73 is where you discuss the creditworthiness review, which includes quotes that I think you'd read yesterday from Mr. Robert Hull who was the general manager for Commercial Treasury and Risk for Nalcor, at the time, and I believe you characterized Mr. Hull's two messages – email messages – that you referred here to as being: the creditworthiness evaluation of the Astaldi proposal.

Now, is that correct or did your work uncover more formal evaluations in the form of memoranda?

MR. SHAFFER: I would assume there's something internally but I just don't recall.

MR. SIMMONS: Okay.

Our understanding is that Mr. Hull was actually part of what was called the cold eyes review team for the Astaldi contract and as part of that he was –

MR. SHAFFER: I do – I'm sorry – I do recollect that.

MR. SIMMONS: Okay. So, tell me what you recall about that.

MR. SHAFFER: I remember there was a cold eyes review team.

MR. SIMMONS: Okay, and that Mr. Hull was part of the cold eyes review team to have a second look at the work that had been done, actually, by the treasury department in conducting the formal creditworthiness assessment of Astaldi.

Does that sound…?

MR. SHAFFER: It sounds reasonable.

MR. SIMMONS: Okay. So –

MR. SHAFFER: I just – I would just have to see it to confirm it.

MR. SIMMONS: Right. As part of your investigation did you go beyond Mr. Hull's comments when he conducted his cold eyes review and actually look at treasury's work on the creditworthiness?

MR. SHAFFER: I remember, as part of reviewing those emails, there were attachments to it, which I assume is what you're referring to.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: And I remember reviewing those attachments.

MR. SIMMONS: Okay. But can you tell me now that you reviewed the – I'll tell you, there were reports from treasury done in July of 2013 and two reports done in September of 2013. Can you recall whether that formed part of your review?

MR. SHAFFER: No, I can't.

MR. SIMMONS: Okay. All right.

So, when we go then to page 74, this is where you set out the Commercial Terms of the Astaldi contract, and I'm going to go through the LMax concept just a little bit again just to make sure that I – that we have a full understanding of that. And I want to talk about some of this just in the context of who was bearing what risk under this contract.

MR. SHAFFER: Sure.

MR. SIMMONS: Okay.

So you have a table there on page 74 beginning at line 5. The first item in the table is Target Cost of Labour, which was $508 million. So my understanding is that Astaldi would be paid its cost of labour as it was incurred up to the amount of $508 million. That's the first step.

MR. SHAFFER: Correct, that's my understanding.

MR. SIMMONS: Right.

And then, if we go to the third line, what we call the LMax is a higher number, $572 million, which was the maximum amount of labour that Astaldi could be paid for under the contract.

MR. SHAFFER: Correct, that's my understanding.

MR. SIMMONS: So that for any labour cost Astaldi had above $572 million, the risk that those costs would be incurred was Astaldi's risk and not Nalcor's risk.

MR. SHAFFER: Yes.

MR. SIMMONS: And in between the target cost of labour of $508 million and the LMax of 572, there was a sharing formula in place so that if the labour went over the target and was below the LMax, the risk in that window was shared between Nalcor and Astaldi.

MR. SHAFFER: That, I would have to look at the agreement again, but okay.

MR. SIMMONS: Okay.

And the profit on labour was treated a little bit differently, in that in addition to Astaldi's actual cost of labour up to the target cost, Astaldi was also paid a fixed percentage of profit on the labour up to the target cost of labour.

MR. SHAFFER: Correct.

MR. SIMMONS: But above the target cost, Astaldi – if their labour costs went above the target, there was no profit payable to Astaldi on any of that portion?

MR. SHAFFER: I would have to look at the agreement again to confirm that, but let's assume you're right.

MR. SIMMONS: All right. So let's assume that's right, then. So the risk in relation to labour profit above the target cost of labour, that was Astaldi's risk –

MR. SHAFFER: Correct.

MR. SIMMONS: – and transferred to them under the contract arrangements?

MR. SHAFFER: Yes.

MR. SIMMONS: Okay.

The contract also included fixed lump sum prices. And for items that are fixed lump sum price, the risk of the cost exceeding what was included in the contract is Astaldi's risk?

MR. SHAFFER: Yes.

MR. SIMMONS: There were unit price items, and a unit price item is $100 a ton for Class A crushed stone, is a typical type of unit price. And there's an estimate of quantity and the contractor gets paid based on the actual quantity used but at the fixed unit cost per unit of quantity.

MR. SHAFFER: Based on actual installation quantities, yes.

MR. SIMMONS: Actual installation quantities.

MR. SHAFFER: Yes.

MR. SIMMONS: So a unit price item has an element of shared risk in it. The pricing, it's entirely at Astaldi's risk whether they priced it right. So if their cost per ton for Class A crushed stone is higher than what they bid, they bear that extra cost. So that's at their risk, and Nalcor's not at risk in relation to the unit price.

MR. SHAFFER: Correct.

MR. SIMMONS: Right. The quantities would be, on the Nalcor risk side, in that if the quantities exceed what's been estimated then Nalcor bears the risk of paying more for extra quantities.

MR. SHAFFER: Correct.

MR. SIMMONS: Okay.

And the only other item in here was, there was travel allowances for travel, and that was a reimbursable item. So on the risk of travel allowances exceeding what was estimated would be on the Nalcor side.

MR. SHAFFER: Yes.

MR. SIMMONS: All right.

So of all these things, all these items, the big ticket cost item in here was the labour, and if the labour exceeded the LMax all of the risk was placed on Astaldi under the commercial arrangements.

MR. SHAFFER: Yes.

MR. SIMMONS: Okay, good.

Now, I won't bring you to it now, but for reference, Mr. Hennessey – one of Mr. Hennessey's reports has a nice summary of some of this. And that's P-01680, where he sets out what some of these terms are, and also addresses some of these risk issues in it.

Change orders; so there is some commentary in the Miller Thomson report about the LMax, where it says that the LMax could be increased by a change order, I believe. And I think you referred to that in your testimony yesterday; that came up as you went through. Do you recall that?

MR. SHAFFER: Yes.

MR. SIMMONS: Okay.

So change orders, generally, a change order is a common feature on pretty well any commercial construction contract. Correct?

MR. SHAFFER: It is.

MR. SIMMONS: And the way they are managed may vary a bit from contract to contract and project to project, but the basic premise is that if there is a change in the scope of the work, additional work to be done, or if there's some change in the assumptions that merits the contractor wanting to be paid extra, there has to be a negotiation between the parties or some other form of approval so that the – there has to be – so that the owner, in this case Nalcor, would have to give prior approval before the change order work is done, and there'd be an agreement on price.

MR. SHAFFER: Yes.

MR. SIMMONS: In general concept, yes.

MR. SHAFFER: And – oh, yes.

MR. SIMMONS: Okay.

And change orders – a change order can change, if the parties agree, they can change anything in the contract.

MR. SHAFFER: Absolutely.

MR. SIMMONS: Pretty much.

MR. SHAFFER: Absolutely.

MR. SIMMONS: Right. So there's nothing special about saying a change order could change the LMax, that's just – that's – that would be obvious to someone who's familiar with construction contracts.

MR. SHAFFER: Nothing special, and the whole point there is that that was up to Nalcor whether or not they wanted to agree to that.

MR. SIMMONS: Right. Okay.

In 10.4.10, which is on page 77, there's discussion of the default and termination provisions in the contract.

MR. SHAFFER: Yes.

MR. SIMMONS: Now, I presume that this section is a description of what the default termination provisions were looking objectively at the contractual arrangements and not expressing any views on their actual application to events as they subsequently have transpired.

MR. SHAFFER: That's correct.

MR. SIMMONS: You're aware now Astaldi is no longer on the project.

MR. SHAFFER: I'm aware of that.

MR. SIMMONS: And Miller Thomson's opinion, which their – if we go to their report, I think it's on page 5, we don't need to go there now and you've repeated it – was that they determined that this contract included the necessary tools for default and termination that they found reasonable for a contract of this nature.

MR. SHAFFER: I think you're paraphrasing, but yes.

MR. SIMMONS: I am; I'm not remembering the exact language.

So one question I have for you is that this provision here refers to termination for cause and what – how that works, and termination for convenience. It's correct – is it correct also that the arrangement can also be terminated for insolvency?

MR. SHAFFER: I would have to check the terms of the contract, but typically in the contracts I've reviewed that's a term, that – it's typically in there.

MR. SIMMONS: Okay. Thank you.

And back on the previous page, 76, there's a description there of the various performance security. You've given a pretty good explanation, I think, of some of this already, in that Nalcor took a parental guarantee and, as I understand it – correct me if I'm wrong – the contracting party was Astaldi Canada, which is a Canadian company which was a subsidiary of the parent Astaldi S.p.A. based in Italy.

MR. SHAFFER: Correct.

MR. SIMMONS: And in order to ensure that the work would be completed, the parent company guaranteed all of the obligations of Astaldi Canada under the contract.

MR. SHAFFER: Correct.

MR. SIMMONS: Right.

The actual precise terms of the guarantee would be a legal matter and I don't think you've expressed any views on how the guarantee would actually work or be enforced.

MR. SHAFFER: That's correct.

MR. SIMMONS: So, is it correct that – a couple advantages of taking a parental guarantee, one is that it's – it has a wide scope in that it's not limited to a dollar amount like a letter of credit is; and, also it adds – it has no real cost to the project, no real cost to Astaldi Canada. So having a parental guarantee as part of the package doesn't add to the cost of getting the work done.

MR. SHAFFER: That I'm not sure about because the question would be, would the contractor, because of that additional risk, run an additional premium in the price.

MR. SIMMONS: Mm-hmm. And the only reason for them to want additional premium in the price is if it costs them something to provide that security. Is that right?

MR. SHAFFER: That, or the risk of the guarantee itself.

MR. SIMMONS: Then there are letters of credit. There are three of them listed here. And letters of credit, for those who may not be familiar with them, they are a tool that are – that is used for, particularly, large construction projects as a form of security in your experience, I guess.

MR. SHAFFER: That's correct.

MR. SIMMONS: Okay.

And a letter of credit is issued by a financial institution, like a bank, and it can be – it will describe the conditions that have to be met for the letter of credit to be called by the owner –

MR. SHAFFER: Correct.

MR. SIMMONS: – generally.

MR. SHAFFER: Correct.

MR. SIMMONS: And they are – and if those conditions are met, the – it's usually a matter of the owner just giving notice to the financial institution saying: these conditions have been met, I want the $100 million. And the financial institution then is obligated to deliver the $100 million.

MR. SHAFFER: That's the way I've seen that –

MR. SIMMONS: General concept.

MR. SHAFFER: That's the way I've seen that, yes.

MR. SIMMONS: General concept, right.

So, letters of credit are very valuable forms of performance security because of the relative ease in accessing the funds –

MR. SHAFFER: Oh, extremely valuable –

MR. SIMMONS: – that need to be accessed.

MR. SHAFFER: – extremely valuable.

MR. SIMMONS: Yeah, okay.

And would you be familiar with what a contractor has to do in order to be able to get a letter of credit from the financial institution, in the sense that whether there are costs to the contractor in providing them?

MR. SHAFFER: I'm sure there's cost that's involved in that, in addition to – there has to be a (inaudible) solvency on the contractor.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: It just depends on the bank and what exactly they want, but –

MR. SIMMONS: Right.

MR. SHAFFER: – there's cost.

MR. SIMMONS: Your experience with the construction matters you've been involved with – would you be familiar with cases where, in order to get a letter of credit, a contractor actually has to put up security, sometimes significant security –

MR. SHAFFER: I've –

MR. SIMMONS: – to an institution, in order to do that?

MR. SHAFFER: Yes, I've seen that.

MR. SIMMONS: Right.

So, letters of credit, then, while very valuable to the owner, do come with a cost, and so there's the potential for that cost to find its way into the contractor's price?

MR. SHAFFER: Absolutely.

MR. SIMMONS: And then the third form of performance security listed here are performance bonds, which again are very standard in construction projects. Correct?

MR. SHAFFER: Yeah.

MR. SIMMONS: Yes, and there are companies, surety companies, that make it their business to issue these performance bonds?

MR. SHAFFER: True.

MR. SIMMONS: Mmm. The contractor will have to pay a fee to get a performance bond and will have to establish that it's got enough solvency to the surety in order to be able to obtain a bond?

MR. SHAFFER: Correct.

MR. SIMMONS: Right.

The fee will vary depending on the value of the bond.

MR. SHAFFER: Correct.

MR. SIMMONS: Right, so the higher the performance bond required by the owner, the greater the cost to obtain it. And we know that those costs find their way into the contractor's price to do the work.

MR. SHAFFER: Yes.

MR. SIMMONS: Concept.

MR. SHAFFER: Right.

MR. SIMMONS: So, for letters of credit and performance bonds, then, there's still a trade-off at play. The higher the value you require for letters of credit and performance bonds, the greater the cost to put that form of performance security in place.

MR. SHAFFER: Yes.

MR. SIMMONS: This – I – this maybe well-known, but it's a tutorial, I guess, to make sure we all understand some of the basics of this.

'Cause this, I think, is relevant to the conclusions that you've expressed already in your main testimony that when your consultants – in particular, Mr. Hennessey – looked at this performance security, the conclusion that I think was expressed to you and you've passed on is that this mixture of performance security consisting of a parental guarantee, various letters of credits and the performance bond are one which is consistent with the approach that Mr. Hennessey has seen in other large projects?

MR. SHAFFER: Absolutely, yes.

MR. SIMMONS: Now, there's one point dealt with by Mr. Hennessey that I wanted to just bring you back to, and we – if we can bring up, please, Exhibit P-01680.

Actually, we may go to – yeah, 01680.

This is Mr. Hennessey's report to Grant Thornton dated November 14, 2018. The subject says: "Muskrat Falls – Clarifications to RWBC CH0007 Memorandum." Do you see that one?

MR. SHAFFER: Yes.

MR. SIMMONS: Okay.

And the – on the bottom of page 1 there's a heading that says "6. Invoicing of Labour Costs," and that continues over on to page 2.

So, how did this clarification come about? Was this a result of a question or a request you submitted to Mr. Hennessey for clarification of something in his original report on his review of the CH0007 terms?

MR. SHAFFER: It was.

MR. SIMMONS: And if we look at item 6 here, comparing the first paragraph under item 6 to the main report, this appears to be a quote of what he reported originally. And you spoke to this earlier and the gist of this is that the timing of the payments for labour to Astaldi was such that until they hit the LMax they were paid as their labour cost was incurred instead of measuring the payment against the construction progress achieved.

MR. SHAFFER: That's correct.

MR. SIMMONS: Right, yeah.

And Mr. Hennessey looked at that, and so what was it about that that caused you, then, to want to seek a clarification from him, or what was the question you posed to him arising out of that, if you can recall?

MR. SHAFFER: I'm not sure I remember that. I just don't remember.

MR. SIMMONS: Okay. So –

MR. SHAFFER: I think if you look at the clarification, maybe that would give you – give light –

MR. SIMMONS: Right.

MR. SHAFFER: – to it.

MR. SIMMONS: Well, let's go to page 2 of the document, under Clarification.

And it says "RWBC …" – which is Block – "… was asked to clarify its statements in paragraph 6." And the clarification is: "The approach Nalcor used for reimbursing the labour costs under the contract (i.e. paying them as costs were incurred and not linking the progress payments to work put in place in the periods of time covered by the progress payments) is similar to other target price utility industry contracts we have reviewed."

So in the course of your investigation, or the opinions that you obtained, did you receive – was there anything expressed to you that was contrary to this determination by Block that this was a typical provision –

MR. SHAFFER: Not at all.

MR. SIMMONS: – for these contracts.

MR. SHAFFER: Not at all.

MR. SIMMONS: Good. Okay, thank you.

Okay, so the – that brings us to the Valard contract, which begins on page 79, section 10.5. I don't have very much to ask you about this.

You've spoken about the geotechnical risk already, and you've pointed out that the view was that the contractual arrangements for dealing with geotechnical risks were not unusual and were fairly standard.

MR. SHAFFER: Correct.

MR. SIMMONS: Correct.

And so I'll bring you to page 83, section 10.6 – Overall Comments. And I think this section addresses comments on both the Astaldi and Valard contracts. So this isn't confined to one or the other, as I read it. Is that correct?

MR. SHAFFER: Correct.

MR. SIMMONS: Yeah. Three bullets there. This kind of ties back to the discussion we just had about the performance security.

And it says: "As noted above, both the Astaldi and Valard Contracts did allocate a certain portion of the risk to …" Valard. "Examples of this are as follows: Letters of credit not covering 100% of the contract price."

So was there – is there any view being expressed here as to whether there should have been or could have been letters of credit covering 100 per cent of the contract price, say for the Astaldi contract?

MR. SHAFFER: No, these are just statement of facts.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: And all this is subject to negotiation between the parties.

MR. SIMMONS: Right.

In your experience, for a contract like the Astaldi contract, if it's $1 billion, have you ever seen an example where performance would be secured by a $1-billion letter of credit?

MR. SHAFFER: I have not.

MR. SIMMONS: The second bullet deals with limitation of liability, which we didn't actually talk about, but am I correct that in the Miller Thomson report the limitation of liability provisions were looked at and found to be reasonable under the circumstances?

MR. SHAFFER: Yes.

MR. SIMMONS: And then the third bullet is that performance bonds were not for the full amount of the contract and were for $150 million for Astaldi and none for Valard. So I presume, just as for letters of credit, there's not a – no view being expressed here as to whether that's good, bad or indifferent. It's just a statement of fact.

MR. SHAFFER: Correct.

MR. SIMMONS: Yeah.

Similar to the letter of credit issue for – in your experience – for contracts of the magnitude of these in the $1-billion range, have you seen instances where performance bonds for the full value of the contract have been available?

MR. SHAFFER: I can't recall that one.

MR. SIMMONS: So then on the last paragraph of this page you've got a quote there from Miller Thomson. And I'll go to the Miller Thompson report just to deal with it. This is a quote directly from their report. The report is P-01679, please. And I believe we're going to go to page 8.

Okay, so you have that, Mr. Shaffer?

MR. SHAFFER: I see it.

MR. SIMMONS: Okay. Let's scroll down, please, to the section that's headed: Conclusion. Okay, you can stop there. So, this paragraph is the one, I think, that's quoted in your report, this conclusion paragraph.

MR. SHAFFER: Yes.

MR. SIMMONS: So, the first sentence is: "In conclusion, while certain contractual terms included in the Agreements were negotiated to be more favourable to the Contractors than as originally included in the Owner's template, we did not locate any contractual terms included in the Agreements that were clearly unsuitable for an agreement of this type."

My question concerns the reference to certain contractual terms included in the agreements that were negotiated to be more favourable to the contractors.

So I looked at Miller Thomson's report to try and identify where those were, which ones they were that had been identified here.

MR. SHAFFER: Yes.

MR. SIMMONS: And all I can see is if we look back at page 1, at the bottom of page 1, which is the Executive Summary, it says: "In brief, we have concluded that the Agreements generally provide the tools necessary for an owner of the Project to proceed toward completion of the Project. Although we have identified certain limited concerns about the final Agreements, it is our view that these points do not meet the threshold of being a significant negative impact on the Project."

And, there's a footnote 1 there by certain limited agreements and if you go to the footnote at the bottom, it refers us to Appendix A. So, I don't know how much opportunity you've had to go back over this report before taking the stand here now, but are you aware of any other reference in this report that could be the contractual terms that were negotiated to be more favourable to the contractors, other than those footnoted in Appendix A here?

MR. SHAFFER: I am not.

MR. SIMMONS: Okay.

And that Appendix A starts on page 10, please. I see three contractual provisions dealt with for the Astaldi agreement. The first one here is section 21.4, which is the limitation of liability section we referred to earlier. And I just want to bring you to the next page; it's page 11 of the appendix. I'm not sure what page of the PDF – yeah, same number. Scroll down please; up a little bit; stop there.

So, the final line of the first paragraph we can see on the screen there which is the end of the analysis of this section says: "*We do not believe this provision was unreasonable*." Do you see that?

MR. SHAFFER: Yes.

MR. SIMMONS: All right.

So, I gather than that although Miller Thomson flagged this as something that transferred some risk to Nalcor, their conclusion was that this was a reasonable provision nonetheless.

MR. SHAFFER: Yes.

MR. SIMMONS: Right.

And I won't go through the others in Appendix A, but the other provisions they've identified here I think they've come to the same conclusion that they saw nothing unreasonable about the way the limitation of liability and the indemnification provisions were drafted.

MR. SHAFFER: I think that's correct.

MR. SIMMONS: Okay.

So let's bring this back to page 8. Under Conclusion, I read the first sentence. So, I want to go to the last sentence that begins on – in the third last line where it says: "The contractual terms of the Agreements …."

MR. SHAFFER: Yes.

MR. SIMMONS: "The contractual terms of the Agreements reflect a procurement/contractual strategy employed by the Owners to limit the aggregate cost of the Project, and in so doing, allocated a higher proportion of risk to the Owners.

So, again, the only thing I could see in the report to kind of support this idea of allocating a higher proportion of the risk was those few things they flagged in Appendix A.

MR. SHAFFER: I spoke to them about this conclusion –

MR. SIMMONS: Okay, yeah.

MR. SHAFFER: – and –

MR. SIMMONS: And because we're not going to have them here to give evidence –

MR. SHAFFER: That's right.

MR. SIMMONS: – as far as I know, so I'd appreciate hearing what they told you about this.

MR. SHAFFER: It's really what I said yesterday –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – or maybe the day before, I forget, but –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – but where the provisions of the LMax and the lump sum provisions in the agreements that limit the cost of the project to Nalcor –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – that as a result of that the contractors are going to want more money out of it in the pricing, and that's what they meant.

MR. SIMMONS: Right.

So it's the same concept if you transfer more risk to the contractors upfront, their price gets a bit higher upfront.

MR. SHAFFER: Correct.

MR. SIMMONS: If you want to keep the upfront price lower, you end up having to assume more of the risk yourself.

MR. SHAFFER: This transfer means you're going to be paying more.

MR. SIMMONS: Good. Thank you, okay. Straightforward.

And if we go back to your report then at page 84, where you express observations and findings on the review of the contractual terms, the last bullet on that page, that's just a quote of that same sentence we were just looking at, so we should interpret that in the same way that you've just advised us.

MR. SHAFFER: Exactly.

MR. SIMMONS: Okay. Good.

The next section then is section 11, Overall Project Management Structure Nalcor Developed and Followed, and I want to bring you to 11.5, please, which begins on page 89. And this is the section dealing with the review of the hydroelectric project experience of various people who were on the project management team and involved in the project that you've spoken to earlier.

So, the first thing I wanted to confirm with you is that as you've said, the – all the design function remained with SNC after the change from the EPCM contractual model to the integrated management team model.

MR. SHAFFER: Yes.

MR. SIMMONS: Right.

And has there been any issue at all with SNC's experience in hydroelectric plant design?

MR. SHAFFER: Not that I'm aware of.

MR. SIMMONS: Right, and then in fact SNC is, I think, well known for having quite a depth of experience through their work for Hydro-Québec and elsewhere.

MR. SHAFFER: That's –

MR. SIMMONS: So you'd be –

MR. SHAFFER: – why Nalcor –

MR. SIMMONS: – aware of that?

MR. SHAFFER: That was why Nalcor chose them.

MR. SIMMONS: Right.

So then on page 90 and 91 there's two tables where information concerning the experience of various people are presented. Going first to the table on 91, which continues over to 92, there are individual people identified and their positions. Now, looking at these, these seem to me to be sort of functional positions in that things like the Ready for Operations Manager, Hydroelectric Construction Specialist, Senior RCC – that's roller compacted concrete – Construction Engineer are people who will have actual involvement in the performance of the work.

Is that your understanding?

MR. SHAFFER: Seems that way based on their titles.

MR. SIMMONS: Right, okay.

So what did you do, if anything, to actually look into what the requirements were for these positions, what the people's duties were in order to assess what kind of skill sets, background, experience would be appropriate for each of those positions?

MR. SHAFFER: We did not do anything with that. There were résumés that we did review –

MR. SIMMONS: Right.

MR. SHAFFER: I don't recall if we reviewed – I think, we reviewed all of these folks actually now that I think about it.

MR. SIMMONS: Okay.

So, it's one thing to review their resumes and see what experience they had, but if the question is did they have enough experience on, say, hydroelectric projects, you'd need a standard to compare it to.

MR. SHAFFER: I would agree with that, but we didn't do that.

MR. SIMMONS: You didn't do that.

MR. SHAFFER: No.

MR. SIMMONS: No.

So although we've got a table here, listing what their hydro experience is and their megaproject experience is, do I understand then that you're expressing no opinion as to whether there's enough of one or the other, or not enough or –?

MR. SHAFFER: We're just stating again, facts here –

MR. SIMMONS: Yes.

MR. SHAFFER: – of what we received from Nalcor –

MR. SIMMONS: Yes.

MR. SHAFFER: – those three pages –.

MR. SIMMONS: Yes.

MR. SHAFFER: – that we got from them regarding these folks and that's what we're compiling here.

MR. SIMMONS: So if someone wanted to say: Should there have been people with more megaproject experience or more hydro project experience, that's going to have to be explored by someone else. That's not something you have expressed any view on.

MR. SHAFFER: That's correct.

MR. SIMMONS: So, same thing then if we go the table on page 90. These are people that were in more senior positions in the project management team, I think – project manager, project director, deputies to those people and so on.

Same question: Did you look at the skills, expertise, background that would be – that would be necessary for each of those positions and compare that to the experience in both megaprojects and hydroelectric that each of those people had?

MR. SHAFFER: No. I guess – but again, I guess the whole point of this was to compile the data for the reader of the report and for the Commissioner –

MR. SIMMONS: Okay.

MR. SHAFFER: – and then tie it then into what Mr. Flyvbjerg indicated in his testimony.

MR. SIMMONS: Yup.

MR. SHAFFER: And that's my only comments on all this.

MR. SIMMONS: And that's it, nothing more.

MR. SHAFFER: That's it.

MR. SIMMONS: Well, so you may not in a position to answer this at all, but for the table of the more senior people on page 90, I've heard it expressed to me that the skill sets that the project manager, the project director, the general project manager need are construction management skill sets, as opposed to hands-on knowledge about particular types of construction, because they are managers of the project in the broadest sense.

Is that something you have given any consideration to?

MR. SHAFFER: Again, just tying it in – back in to what Mister – Professor Flyvbjerg indicated –

MR. SIMMONS: Okay.

MR. SHAFFER: – in his testimony.

MR. SIMMONS: Nothing more than that.

MR. SHAFFER: Yes.

MR. SIMMONS: All right.

Let's go to section 11.12, which is on page 104. It's headed: Transmission vs. Generation, and this discusses what we'd been referring to as the bifurcation of the project – happened in 2016, when there was a change in senior leadership in Nalcor. And the senior management for the project was split, so that there was a project director now for generation at the Muskrat Falls site and some other things, and for transmission, the construction of the transmission lines.

So, similarly, you've expressed – you've, sort of, told some story here and included some quotes from some people, where there's some views expressed from the project management team and some views expressed from Mr. Marshall, the new CEO. I take it then that you're just presenting some facts here, some results of some things that you heard. And you're not engaging in any evaluation of whether the decision to split the project was good, bad or what affect it had.

MR. SHAFFER: Correct.

MR. SIMMONS: And in particular, have you done any analysis as to whether that decision had any impact on cost or schedule?

MR. SHAFFER: No.

MR. SIMMONS: Okay.

So I think you've dealt with section 12, dealing the procurement strategy in your direct evidence, I don't have any questions for you on that.

Section 13 dealt with risk assessment and you've read that for us. The only question that I had about the risk assessment section is: This was dealt with a fair bit in Phase 1 of the Inquiry and the hearings that took place last falls, ending December 21, did you follow that evidence or have reference to it when you prepared this section of your report?

MR. SHAFFER: I don't recall what was in the other report, it was a while ago –

MR. SIMMONS: No, not whether it was in the report, because your report was filed at the outset of that session and there was considerable evidence called from witnesses in the hearing in Phase 1 addressing many of the issues –

MR. SHAFFER: You're saying (inaudible) –

MR. SIMMONS: – discussed in the report.

MR. SHAFFER: – I understand that.

MR. SIMMONS: Yes.

MR. SHAFFER: I don't see it in here, so I don't think we did.

MR. SIMMONS: Okay.

So, someone else prepared this section other than you, did they?

MR. SHAFFER: Well, this was written by one of my team members.

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: I certainly reviewed it –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – traced it–

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – rewrote certain sections of it –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – and finalized it. And adopted it as my work product.

MR. SIMMONS: So, do you know if the person who prepared the drafts for you used or had reference to any of the evidence that was called in Phase 1 in conducting this – preparing this?

MR. SHAFFER: I assume so, if it was – 'cause it was on the website.

MR. SIMMONS: Well, don't assume. Tell me if you know.

MR. SHAFFER: I have no direct knowledge.

MR. SIMMONS: All right.

That brings us to part 14, which is the SNC risk report and I'm on the wrong copy here– and this starts on page 121.

I just want to run through just a little bit of timing here to put some events in sequence for you. Can we go back to page 101 of the report for a moment, please?

And lines 8 to 11. This is where you've identified that it was March 12, 2013 that Mr. Bennett sent an email announcing that the organizational structure had been implemented for the integrated management team. So, that's, kind of, a – that March 12, 2013 is the date that I think we can take as being a point when the change from EPCM to Integrated Management Team had been implemented. Is that consistent with your understanding?

MR. SHAFFER: Well, the process started in 2012 as I understand it.

MR. SIMMONS: Started '12 but certainly – so it started in 2012 and certainly, by March 12, 2013, there's an announcement within the project of – that "*… the organization structure for the Integrated Management Team responsible for execution for engineering, procurement and construction … has been finalized*."

So, it seems to be the point where the project – that Nalcor is reaching – is reaching a point where they say they've got the reorganization done.

MR. SHAFFER: You can certainly infer that from the way this was written.

MR. SIMMONS: So, that's March 12, 2013.

Now, let's take a look, please, at the what we've been calling the SNC Risk Report, which is P-01811, page 5.

Scroll down, please. Okay, stop there.

There's a section there headed: 4. Executive Summary Report and it says: "The first LCP project risk register was drafted April 17th, 2013, by a group of selected members from the Montreal, Panama and Newfoundland-Labrador offices…." And it goes on from there.

Now I've taken this date, April 17, 2013, from the reading of your report to be when SNC started its internal work on preparation of the report.

Is that consistent with your understanding?

MR. SHAFFER: It is.

MR. SIMMONS: Okay.

So that was about a month after the process of changing from EPCM consultant to integrated project management team had been completed on –

MR. SHAFFER: About a month –

MR. SIMMONS: – the project.

MR. SHAFFER: About a month after Mr. Bennett's formal announcement of it.

MR. SIMMONS: After his announcement –

MR. SHAFFER: Yes.

MR. SIMMONS: – right.

Now, it was your understanding that the effect of the change from – SNC's change from EPCM to the integrated team was that SNC, while retaining responsibility for the design, now became a – for want of a better word – a supplier of personnel for the team that was going to do the construction management and procurement work instead of having the responsibility for doing that work themselves.

MR. SHAFFER: I can only go based on what Nalcor's answer to that question was –

MR. SIMMONS: Yes.

MR. SHAFFER: – that's in the report –

MR. SIMMONS: Yes.

MR. SHAFFER: – and that basically, they would be responsible for the engineering and design.

MR. SIMMONS: Right.

And are you aware that they continued to supply people who formed part of the integrated project management team involved with procurement and construction management?

MR. SHAFFER: I have a general understanding of that.

MR. SIMMONS: Right. Okay.

In your interviews with people from SNC, did you gather anything about their position about that change? About whether it was something they agreed with or disagreed with? Or whether they regarded it as being advantageous or disadvantageous?

MR. SHAFFER: I know there was issues with the change of how they felt about it –

MR. SIMMONS: Mm-hmm.

MR. SHAFFER: – because I remember there being a lot of correspondence going back and forth between Nalcor and SNC about them wanting to be taken off as EPCM on the letterhead and whatnot. As far as how they felt about the change itself, I just don't recall. I'd have – I would have to review the interview summaries again.

MR. SIMMONS: Okay.

Was it your perception that the change was a reduced role for SNC in the project?

MR. SHAFFER: Oh, absolutely.

MR. SIMMONS: Right.

So, did you consider that, when looking at this issue of SNC preparing an internal report on risk in April of 2013, only a month after the process of reducing their responsibilities on the project had been completed?

MR. SHAFFER: No, there's no need for me to consider that.

MR. SIMMONS: Okay. All right.

Just a couple of questions for you about the interview with Mr. Card, who was the CEO of SNC, who, I think, visited Nalcor in April of 2013, which was around the time that this report – the SNC risk report was prepared.

MR. SHAFFER: Yes.

MR. SIMMONS: And your – why don't I bring you to Exhibit P-01838, which is the Grant Thornton interview notes for his interview.

Okay, scroll down just a bit, please. Okay, you can stop there.

These interview notes have sections that are highlighted. And from my review, it looks like the highlighted portions are the pieces that are quoted in your report.

Is that right?

MR. SHAFFER: Could be, yeah.

MR. SIMMONS: Do you know if it is?

MR. SHAFFER: I would have to go through each highlight, but let's assume it is –

MR. SIMMONS: Okay.

MR. SHAFFER: – if you have already done that.

MR. SIMMONS: All right.

MR. SHAFFER: Let's save time.

MR. SIMMONS: All right.

So, let's look at the second page, please. Page 2.

Okay, scroll down a little? Okay, you can stop there.

Now, this is not a big point, but if you look at the bottom of the screen there, there's a highlighted portion there which says: "Our key client was really upset." And when I read this in your report, I interpreted the key client as being Nalcor, as Mr. Card saying he was visiting Nalcor, and Nalcor was really upset.

When I look at the portion above it that is not highlighted, there's a reference there to Hydro-Québec, and it seems to be a suggestion that SNC met with resistance from Hydro-Québec to them taking on this work from Nalcor.

What can you tell me about that? And what I'm specifically wondering is if the reference to their key client was a reference to Hydro-Québec rather than Nalcor. It's really a point of clarification on that.

MR. SHAFFER: Yeah, I'm not sure I can answer that, Mr. Simmons.

MR. SIMMONS: Okay.

MR. SHAFFER: I just don't know.

MR. SIMMONS: All right.

MR. SHAFFER: I took this to mean the same as you that it was Nalcor that was upset.

MR. SIMMONS: Okay.

Did you look at these original interview notes? Or did you just work from the draft of the report?

MR. SHAFFER: No, I read the original interview notes too.

MR. SIMMONS: Okay, all right.

Scroll down, please. Okay, stop there.

In the last bulleted paragraph there, there's a highlighted portion and a portion not highlighted, and the potion that's not highlighted says: "We discussed what we felt were advantageous to us playing a more prominent role in helping them deliver the project."

So did you in your interviews with Mr. Card or others with SNC, did you explore whether or not the actual purpose of this visit in April was to see whether there was an opportunity for SNC to become more involved in the project again?

MR. SHAFFER: I can certainly infer that from what's written here.

MR. SIMMONS: Okay.

So if we go back to your report now, I'll take you to page 135, which is the Observations and Findings section of this review of the SNC risk report, and the interviews that were conducted.

And I wanted to ask you about the first bullet there, which is at lines 9 to 14. And it reads: "According to Bob Card, former CEO of SNC Lavalin, a meeting took place in April 2013 where the SNC Risk Report was discussed."

Now, I've read through the quotes in the report from your interview with Mr. Card, and I've looked at the interview notes that we have on the screen there right now for Mr. Card, and I do see him saying that the risks described in the report were discussed. But I do not see him saying anywhere in there, even that the existence of a report was discussed in those meetings.

MR. SHAFFER: I agree with you.

MR. SIMMONS: Okay.

So this is not a perfectly accurate statement here, when it says: "… where the SNC Risk Report was discussed." It was the risks –

MR. SHAFFER: It was the –

MR. SIMMONS: – not the risk report.

MR. SHAFFER: It was the risks in the report that were discussed.

MR. SIMMONS: Right.

And in fact, in the interview, at one point Mr. Card is asked, you know, if – something to the effect of if the existence of the report was disclosed to Nalcor, and he couldn't say if it was or wasn't.

MR. SHAFFER: That's correct.

MR. SIMMONS: Okay.

So we don't have evidence from them saying that in those meetings – that there was actual discussion that a report exist – existed.

MR. SHAFFER: No. But I mean, the whole basis of the report was the risk.

MR. SIMMONS: Right.

MR. SHAFFER: And that was discussed.

MR. SIMMONS: Okay.

Are you familiar with the Aconex management system that was used by the project?

MR. SHAFFER: My team is.

MR. SIMMONS: Okay.

I understand it to be a – it's one of these web-based, cloud-based document management things that projects can use. And the owner has access to it and every contractor has access to it.

MR. SHAFFER: Right.

MR. SIMMONS: And it's used as a means for transmitting documents from one to the other and it maintains a complete record of every document and every transmittal.

MR. SHAFFER: And my understanding also is once it goes it goes in, it can't get out.

MR. SIMMONS: It can't come out.

MR. SHAFFER: Right.

MR. SIMMONS: Right, exactly.

And are you aware that on this project, letters that were exchanged between Nalcor and contractors on a wide range of issues, they went through Aconex, so that there's a good record of what all the letter communication has been?

MR. SHAFFER: I agree with that.

MR. SIMMONS: Right.

And are you aware that SNC did not submit this report through Aconex?

MR. SHAFFER: I'm aware they didn't submit it through Aconex. There was no evidence that was presented to me, any proof of delivery any other way.

MR. SIMMONS: Right.

MR. SHAFFER: Which is why I concluded that I'm not sure if Nalcor or anybody at Nalcor saw that report.

MR. SIMMONS: Okay, good.

Okay.

Thanks very much, Mr. Shaffer, That's all the questions I have for you.

MR. SHAFFER: Thank you, Mr. Simmons.

THE COMMISSIONER: Concerned Citizens Coalition.

Do you want to start now or do you want to wait 'til after lunch? It's – I noticed it's almost 20 after 12.

MR. BUDDEN: We need about 45 minutes, so we might be just as well to wait – it's up to you.

THE COMMISSIONER: Well, if you want to start now, it's fine with me. We can go to 12:30. We just got about 10 minutes, that's all. I just don't want to break it up for you in a –.

MR. BUDDEN: I'll start.

THE COMMISSIONER: Start now? Good. Okay.

I think as well, we should just confirm that Exhibit 01870 is now marked as an exhibit. That's the one that was referred to by Mr. Simmons.

MR. BUDDEN: Good day, Mr. Shaffer.

My name, as you know, is Geoff Budden. I represent the Concerned Citizens Coalition.

MR. SHAFFER: Good afternoon.

MR. BUDDEN: Good afternoon.

Most of the questions, if not all of them, will be to do with the – with your forensic audits.

So, I will ask Madam Clerk, perhaps we can start by turning to page 6 of that audit.

This brief passage here that I'll read to you, Mr. Shaffer, it's a – it begins at line 18 and, I thinks, continues through 23, but I'm skipping 19 and 20. Generally, I'm quoting now from line 18: "Generally, as part of our Forensic Audit, we performed the following procedures:" There's that little bit I'm skipping then the line 21: "Conducted interviews with and/or attended presentations from: Nalcor executives, senior management, other employees and contractors; industry experts; concerned citizens; and, past members of the Muskrat Falls Oversight Committee."

So, I'm going to ask you some questions about those meetings who you met with. And as a starting point, we've received a lot of documents, I haven't gone through every one of them, but I haven't come across a comprehensive list of every person you met with.

To your knowledge, is there such a list?

MR. SHAFFER: A document that indicates every person that we met with?

MR. BUDDEN: Yes.

I mean, you talked to categories of people.

I guess what I'm asking: Is there a document I can refer to that says, you know, this is the list of people or organizations we met with?

To your knowledge, does any such document exist?

Did you interview the Consumer Advocate, Mr. Dennis Browne?

MR. SHAFFER: I don't remember.

MR. BUDDEN: Sure.

Did you interview Ms. Julia Mullaley who is the Auditor General of Newfoundland and Labrador and who, we understand, was this past fall, the fall of 2018, doing an audit of Nalcor? Did you have cause to interview her?

MR. SHAFFER: I don't remember. She was on the oversight committee?

MR. BUDDEN: I'm not sure. I know she was the Auditor General and that's really the capacity I'm most interested in.

MR. SHAFFER: I just don't remember.

MR. BUDDEN: Okay, sure.

So you – it follows that you can't say now to what degree, if any, any audits she may have done would have informed your forensic audit.

MR. SHAFFER: Mr. Budden, I – honestly, we've been doing this for a year and we've interviewed a lot of people. And I just don't have a list off the top of my head. I'm not sure how much I could help you on that one.

MR. BUDDEN: Sure.

So, I guess your answer is that you cannot recall right here today whether you interviewed the Auditor General of Newfoundland and whether any audits she may have done may have informed your forensic audit.

MR. SHAFFER: Oh, no. I – no, we didn't rely on any of her work for anything.

MR. BUDDEN: Okay.

MR. SHAFFER: If that's what you're asking.

MR. BUDDEN: Sure. It's part of what I'm asking.

MR. SHAFFER: Yeah. No, absolutely not.

MR. BUDDEN: Sure.

THE COMMISSIONER: Just before you go on, Mr. Budden, just on that point.

I think I would like to have a list of everyone that was interviewed.

Is that possible to produce that list?

MR. SHAFFER: Sure.

THE COMMISSIONER: And –

MR. SHAFFER: We'll prepare that.

THE COMMISSIONER: – if that's produced, can it be provided to Commission counsel, so that we can have it actually marked as an exhibit?

MR. SHAFFER: Yeah. We'll take care of that, Commissioner.

THE COMMISSIONER: Okay, thank you.

MR. BUDDEN: Thank you.

You're – that quote I just gave you referred to concerned citizens – lower case.

Did you – do you recall or, I guess, I'll put it this way: My understanding is you did not interview for phase – your Phase 2 audit – the officers of my client, the Concerned Citizens Coalition, Mr. Penney, Mr. Vardy and Mr. Sullivan.

I guess two questions: Why did you not interview those, the Concerned Citizens Coalition? And who were the concerned citizens whom you did interview? At least some of them.

MR. SHAFFER: Well, I don't remember their names, but I remember sitting in an interview that you were present at.

MR. BUDDEN: Yeah, that was in advance of the Phase 1 audit – back last June.

MR. SHAFFER: True –

MR. BUDDEN: Mm-hmm.

MR. SHAFFER: – but I thought we also went into areas that might have been having to do with the construction phase of this thing.

MR. BUDDEN: Okay.

MR. SHAFFER: I thought we talked about the construction itself too, at that interview.

MR. BUDDEN: Okay, the one in June of 2018?

MR. SHAFFER: I believe so. I would have to check the notes again. But I just can't imagine limiting the interview just to one phase, when I'm only gonna get, basically, one crack at these folks.

MR. BUDDEN: Okay.

It was a long interview, but my recollection – again, not giving evidence, was that it mostly did focus on the pre-sanction period, but –

MR. SHAFFER: It could have, but again, I remember it being about a two-day interview, if I recall.

MR. BUDDEN: Pardon?

MR. SHAFFER: I remember it being about two days. I thought we did this over the course of two days, if I remember correctly.

MR. BUDDEN: Okay.

I remember one long day.

MR. SHAFFER: Oh, could have been – might have seemed like two days, Mr. Budden.

MR. BUDDEN: Sure.

Do you recall which members of the oversight committee Grant Thornton did meet with? The individuals?

MR. SHAFFER: No.

MR. BUDDEN: Okay.

Why was – and I realize some date had to be picked, but was there any particular reason March 31, 2018 was selected as the end date for the forensic audit?

MR. SHAFFER: That was the latest financial forecast of costs that was received from Nalcor at the time that we started the analysis. We did receive an update as of October. You couldn't go back and – based on what we were told, you couldn't go back in-between and get the months in-between there, 'cause all they're doing is just updating it – just overwriting it basically, just updating it.

MR. BUDDEN: Okay, thank you.

Madam Clerk, perhaps we could turn to page – actually, just before we do that – obviously, the sanction date is a very important date. As we all know, a lot of attention was given to that. But from reading the introductory section of the report, it seems fairly obvious that the financial close date, which, I believe, is November 2013, was perhaps a date of equal significance or at least, great significance.

You would agree with that?

MR. SHAFFER: I agree.

MR. BUDDEN: Okay.

Perhaps, Madam Clerk, we could turn to page 13.

And when we do get there, Mr. Shaffer, I'd like you to read from line 27. And then it carries over, the first three – the first two lines of the following page. So begin, if you would, at page – on line 27 of page 13.

MR. SHAFFER: Out loud?

MR. BUDDEN: Yes, please.

MR. SHAFFER: Okay.

"Accordingly, if Nalcor did not complete the project after the execution of the FLG, the GNL would have still been required to fund the costs to complete the project under Canada's direction." Meaning Canada's stepping rights as I understand it.

MR. BUDDEN: Mm-hmm.

MR. SHAFFER: "Therefore, prior to the execution of the FLG, Nalcor had the ability to stop the construction of the project without funding the remaining cost to complete. However, once the FLG was executed Nalcor/GNL were committed to funding the project."

MR. BUDDEN: Okay.

So I take that to mean that really even though the province had sanctioned the project, really at anytime up to financial close, the project could have been abandoned with nothing but the sunk cost having been spent or committed.

Would that be correct?

MR. SHAFFER: I don't think it'd be that easy. I mean, you would have also any contracts that would've been potentially entered into prior to that. You could've – there might have been damages as a result of litigation and what not. But that aside, yes, I would think so. But there's going to be additional costs as a result of that.

MR. BUDDEN: Sure.

Madam Clerk, perhaps we could go back to page 2 – to page 12.

And there's a fairly long quote there, but it's important, so I'd like you to read – again, out loud – lines 1 through 18, of page 12.

MR. SHAFFER: "As indicated above, prior to financial close, bids were received from contractors whom ultimately were hired which collectively, exceeded the DG3 budget by approximately $600 million, a twenty five percent (25%) overage. The amount of this overage exceeded the DG3 tactical contingency amount ($368 million) by over $230 million. Hence, prior to financial close, Nalcor should have been aware that the contingency amount included in DG3 budget was insufficient.

"Furthermore, Nalcor should have known that by April 2013 when the CH0007 bids were received (four months after sanctioning) that the DG3 contingency amount was exhausted. Accordingly, Nalcor knew that the remaining budget of $4.2 billion ($5.8 billion which is base plus escalation, less $1.6 billion subtotal of DG3 budget at April" – 30 – "2013) after the consideration of CH0007 did not have any contingency remaining."

MR. BUDDEN: Okay.

MR. SHAFFER: Keep reading?

MR. BUDDEN: So, I take from that, and correct me if I'm wrong, that the Nalcor leadership, the executive and the leadership team, knew or ought to have known – subsequent to sanction, but well in advance of financial close – that the business case for Muskrat Falls had deteriorated, it wasn't as strong as it would've appeared at sanction.

MR. SHAFFER: Well, I mean, they certainly knew that the contingency was used up. I mean, we were told that, basically, by Jason Kean. And they knew they were going to exceed their contingency that was set at sanctioning.

MR. BUDDEN: Okay.

MR. SHAFFER: They also knew that the bids were coming in higher, at the levels that were set when the estimate was made due to a number of reasons, mostly labour productivity issues that the contractors were concerned about.

Does that answer your question?

MR. BUDDEN: Yes, it does.

MR. SHAFFER: Okay.

MR. BUDDEN: Perhaps, Madam Clerk, we could turn to page 21?

THE COMMISSIONER: I notice it's 12:30 now.

MR. BUDDEN: We can break here.

THE COMMISSIONER: Break here is fine?

MR. BUDDEN: Sure.

THE COMMISSIONER: Okay.

So, we'll break here now, and we'll return at 2 o'clock this afternoon.

MR. BUDDEN: Thank you.

CLERK: All rise.

Recess

CLERK: This Commission of Inquiry is now in session.

Please be seated.

THE COMMISSIONER: All right. Mr. Budden, when you're ready.

MR. BUDDEN: Good afternoon, Mr. Shaffer.

MR. SHAFFER: Good afternoon.

MR. BUDDEN: Just before we broke, you read to us a rather – a long excerpt from page 12, lines 1 through 18, which basically talk about how not long after sanction, and certainly well before financial close – the DG3 – bids are already coming in in excess of DG3 numbers, the contingency had been largely exhausted and so forth. I guess my question is, had that situation or any key elements of it, to your knowledge, had any of that been conveyed to the board of directors of Nalcor in advance of financial close?

MR. SHAFFER: I don't know.

MR. BUDDEN: Okay. So you haven't seen any evidence that it had been?

MR. SHAFFER: Correct.

MR. BUDDEN: Or you simply can't recall?

MR. SHAFFER: No, I haven't seen any evidence that it had been.

MR. BUDDEN: Okay. Same question, but with respect to Government of Newfoundland and Labrador civil servants. Have you seen any evidence of that situation – that knowledge of that situation was conveyed to any of them in advance of financial close?

MR. SHAFFER: No.

MR. BUDDEN: Okay. Politicians of the Government of Newfoundland and Labrador? Same question.

MR. SHAFFER: No.

MR. BUDDEN: Okay.

If we could turn to page 21, Madam Clerk?

There's a chart there, Mr. Shaffer, that – and the box in the upper left-hand corner – I'll just read it to you and then ask you to contextualize this a little bit for us.

"*Mar 2014 Briefing to CEO by Project team plus emails associated with Nalcor Board update and updated AFE'*s." And all of that falls under a heading AFE revision 1 in June 2014 for $6.99 billion (9 months later).

Can you tell me a little bit about what that – inform us a little bit about what all that is about, what that's saying?

MR. SHAFFER: No, it doesn't fall under the heading above it. It's the note that's below it.

MR. BUDDEN: Okay, so that's the September 2, 2015, revision?

MR. SHAFFER: Correct. In other words, as of March of 2014, the project management team presented to the executive that the costs was escalating and it's probably going to be closer to $7.5 billion. And the AFE revision for that was done 18 months later on September 15 for $7.65 billion.

MR. BUDDEN: Okay. So the board of directors did not know by financial close, which I believe is November 2013, but they did know by four months later, March 2014 –

MR. SHAFFER: Well –

MR. BUDDEN: – that the budget was being exceeded?

MR. SHAFFER: Well, I don't know if the board knew it because AFE wasn't revised until September of 2015.

MR. BUDDEN: Okay. So what was the update to the Nalcor board? What did that update consist of?

MR. SHAFFER: In September of 2015?

MR. BUDDEN: Well, just where I'm reading here, and, again, I may be misunderstanding, but: "*Mar 2014 Briefing to CEO by Project team plus emails associated with Nalcor Board update and updated AFE'*s."

So can you explain that a little bit for me?

MR. SHAFFER: No, I cannot.

MR. BUDDEN: Okay.

MR. SHAFFER: This section – the first section of these charts came from notes that were written by Paul Harrington. That was a cover sheet to each presentation.

MR. BUDDEN: Right, I understand that.

MR. SHAFFER: Yeah, so I don't know what it means. You would have to ask Mr. Harrington about that.

MR. BUDDEN: Okay. So you cannot say when it was that the board was made aware of the circumstances you laid out in lines 1 through 18 of page 12?

MR. SHAFFER: Correct.

MR. BUDDEN: Okay.

You may or may not be aware, but we had a provincial election in November of 2015. Have you seen any evidence in your forensic review, any emails or anything came up in interviews, that showed that the flow of information around these financial issues was in any way impacted by knowledge or awareness of that election?

MR. SHAFFER: No.

MR. BUDDEN: Okay.

Madam Clerk, perhaps we could turn to page 15?

This has to do with the independent engineer, and perhaps, Mr. Shaffer, you could read us lines 17 to 23, page 15?

MR. SHAFFER: "Reviewed project design and projected performance; Reviewed" – the – "construction plan and schedule; Reviewed capital budget; Reviewed commercial operation and maintenance services; Reviewed project agreements (such as power purchase agreements); Reviewed permits and licenses, and; Reviewed basis of project pro forma financial model."

MR. BUDDEN: Okay.

So these essentially are the terms of reference for the independent engineer, I understand, would you agree?

MR. SHAFFER: Yes, I believe this came from the engagement letter that we reviewed.

MR. BUDDEN: Okay.

Who determined or prepared these terms of reference?

MR. SHAFFER: Without looking at the engagement letter again, I don't recall. But I thought the engagement letter was with Nalcor.

MR. BUDDEN: Okay. So your understanding, and correct me if I'm wrong, is that Nalcor themselves prepared these terms of reference?

MR. SHAFFER: I don't know, I'm just – I just saw the – if I remember correctly the engagement letter was executed with Nalcor.

MR. BUDDEN: Okay. Is that customary with respect to independent engineers, that the subject of the review would determine the terms of reference?

MR. SHAFFER: Well, I mean, Canada, as I understand it, was involved in it.

MR. BUDDEN: Mm-hmm.

MR. SHAFFER: And I thought that the engagement letter with Nalcor was the fact that Nalcor was gonna pay for those services, but he was still reporting to Canada.

MR. BUDDEN: Yeah, and I guess my question not so much who's paying for it, but who determined those particular terms of reference. And are you able to tell me?

MR. SHAFFER: Well, I'm assuming that if the independent engineer signed off on it, that he agreed to those terms of reference. I don't know who actually formulated them. That would be between the parties.

MR. BUDDEN: Okay.

So you can't tell us, say, for instance, they were prepared by Nalcor but approved by Canada or they were prepared by Canada but approved by Nalcor? That's somebody – something outside of your knowledge at the present time?

MR. SHAFFER: That's correct.

MR. BUDDEN: Okay.

The – on page 16, again dealing with the independent engineer, you appear to have established that the report – or at least that particular report – went through several drafts before it was finalized. But – if you did I missed it, but you didn't discuss what role, if any, Nalcor played in those revisions. Can you tell us now what, if any, role Nalcor would have played in those revisions?

MR. SHAFFER: I know that the draft of November 15, 2013 was sent to Nalcor and Canada for review. And I remember seeing revisions that I believe Mr. Harrington had input into that. And then I know that – I recall seeing – some of those revisions are probably accepted – like on the contingency, for example, on the November 29 version.

MR. BUDDEN: Okay.

In Phase 1, as you may be aware, the revision of, you know, supposed independent reports by Nalcor was an issue that we spent a fair bit of time working on. And we obviously will hear from these people, but do you have anything to add here, as the forensic auditor – anything further beyond what you've said as to what role, if any, Nalcor may have played in shaping the ultimate wording of that report?

MR. SHAFFER: I personally don't find it unusual, to be honest with you. I mean to me, any deliverable that you prepare and you want to make sure that it's right, you send it to the client to get their input. It's up to you as the author of that report whether or not you're going to accept that input or not accept the input.

MR. BUDDEN: Okay.

Perhaps we can turn to page 28, Madam Clerk? And I'm going to have a few questions about the bidding process now for you, Mr. Shaffer.

The chart there on page 28 with the four factors which we've discussed already through your direct evidence; can you tell us who devised that particular weighing scheme? Who selected these four factors and assigned a particular percentage weight to them?

MR. SHAFFER: I don't know who actually devised it.

MR. BUDDEN: Okay. I'm not talking even so much about the individual, but was that devised by Nalcor? Was it devised by some other entity – are you able to tell us?

MR. SHAFFER: Well, based on the fact that Nalcor scored the bid that way, I'm assuming Nalcor devised the weighting system.

MR. BUDDEN: Okay.

Was there anything about that weighing system that was in and of itself unusual? Does it differ from other weighing schemes you've seen in similar projects?

MR. SHAFFER: Well, a little bit different, yes. But it's basically the factors that owners will look at when they hire a contractor. The only – as I noted on lines 14 through 18, the unusual thing about it was that a majority of it was being driven by price –

MR. BUDDEN: Yes.

MR. SHAFFER: – the 63 per cent.

MR. BUDDEN: Yes, and we'll get to that in just a second. I understand as well that those factors perhaps had sub-factors within them.

MR. SHAFFER: I'm sorry?

MR. BUDDEN: Okay, I understand as well – correct me if I'm wrong, but the particular percentages assigned to each factor was further divided amongst sub-factors, at least in some cases. Would that be correct?

MR. SHAFFER: It was. For example, as I indicated here –

MR. BUDDEN: Yes.

MR. SHAFFER: – the commercial benefits was 70 per cent, and of that weight, 90 per cent was attributable to low bid.

MR. BUDDEN: Okay, from a – your recollection or your knowledge, can you tell us of any weight in any of those four criteria, or sub-criteria rather, was assigned to experience working in the North?

MR. SHAFFER: Without pulling up the scoring, I can't tell ya.

MR. BUDDEN: Okay, same question with regard to prior hydroelectric experience. Are you able to tell us that without consulting with the documents?

MR. SHAFFER: I would need to see the document.

MR. BUDDEN: Sure – okay. I have a couple more questions, but basically you can't really be more specific than you have been I take it.

MR. SHAFFER: Yeah, what's in the report is about what I can remember –

MR. BUDDEN: Okay –

MR. SHAFFER: – that we noted–

MR. BUDDEN: – fair enough.

MR. SHAFFER: – of importance.

MR. BUDDEN: So just – they're fairly short – could you read lines 14 through 18 one more time as I have a question or two flowing out of them.

MR. SHAFFER: "As noted above commercial and provincial benefits accounted for 70% of the weighting. Of this particular weight, 90% was attributed to the low bid price. This means, that all other things being equal, 63% of the total scoring would favor the lowest bidder regardless of lower scores in execution of the work. As such since Salini and Astaldi were low bidders, they were selected for further consideration."

MR. BUDDEN: Okay, I take it from your earlier comments, and again, correct me if I'm wrong, but – so 63 per cent assigned in this fashion, you regard that as unusual?

MR. SHAFFER: I regard that – basically, low bid wins as unusual, given – especially given the quote in Merrow's book that I indicated on the following page.

MR. BUDDEN: Yes, we'll get to that in just a second.

MR. SHAFFER: Yeah.

MR. BUDDEN: What would be more customary from your experience? If not 63 per cent, 40 per cent, 50 per cent, 30 per cent?

MR. SHAFFER: It's all over the board.

MR. BUDDEN: Okay, but even though it's all over the board, you still regard 63 per cent as high, I take it?

MR. SHAFFER: Based on what Merrow indicated, yes.

MR. BUDDEN: Yes. Have you any other source based on your expertise in this field other than what Merrow has said to arrive at that conclusion?

MR. SHAFFER: No.

MR. BUDDEN: Okay.

Perhaps we could turn to the following page, Madam Clerk, page 30. The – I won't ask you to read the quote there, but it's essentially a description of – or an account of what transpired between Astaldi and Nalcor in the fall of 2015 – I think summer and fall of 2015 – that led to the need for the bridge agreement.

Are you able to tell us if that information was – at that time – passed on to the Board of Directors of Nalcor?

MR. SHAFFER: Not without looking at the board packages again. I couldn't tell you.

MR. BUDDEN: Okay.

And likewise you're able to say whether that information was passed on to the politicians or civil servants in the terms as I've previously described them?

MR. SHAFFER: Correct.

MR. BUDDEN: You're unable to say?

MR. SHAFFER: I'm unable to say, yeah, sure.

MR. BUDDEN: Perhaps page 42, Madam Clerk, and it's lines 7 to 13 I'm particularly interested in, Mr. Shaffer, and perhaps when you're ready you could read those to us.

MR. SHAFFER: I am.

"The CT0327 package budget was developed with limited geotechnical data due to the environmental assessment restrictions. Jason Kean, the former Nalcor Deputy General Project Manager explained *We didn't have any geotechnical data because we weren't allowed under the environmental assessment process. We could fly a little mini Kubota excavator on a helicopter to dig down one meter in a few locations. That was it because it would be deemed that we would start construction if we were to have entered into a lot of these remote locations. So that challenged that from an estimating perspective, we had to make assumptions based on mapping and geotechnical data.*"

MR. BUDDEN: Yeah.

That absence of geotechnical data really had pretty significant consequences as your report unfolds, with regard to the Valard and other contractors. That would be correct, would it not?

MR. SHAFFER: Well, in the end it impacted the towers.

MR. BUDDEN: Pardon.

MR. SHAFFER: The towers.

MR. BUDDEN: Yes.

MR. SHAFFER: The base for the towers, yes.

MR. BUDDEN: So, the financial consequences certainly, perhaps in the hundreds of millions of dollars even. Would you agree with me there?

MR. SHAFFER: Well, the settlement agreement was $245 million. Of that, I think, 36 was attributable to the conductor proud-stranding issue. I don't know how much was actually attributable to this particular issue.

MR. BUDDEN: But it was certainly a substantial issue.

MR. SHAFFER: Well, it was included in the settlement agreement as I understand it.

MR. BUDDEN: Sure.

I'm wondering was any effort made by Grant Thornton to follow up on that to see if what Mr. Kean was saying was in fact correct, what he was saying about the environmental assessment process making it impossible to do the proper due technical assessment.

MR. SHAFFER: Other than what we noted in the report in terms of our conversations with the folks at Valard, no.

MR. BUDDEN: Okay.

The proud-stranding issue – which again is another one with significant cost consequences – I assume that it is clear from the contract, as between Nalcor and Valard, that it is Nalcor that is responsible for that particular problem. Am I correct in that assumption?

MR. SHAFFER: I would have to look at the contract again, but again, it was part of the settlement agreement.

MR. BUDDEN: Okay.

So I guess my question is, would Grant Thornton have independently verified, or made some efforts to independently verify, that it was indeed Nalcor, as between Nalcor and Valard, that was responsible for any cost consequences of the proud-stranding issue?

MR. SHAFFER: No, that's between the parties.

MR. BUDDEN: Okay.

Perhaps page 48, Madam Clerk.

And it's lines 26 to 28, Mr. Shaffer, I'm interested in, and perhaps you could read those for us?

MR. SHAFFER: I'm sorry, which lines, Mr. Budden?

MR. BUDDEN: Lines 26-28, the last –

MR. SHAFFER: Yeah.

MR. BUDDEN: – paragraph.

MR. SHAFFER: "However, the PMT also indicated that as a result of the Liberty review, '*…Nalcor acknowledged that NL Hydro's operations and maintenance philosophy needed adjustment, and that a near permanent access network would be required*.'"

MR. BUDDEN: Okay.

I guess my question is this something that you were able to answer? It was acknowledged that, post-Liberty report, that that adjustment was required. Did Grant Thornton inquire as to whether that adjustment should have been made prior to or at the time of the DG3 estimates? So in other words, was their operations and maintenance policy, prior to this adjustment, in keeping with best practice?

MR. SHAFFER: No, we didn't look at that.

MR. BUDDEN: Okay.

Page 50, Madam Clerk.

This is a general question, really, Mr. Shaffer. It's obviously a very large number there for project management. Is that in keeping with what megaprojects on this scale typically would require for the project management component of the development?

MR. SHAFFER: I can't comment on that. I don't know.

MR. BUDDEN: Okay.

So you're unable to say whether this is twice what it would ordinarily cost or spot on or half what it would ordinarily would cost?

MR. SHAFFER: Correct. I can't respond to that. I just don't know.

MR. BUDDEN: Okay.

Perhaps, Madam Clerk, we could go back to page 13.

And this is the – there's a quote there that you use there and used, I think, on page 93 as well, again from this Mr. Merrow. And perhaps you could read that quote to us there at the top of page 13, Mr. Shaffer?

MR. SHAFFER: Starting on line 6 or line 9?

MR. BUDDEN: The – line 6 should be fine. I believe I'm at the right place.

Bear with me just for a second, Mr. Commissioner; I seem to have lost the quote.

Yeah, it is page 13, starting – yeah, you can start from line 6 just to contextualize it just a bit.

MR. SHAFFER: It says: "time-risk (i.e. the risk of not achieving first and full power on their expected dates) was included in management reserve in Nalcor's DG3 analysis, costs associated with schedule slippage were excluded from the sanctioned budget. Edward Merrow (the founder of Independent Project Analysis, Inc.) writes, '*Schedule pressure dooms more megaprojects than any other single factor. When there is pressure to move a project along quickly from the outset, corners get cut and opportunists have a field day.*' Edward Merrow goes on to say '*But taking risks with megaproject schedules is a fool's game.*'"

MR. BUDDEN: Okay. Again, you included this quote here and you included it elsewhere, and it's obviously colourful, but I presume you had other reasons for, you know, for including this quote. You must have obviously thought it was, you know, relative and apt to the subject under discussion, obviously.

MR. SHAFFER: I did.

MR. BUDDEN: Just following up on what you've said, I guess, where were the corners that were cut in this project?

MR. SHAFFER: I don't know. It's a quote from Mr. Merrow.

MR. BUDDEN: It's a quote form Mr. Merrow that you chose to include in your forensic audit. And I'm assuming you included it because you thought it was appropriate to a discussion of Muskrat Falls.

MR. SHAFFER: Well, because of the schedule pressure with this project. And what I did, knowing that Mr. Merrow is who he is and well-known in the field and has a book on megaprojects, I wanted to see what his perspective was on schedules. And this is what I found.

MR. BUDDEN: Okay.

MR. SHAFFER: As far as the actual corners that got cut in the project, I don't have any knowledge of that.

MR. BUDDEN: Pardon?

MR. SHAFFER: As far as – if corners got cut in the project, I don't have any knowledge of that.

MR. BUDDEN: Okay. So you used the quote; you thought the quote was apt, but when we break the quote down and look at terms such as "*corners get cut*," "*opportunists have a field day*," "*a fool's game*," you're not prepared to comment as to how those particular parts of the quote relate to this project?

MR. SHAFFER: Well, the schedule pressure, right? And he basically says: "*schedule pressure dooms more megaprojects than any other single factor*."

MR. BUDDEN: Yes.

MR. SHAFFER: And he goes on and he says why he thinks that, and then he's saying – and we can read it – saying that "*taking risks with*" – the – "*schedule is a fool's game*." Which to me –

MR. BUDDEN: (Inaudible.)

MR. SHAFFER: – which to me says, there's an issue here, which is why I included it.

MR. BUDDEN: Okay, that's fine. Thank you.

MR. SHAFFER: Okay.

MR. BUDDEN: I have no further questions. Thank you very much.

THE COMMISSIONER: Edmund Martin.

MR. SMITH: Good Afternoon, Mr. Shaffer. Harold Smith for Edmund Martin.

MR. SHAFFER: Good Afternoon, Mr. Smith.

MR. SMITH: I don't have a lot of questions, just a few for my curiosity more than anything.

MR. SHAFFER: Okay.

MR. SMITH: I'm looking at page 5 of the report that you have entered into evidence, and I believe, since it's the only report of great substance, everybody would have the number. My understanding is, is that it's P-01677.

Looking at page 5, I'm interested in the lines 24 to 27, which I – and goes on then through to 35 – which I understand outlines your, if you will, terms of reference to what you were trying to address in the report. It's a scope of your report. Is that a fair assessment of that section?

MR. SHAFFER: Yes.

MR. SMITH: Okay.

Now, it says – "why there are significant differences between the estimated costs of the Muskrat Falls Project at the time of sanction and the costs by Nalcor during" – the – "project execution, to the time of this inquiry together with reliable estimates" – and I think we've heard evidence from you, earlier today, that that was up until March of 2018?

MR. SHAFFER: Yes.

MR. SMITH: Okay.

Now, with respect to that term of reference, in your direct examination a day or so ago, you made reference – or counsel made reference – to the estimate of cost – additional cost – created by something which we refer to as bifurcation.

The bifurcation happened in 2016, and I'm wondering why, under the terms of reference, an assessment of the costs for the bifurcation weren't included in your report.

MR. SHAFFER: I'm not in a position to determine whether or not the bifurcation caused additional costs or not. The whole purpose of reporting on that was to get the perspectives of the person that did it, Mr. Marshall, and get the perspective from the people that disagreed with it, mainly Jason Kean and Paul Harrington.

MR. SMITH: Yes, but my question I guess is if you had some evidence that indicated that the project management team were concerned that it would increase the costs, I'm at a loss as to why, given your mandate, that that wasn't investigated.

MR. SHAFFER: Well, we did investigate it. And we inquired about it.

MR. SMITH: Okay. And what was your conclusion?

MR. SHAFFER: We only concluded what we found and what was reported in the report.

MR. SMITH: So, again, we're learning, I guess, what forensic auditors do from Phase 1, and I'm just checking with whether or not Phase 2 is similar. And that is that the forensic auditors don't conclude or make determinations, they really just merely outline what facts they found.

MR. SHAFFER: It's procedures and findings.

MR. SMITH: Okay. And findings of fact, though.

MR. SHAFFER: Findings of fact.

MR. SMITH: If you didn't do the divergence issue, did you do any consideration of the impact that trying to have Nalcor respond to the Commission – did you look at whether those were costs that were improved or increased, increased the cost of the project, because you had the divergence of people away from the project and focused on the Commission's, you know – activities of the Commission, I should say.

MR. SHAFFER: In a presentation by the project management team they indicated that that did happen.

MR. SMITH: Okay. So you found as a fact that there was some increase in costs as a result of the moving away of people from their core duty to support the Commission?

MR. SHAFFER: I found it a fact that that's what they told me.

MR. SMITH: Okay. Had you ever any reason to doubt that their statements were inaccurate or invalid?

MR. SHAFFER: No.

MR. SMITH: Okay.

Now, I note that in your report that you determined that – I think it's page 17 of the report – yeah, you made the conclusion that, at lines 8 and 9: "Prior to financial close, Nalcor should have been aware that the contingency included in DG3 budget was insufficient."

You also concluded, I think, on page 16 that – I'm sorry that's wrong. I apologize.

Yes, on page 12, you also concluded that the contingency amount of 368 was exceeded by 230 million. And these, I understand from Mr. Simmons's questions, were numbers based upon the RFPs not the actual contracts. Is that correct?

MR. SHAFFER: It was based on the bid responses on the REPs –

MR. SMITH: Yeah.

MR. SHAFFER: – that's correct.

MR. SMITH: Okay.

And Mr. Simmons took you through that the bid responses, if you will, may not necessarily be the actual cost by the time you go through the process.

MR. SHAFFER: There's no doubt about that; however, what I do want to point out is that during the course in 2013, based on the presentations that Mr. Harrington was making to these execs, that by July of '13 he indicated the cost was approximately $7 billion.

MR. SMITH: Okay.

Now, looking at that, those projections – I mean, they're the response to the bids, I accept that – but looking at those, were you made aware of the projected $300 million in savings on the financing costs that were in the CPWs?

MR. SHAFFER: No. I read that, I think, yesterday in an article with – off of CBC.

MR. SMITH: Okay.

Now, if you hadn't considered the 300 million which would have essentially eliminated 230, the 230 overage, in other words the contingency of 368 and the 230 difference to make up the 600 million you found, would your view change?

MR. SHAFFER: No.

MR. SMITH: Why?

MR. SHAFFER: I'm dealing with the construction cost only here. I have no direct knowledge if there was savings or not and that – I didn't look at that.

MR. SMITH: Fine;

In the context of how this project got off the ground – and you were, I understand, involved in the Phase 1 process – that there was a $2.4 billion difference between the two options under consideration. And I'm not sure from your statement that by the time these bids came in, 600 million was a material impact, or had any material impact on the $2.4 billion difference.

MR. SHAFFER: I guess we'll never know because Nalcor never bothered to rerun it.

MR. SMITH: Are you sure? Because there's only one – there's only one, quote unquote, variable, and that's the change in the –

MR. SHAFFER: The –

MR. SMITH: – the cost.

MR. SHAFFER: The critique here –

MR. SMITH: Yes.

MR. SHAFFER: The critique here is very simply, they knew the bids were coming in above the DG3 estimate – no doubt about that; Mr. Harrington certainly knew it. And as far as we know, and based on our interviews and documents that we reviewed, nothing came to our attention to indicate that Nalcor attempted to recalculate all this.

And when we asked Mr. Harrington about it, what he told us was it wasn't his call, and when we asked Mr. Bennett about it, he indicated once the sanction decision is made, it's made. And so it might've been the same result, as far as the sanction decision, but I don't know that, right, and I don't think Nalcor knows that because nobody bothered to rerun it –

MR. SMITH: Okay.

MR. SHAFFER: – as far as I know.

MR. SMITH: But you'd agree with me that 600 million would not eliminate $2.4 billion in the difference between the Isolated and Integrated systems.

MR. SHAFFER: I guess you're looking at it that way; another way to look at it is affordability, right.

MR. SMITH: Yeah. But in terms of all you're looking at is the cost of construction, the difference of 600 million against the 6.2 billion, and as it turned out 6.5 was the number at financial close, there's no possibility that that small amount of money would have eliminated $2.4 billion in difference between the two projects, is it?

MR. SHAFFER: Except you're forgetting one thing. You're assuming on the remaining 4.2 billion of costs for the balance of the project that there'd be no contingency against that. So, I don't know if I agree with your assumptions here.

MR. SMITH: I'm not sure I understand what your answer is.

MR. SHAFFER: Well it's –

MR. SMITH: Two point four billion is the difference in the CPWs. CPW is the business case for the project, and if a $2.4-billion difference existed at sanction, a $600-million overrun over the base price would not eliminate that difference, and the – and we have to assume the power was needed, otherwise it wouldn't be at – making the –

MR. SHAFFER: No, but you're forgetting the overrun on the remaining $4.2 billion of the estimate.

MR. SMITH: Yeah, but that wasn't known between April and November of 2013.

MR. SHAFFER: No, it – I think we're talking past each other.

MR. SMITH: Okay.

MR. SHAFFER: Let's try this again.

At sanction it was $6.2 billion. Of that, there's a $368-million contingency – tactical –

MR. SMITH: (Inaudible.)

MR. SHAFFER: – that's included in that number.

And we all know that that excluded the management reserve. We get into this by the – by financial close and bids are coming in and they're $600 million above the DG3 budget. So, the total bids – at least as of April, I mean – as of April, the total bids that were coming in was over $300 million higher than the DG3 budget, okay?

So, what that means is that the remaining $4.2 billion of costs for the balance of the project – there's no contingency left.

MR. SMITH: Again, on the basis of what is in the cost estimate.

MR. SHAFFER: Absolutely.

MR. SMITH: Right. And the debate, or one of the debates, was whether or not the management reserve should be either added to the budget or not. Did you know what the management reserve was at that time?

MR. SHAFFER: Which P-factor?

MR. SMITH: P-factor is 50.

MR. SHAFFER: Five hundred million.

THE COMMISSIONER: Let me just ask a question here now, because this line of questioning has been sort of playing in the back of my mind for a while.

I think there's a distinction between what the supposed difference was between the two options – and there's lots of issues around that – and the actual cost that was approved for this budget, for this project.

So what we know – forget the fact there was a 6.2 – or $2.4-billion supposed difference. What we know is when the Government of Newfoundland and Labrador sanctioned this project, they sanctioned it at 6.2 billion.

MR. SMITH: That's correct.

THE COMMISSIONER: Correct.

So, the fact that there might be a pocket of money somewhere saved because, had they done another option it would have cost more – like, I'm trying to figure that out in my own mind as to how this plays into the, you know, the type of decisions that had to be made.

Because the other argument that you could make is, you know, like, if there was a $300-million saving on the finance costs, that's $300 million in the pocket of the Province of Newfoundland and Labrador that they don't have to spend.

But it seems like what you're suggesting is that any extra money that was saved was just gonna be – that was money available to add to the pot. And I'm just trying to figure out – I think that's what you're getting at in your questions and I have to tell you, I'm struggling with that.

MR. SMITH: I understand that.

But the fundamental issue coming back to that is that we needed the power, so we had to find the option that would produce the power that was necessary. That's the fundamental issue.

And the two options that were under consideration were Isolated and integrated. And the integrated was projected to be $6.2 billion; however, in any project of this size – billion-dollar projects, megaprojects – there's an expectation that 6.2 is not hard and fast and set in stone – that there will be challenges to that. Some of the challenges that Mr. Shaffer has discussed is that the bids were coming in a little higher than what was projected.

So, you either, you know, fold your tent and go away and put $2.4 more billion into another system or you proceed because the least-cost option is still the integrated system, even though it's slightly more –

THE COMMISSIONER: Right. Or –

MR. SMITH: – than was planned.

THE COMMISSIONER: – or there's another option. When you find out that your $6.2 million – billion option isn't gonna work, you go back to the drawing board and figure out how you're gonna meet your – how are you gonna meet your need for power.

MR. SMITH: Yup. Well –

THE COMMISSIONER: Anyway, we –

MR. SMITH: – I'm not suggesting –

THE COMMISSIONER: This is –

MR. SMITH: – that's not an option.

THE COMMISSIONER: This will be –

MR. SMITH: I'm just –

THE COMMISSIONER: – part of submissions later on –

MR. SMITH: Yeah.

THE COMMISSIONER: – but I have to – I just wanna alert you to the fact that I'm having some concerns about trying to figure out in my mind right at this stage of the game how, supposedly, the difference in the cost of the two options – how that plays into the equation once we know that what the Government of Newfoundland and Labrador signed up for was a $6.2-billion project.

Yes, with the possibility of up to $500 million, or whatever people said, with regards to – you know, so, when it gets to 10.1, we can't say: Okay, well, now, we'll add to that 6.2 the $2.4-billion difference; we'll add $300 million that we're going to save on the financing costs, and that's how we can – so, it's all fine.

Like, I'm having trouble trying to make that work in my mind. So, just to – you know, I think it's fair enough for me just to raise this at this particular stage of the game because I'm having trouble following that rationale. Okay?

MR. SMITH: I think we have to, at this stage – this is April of 2013 – we have to, you know, keep in mind or consider the consideration that the pursuit of Nalcor seems to have been the least-cost option, and when you look at the numbers that were coming in, yeah, it was higher, but the question is: Did it change whether or not it was still the least-cost option because the power was needed?

You have to recall that just to get to this stage, it was not done in six months or seven months; it was done in eight years or nine years, to get to this. In fact, the Lower Churchill option was under consideration for nearly 30 years 'cause it was suggested by Hydro in the late 1980s, okay?

So, in terms of the questions of the witness, I'm trying to understand why or if he concluded that the – that Nalcor should have just abandoned the project when they had some projected numbers coming in, or was he just reporting that fact that it was projected numbers? And that's far as I'm going for that – for today, okay?

So, Mr. Shaffer, you know, in looking at it, after an interesting discussion with the Commissioner, are you saying –when you recommended that the – Nalcor had the option that between April and when they were locked in after financial close, are you saying that that was just a period that they had the option to do it if they wanted to, but not – you're not recommending or arguing or concluding that they should've?

MR. SHAFFER: I'm saying that, as a prudent businessperson, when you realize that your estimate is basically wrong, maybe you have to put the brakes and go back and sit and think about this and maybe rerun the numbers.

MR. SMITH: Okay.

So I would say from your comment, then, that the foundation is the mere fact that the bids came in a little higher than the budget.

MR. SHAFFER: I think your term is a little higher. I don't necessarily do it that way.

MR. SMITH: Well –

MR. SHAFFER: My basis is that what I testified to previously – is that as of four months after sanctioning that tactical contingency is gone. And now you realize that the remaining balance of a budget has no contingency on it – the $4.2 billion that's remaining. And that's my basis, and I don't consider that a little higher.

MR. SMITH: Yeah, there's no tactical contingency, and we've heard from Phase 1 that Nalcor used the strategic contingency as part of its management reserve. So where did it come from that there was no contingency whatsoever on the four-point-some billion?

MR. SHAFFER: Well, again, my whole point is that you know it's gone. You know that at this point the remaining cost that was in the estimate has nothing on it and you know – you have to know at this point that the additional bids are going to be coming in higher than your base estimate. And maybe – you could say you could draw it from strategic, draw it from whatever you want, but you know the estimate at this point, you got a problem. And my only critique here is that when you know all that, as prudent business people, why don't you sit down and rethink this and rerun the numbers? That's what I'm saying.

MR. SMITH: Now, if you bear with me a second.

I'd like to follow up, if I could, on your conclusion –

MR. SHAFFER: What page are we on, Mr. Smith?

MR. SMITH: Pardon?

MR. SHAFFER: What page are we on?

MR. SMITH: I'm getting to it.

MR. SHAFFER: Okay.

MR. SMITH: 135 – 6, very sorry.

Now, I think Mr. Simmons covered this in relation to the second bullet, and I got the impression from your evidence when he was examining you that Mr. Card remembered discussing it – meaning the report. And I came away with the impression, and I'd like you to clarify for me, is that he discussed the report or that he discussed the same risk issues that happened to be in that report or happened to be in Nalcor's own risk registry.

MR. SHAFFER: I'm taking it to mean the risks that were in the report.

MR. SMITH: Yeah. In other words –

MR. SHAFFER: Not the existence of the report.

MR. SMITH: Not the port – not the report or not the detail that might've been in the report.

MR. SHAFFER: I'm saying that he discussed the issue – the risk issues that were in the report – the risks that were in the report.

MR. SMITH: Okay.

I'm still having some difficulty because he's discussing the risk issues in the report but Westney determined, as I understand it, that the risks that are in the report are similar to the risks, if not the same – similar to the risks that Nalcor was already discussing internally. In other words, I'm trying to distinguish between whether he was discussing the report or whether he was just discussing, as a general question, risks that happened to be in that report and happened to be in Nalcor's own report.

MR. SHAFFER: I believe it was the – not the report itself but the contents of the report, the risk.

MR. SMITH: Yeah. The risks identified in both Nalcor and the report. Is that how I understand it?

MR. SHAFFER: Oh, that I don't know.

MR. SMITH: Okay.

MR. SHAFFER: But the risks that were in the report.

MR. SMITH: Okay. Because I look at some of the support information that we have from Mr. Lon, for example –

MR. SHAFFER: I'm sorry. Mr. Who?

MR. SMITH: I think it's – I'm saying "Lon," but I may be mispronouncing it. It's Thon: T-H-O-N. Sorry.

MR. SHAFFER: Scott Thon.

MR. SMITH: Yeah.

MR. SHAFFER: Okay. What page are you on, Mr. Smith?

MR. SMITH: I'm on page 126.

Mr. Thon says, at the bottom of the page in lines 35 to 37, he says: "*My recollection is that* …" – they – "*were working on the report when we had that April meeting. It was not complete and it was not completed until after that meeting. So there would have been some revisions. I don't believe that there was anything that Nalcor provided us that changed the contents of that report.*"

Now, Mr. Thon is fairly senior and would've ordinarily been the person – I understand from the excerpts that you provided – that he would ordinarily be the person that would give it to Mr. Card in the first place.

MR. SHAFFER: I didn't hear a question.

MR. SMITH: Okay, my apologies.

My statement is that how could you be discussing – how could, you know, Mr. Martin be discussing the report with Mr. Card if Mr. Thon is correct that the report was being worked on – it wasn't even complete?

MR. SHAFFER: Well, on line 23 the question was: "**Was the content of the report shared with Nalcor?**" And he said: "*I can't remember whether we gave it to them or not. We certainly did on a number of occasions, walk through the key areas of the report and our concerns around the risk, yes.*"

MR. SMITH: Yes, but again, it looks more like they were discussing risks in general, not specific risks that were – that came out of a report. Because the report – further on Mr. Thon says it was still under review.

And I ask you to look at the notes of Mr. Tremblay in P-01836, Madam Clerk.

THE COMMISSIONER: P-01 …?

MR. SMITH: Eight, three, six. Okay.

These are notes that have been brought into evidence and they're the notes that have been identified as those of Mr. J. D. Tremblay. Mr. Tremblay was working on the Nalcor team but he's a secondee, or whatever, from SNC-Lavalin. I think he's part of the SNC-Lavalin team. And in May this meeting is – May 28, two thousand – excuse me – and '13. He says in this document, reading from it – I know the reading is difficult, but you can read it. And it says, Paul Harrington, PH, met with Ed Martin and, you know –

MR. SHAFFER: Then there was – he met with Normand Bechard and J. D. Tremblay.

MR. SMITH: Right. And then it says, the risk work was performed by SCI – what's the deal? Okay? That's what the question was at the time.

MR. SHAFFER: Mm-hmm.

MR. SMITH: And then Mr. Bechard, Normand Bechard, he says, it's a transition from EPCM contracting to an integrated team contract and

M&M, which is – turns out to be metallurgical department of SNC involved – excuse me, this says to – I can't read the writing, I'm sorry, I have a note of it – conduct a risk assessment, okay? "Report issued currently in Hydro top Mgt." Paid for by, essentially, by SNC. This is as of May 28. So this report, according to Mr. Tremblay, was actually still in SNC, in the Hydro department, having been moved from the Hydro department to – excuse me, from the metallurgical and minerals department over to the Hydro department because they were interested it says "M&M condition for supporting LCP is conducting the assessment." So in other words, this assessment seems to have been done by the metallurgical people.

MR. SHAFFER: It was actually – I think the individual was Michel Mackay –

MR. SMITH: Yeah, he's –

MR. SHAFFER: – who heads up there risk management, I believe.

MR. SMITH: Yeah.

And anyhow, it was done within that department according to what Mr. Tremblay told Nalcor officials. And that it was still, as in May 28, it was still in the Hydro department, so what report could be discussed if there was effectively still languishing in the Hydro department of SNC?

MR. SHAFFER: Well, I believe if you look at the report they did start the work in April of 2013, it might have been in a draft form for all I know. But the point being is there is no doubt that Scott Thon indicated what he said here, Bob Card indicated what he said here, and that's what I'm reporting.

MR. SMITH: Yeah.

And taking it a bit further I'd ask you to look at the P-01811.

MS. O'BRIEN: Sorry, while that's being brought up I just ask Mr. Smith, they're having trouble hearing you a little bit on the recording –

MR. SMITH: Oh.

MS. O'BRIEN: – so if you could just stay in front of your mic, thanks.

MR. SMITH: Try the best I can, I tend to wander.

P-01811. Okay, could you scroll down please? Again, there, right there. Up, a little more, thank you. Right there.

This is the report and the earliest it was signed by Michel was April 23; however, it wasn't approved and in accordance with your own management, you know, these documents are approved before they're given to the client normally. These – this document wasn't signed off until well after April 23. Well after the meeting with my client.

Sorry I moved again, sorry. So my question is simply then, you know, the so-called report isn't a report because it requires other signatures and those signatures occurred after the meeting with Mr. Martin.

MR. SHAFFER: Again, the first date on here is April 23, 2013, so maybe there was a draft? Who knows? But all I know is that I was told by two people that the risk, the contents of that report was discussed with the executives.

MR. SMITH: And you're discussing a content of a report that is not a finalized by SNC in terms of the signoffs. You're discussing a report that one of the witnesses, Mr. Tremblay, argues was actually languishing in the Hydro department of SNC, not yet released yet. And we're discussing a report that no one produced or even you found was given to Nalcor. So I'm just wondering how you could come to a conclusion that the report was discussed as opposed to the risks that might have been identified in the report?

MR. SHAFFER: I think I already testified to that. The – they discussed the risk in the report not the – as far as I know, not the report itself. They – but they – remember Bob Card said it wouldn't be his style to whip out a report and go down line by line by line.

MR. SMITH: Yeah and if we look at Bob Card's – his testimony which I understand is before – was before you at the time of your report, he says he arranged a meeting in January to meet with Mr. Martin and the purpose of the meeting was to discuss – in his words – the purpose of the meeting was to discuss the change from SNC being an EPCM contractor and running – and discussing risks associated with the owner doing the contract management, and that, I think, is found at page 124 at line 27 to 35.

MR. SHAFFER: You said testimony? I'm confused now.

MR. SMITH: No, sorry, at the – the quote that you used from Mr. –

MR. SHAFFER: Okay –

MR. SMITH: – Card.

MR. SHAFFER: – and, I'm sorry, where are you at Mr. Smith?

MR. SMITH: Again, 124, and it's at lines 27 to 35, and I read the answer that you recorded of Mr. Card: The "principal concern was over the success of the project.… Our key client was really upset – so the last thing we wanted was both an upset client and a failed project …."

Now, Mr. Simmons has indicated that a reasonable conclusion from the actual transcript is that the upset client was Hydro-Québec. However, it goes on to say: It becomes clear to us that Nalcor's approach was rapidly evolving into a self-perform mode. In my experience in many multi-billion dollar projects that – while it's not always successful to have a contractor be the program manager, it is rarely successful for an owner to be the program manager – that was a red light number one for us.

So it seems somewhat clear that Mr. Card was really meeting with Mr. Martin to try and get the contract back.

So, why would – why does the report, or the existence of the report, take such precedence with respect to the meeting with Mr. Card? He at no time says that he showed Mr. Martin that – the report, nor that he tabled it, nor that he sent it to them, et cetera. He only – it appears he only discussed the report in the context of getting the EPCM contract back.

MR. SHAFFER: Can you turn to page 125, starting at line 1?

MR. SMITH: I have it.

MR. SHAFFER: It was asked in terms of the April 2013 SNC risk report when would that have been discussed? "The contents, there was not a time in my recollection where a report was laid on the table and we said now, chapter one, chapter two, chapter three. The discussion was the general perception of risk around the project, the approach to managing the contractors, the labour issues. The issues in the risk report would have been reviewed throughout the whole process."

MR. SMITH: Right, and you juxtapose that comment against that of Mr. Thon at page 126.

MR. SHAFFER: I'm sorry, where?

MR. SMITH: 126.

MR. SHAFFER: Yes.

MR. SMITH: Right. And he says at 35 to 37: "*My recollection is that we were working on the report ...*" Okay. And I think we read this before: It is *"not complete and it was not completed until after that meeting.*" In April.

MR. SHAFFER: I suppose if you want to read 34 through 37 like you just did and you want to ignore what he said up above, sure.

MR. SMITH: Well, my point is, is that there's clearly inconsistency in the statements. Is there not?

MR. SHAFFER: Well, I don't think so. In terms of discussing the contents of the report, there's no doubt, they're not sure if they ever sent it to Nalcor. I think I said that.

MR. SMITH: Yeah, you concluded that they – there was no evidence that they did.

MR. SHAFFER: Right.

MR. SMITH: Right. But there's also a conclusion that you refer to in, at page 136: "Mr. Card remembered discussing the SNC Risk Report with Mr. Martin, however Mr. Martin has no recollection of it." But I can't find any support for that in Mr. Card's statements –

MR. SHAFFER: I think –

MR. SMITH: – in answer to the questions.

MR. SHAFFER: I think I testified the contents of the report, not the report itself.

MR. SMITH: Yeah.

And could you point to where there was a – that there was a reference to a draft report in a commentary that you took from the various witnesses: Mr. Tremblay, Mr. Bechard, et cetera?

MR. SHAFFER: It was in Harrington's email, for starters; Mr. Harrington's email.

MR. SMITH: Yeah.

MR. SHAFFER: Of May 28 of '13.

MR. SMITH: I understand that, but May 28 we know from the documentation, we know that it was signed – last signature was May 17.

MR. SHAFFER: And the first one was April 23.

MR. SMITH: I understand that, but it doesn't indicate in terms of the statements of the individual witnesses that there was a draft report. They talked about a report, and the only report that's actually finalized is after May. And that's when Mr. Harrington in his email referenced – quote, unquote – the report.

MR. SHAFFER: Mr. Smith, if you're saying to me that they lied to me, okay.

MR. SMITH: Yeah.

MR. SHAFFER: But I'm going with what I was told.

MR. SMITH: And even with your excerpts from various questions that you ask, even with those excerpts, you chose not to test them against each other in order to make a conclusion that the risk report was discussed, specifically, with Mr. Martin?

MR. SHAFFER: I don't even understand that question. What are you – test what?

MR. SMITH: Test – in other words look at – in conflicting statements that are in the report. I mean, if you look at Mr. Bechard's statement, he talks about the report having been handed by him to Mr. Card, the day or so before the meeting in April. That's what he says.

MR. SHAFFER: Correct.

MR. SMITH: Okay. But nobody else says it, and Mr. Thon would take the view that it would only be him that would present the report to Mr. Card, the CEO. In other words, there doesn't appear to be any testing of the information, just picking those statements out that support the view that the report was discussed. Is that fair?

MR. SHAFFER: No.

MR. SMITH: Why?

MR. SHAFFER: Because after Mr. Bechard's interview where he said that to us, the first thing we did was try to arrange an interview with Mr. Card to see what his perspective on that was. And that he actually attempted to hand the report to Mr. Martin and Mr. Martin wouldn't accept it, to confirm Mr. Bechard's story, and Mr. Card did not confirm that.

MR. SMITH: No. So –

MR. SHAFFER: Yep. Let me finish.

MR. SMITH: – Mr. Bechard's evidence then was inconsistent with Mr. Card.

MR. SHAFFER: And I don't know where in my report I concluded that Mr. Martin refused the report in my –

MR. SMITH: No.

MR. SHAFFER: – conclusions. I didn't say that.

MR. SMITH: No, I understand. So – but, you did say: Even though Mr. Card does not refer to a draft report, neither does Mr. Thon refer to a draft report, but you did say that they were discussing the items in the report. And I'm wondering how you could make that conclusion based upon the material that you relied upon.

MR. SHAFFER: I guess you'll have that opportunity when you talk to Mr. Thon when he testifies.

MR. SMITH: There's only one more issue, and that is – it occurred after March of 8 – sorry, March of '16, and you were doing a – the review up to March of '18 is my understanding this. Right?

MR. SHAFFER: For the cost, yeah.

MR. SMITH: Yeah. March, April, I should say –

MR. SHAFFER: Yes.

MR. SMITH: – of '16. And that is any indication or any activity on the part of the forensic auditors, yourselves, to determine what cost increases might have been incurred by a sudden change out of the leadership of Nalcor.

MR. SHAFFER: The only thing that was told to us was what Jason Kean said. That the increase from 10.1 to 10.5 was a result of the bifurcation.

MR. SMITH: Okay.

And the next – the other issue I'd like to just touch upon briefly, and that is whether or not – from, again, the forensic audit perspective, whether or not you were able to determine if the strategic risk of clearcutting the reservoir has been included in the existing 10.1 –

MR. SHAFFER: No.

MR. SMITH: – number.

MR. SHAFFER: No.

MR. SMITH: Okay. You didn't do it or you don't know, or it's not there?

MR. SHAFFER: I don't know. I don't think I looked at that, no.

MR. SMITH: Okay. You didn't look at that?

MR. SHAFFER: Not that I recall.

MR. SMITH: Okay.

Thank you.

THE COMMISSIONER: All right, it's almost quarter after 3. We'll take our break now until – for 10 minutes.

CLERK: All rise.

Recess

CLERK: Please be seated.

THE COMMISSIONER: Kathy Dunderdale.

MR. HEWITT: Good afternoon, Mr. Shaffer. My name is Justin Hewitt and I represent Kathy Dunderdale.

MR. SHAFFER: Good afternoon, Mr. Hewitt.

MR. HEWITT: Just a couple of questions for you. If we could just turn to page 17 of the forensic audit report.

So you'll see here – there's been some discussion on this point already, but one of your findings was that Nalcor should have known by April 2013 that the contingency was exhausted.

Now, in response to a question from Mr. Budden, I think you acknowledged that you did not find any evidence in the course of your audit that the shareholder was made aware of that fact. Is that correct?

MR. SHAFFER: Correct.

MR. HEWITT: Can we turn to page 19 please? Scroll down a little – there we are.

So, it's – looking at this chart here, am I reading this correctly that according to your findings, by July 2013 the executive at Nalcor was aware that the forecast final cost of the project was $7 billion?

MR. SHAFFER: Yes.

MR. HEWITT: In the course of your audit, did you find any evidence that the shareholder was made aware of that fact?

MR. SHAFFER: No.

MR. HEWITT: Page 73 please? Could scroll down a little. And again, there's been some discussion on this point as well, that Mr. Hull of Nalcor had raised some concerns about the outlook for Italy in response to the – or in respect of the Astaldi bid. And there are certain other issues raised with respect to creditworthiness.

In the course of your audit, did you find any evidence that this was communicated to the shareholder?

MR. SHAFFER: No.

MR. HEWITT: Those are my questions. Thank you.

THE COMMISSIONER: All right, thank you, Mr. Hewitt.

Former Provincial Government Officials '03, '15.

MR. T. WILLIAMS: Good afternoon, Mr. Shaffer.

MR. SHAFFER: Good afternoon.

MR. T. WILLIAMS: Sorry, good afternoon, Mr. Shaffer.

MR. SHAFFER: Good afternoon.

MR. T. WILLIAMS: I only have one question. I'm Tom Williams, representing Former Government Officials from 2003 to 2015 with the exception of former Premier Dunderdale.

My one question is probably following in line with respect to communications to the shareholder. And if we could – if we could just turn to your report – 01677, please. And if we could turn to page 5.

And that page deals with the scope of work, and if we can just go down to lines 20 through 23. If I could just read from there.

Line 20 – starting at line 20, it says: "As per our engagement agreement, the Forensic Audit for the Construction Phase was to include the considerations as set out in paragraphs 4(b)(i) to (vi) of the Commission of Inquiry Respecting Muskrat Falls Project Order." And you go on to cite this would be one of the provisions of the Terms of Reference.

Now, if we turn over to page 6, which is – you go there to list the six sections. If I could draw your attention to lines 9 through 15 on page 6. And line – starting at line 9, it states: "any risk assessments, financial or otherwise, were conducted in respect of the Muskrat Falls Project, including any assessment prepared externally and whether …" – down to line 15 states – "… Nalcor made the government aware of the reports and assessments."

That being said, part of your engagement was to report on this aspect as per the Terms of Reference of the Commission of Inquiry.

Now, if we turn to page 111 of your report, if we could, please. And again, at the top of that page, you again – you repeat those provisions of the Terms of Reference. And then – this is under the Risk Assessments section of your report.

And over the course of the next, I believe, nine pages, you discuss various aspects of the report. You go into some discussion with respect to the meeting that was held with Nalcor, SNC and Westney. And again, you discuss various aspects of the risk assessments, right up to page 119, where your observations and findings are commencing at line 24.

And nowhere between lines – in that section 13.3 – do I see any indication where Grant Thornton made any finding that government were made aware of any of these risk assessments or reports, as per the Terms of Reference.

So, I'm sorry for the long lead-in –

MR. SHAFFER: It was.

MR. T. WILLIAMS: – but am I correct in assuming, based upon your analysis and your conclusions there, that having conducted the review, that you found no evidence given the fact that there's no reference to government ever being communicated anything with respect to these provisions.

MR. SHAFFER: As it relates to the SNC situation and to the QRAs that Westney performed, that's correct, as far as I remember.

MR. T. WILLIAMS: Okay. Thank you.

MR. SHAFFER: (Inaudible.)

THE COMMISSIONER: All right. Thank you, Mr. Williams.

Julia Mullaley, Charles Bown?

MR. FITZGERALD: Mr. Shaffer, I represent Julia Mullaley, the current Auditor General, and Charles Bown.

Mr. Williams and Mr. Hewitt have stolen my questions, but I do have a few more.

In particular, with respect to page 17 of the report, your observations and findings, 1.6, on financial close? That would be page – Mr. Hewitt just brought you there, I believe. That's page 16. Page 17, sorry – 1.6.

Mr. Hewitt brought you to the first bullet: "By April 2013 (four months after sanctioning), Nalcor should have known the contingency was exhausted." And your evidence was that the government was not aware of that.

MR. SHAFFER: The evidence was that I didn't see anything that would make the government aware of that.

MR. FITZGERALD: Okay. I'll come to that in a moment.

"Nothing came to our attention to indicate that Nalcor attempted to recalculate the contingency and/or the entire capital cost estimate between April 2013 and financial close (November 2013)."

Next bullet: "Prior to financial close, Nalcor should have been aware that the contingency included in DG3 budget was insufficient."

And the next budget – bullet: "At the time of financial close, the project schedule was delayed by six months, demonstrating that the 97% chance of schedule slippage determined at sanctioning was in fact materializing."

Is it your evidence that you did not find any evidence that any of this was communicated to government?

MR. SHAFFER: None that I recall.

MR. FITZGERALD: Okay.

You reviewed a number of documents? Thousands –

MR. SHAFFER: Thousands if not hundreds of – yes.

MR. FITZGERALD: Thousands if not hundreds?

MR. SHAFFER: A lot. A lot.

MR. FITZGERALD: And you're a professional forensic auditor?

MR. SHAFFER: Yes.

MR. FITZGERALD: Yes.

And, under the Terms of Reference and the scope of this report, if there was something material with respect to the government having knowledge of this, you would have noted it?

MR. SHAFFER: I would think so, yes.

MR. FITZGERALD: And you had a team working for you, so it wasn't it just you.

MR. SHAFFER: No, it wasn't just me.

MR. FITZGERALD: That's right. So you and your team – a number of individuals reviewed thousands of documents and in reviewing those thousands of documents, there was no evidence that this was communicated to government?

MR. SHAFFER: Yes.

MR. FITZGERALD: And you're independent; you're an independent auditor. You haven't been hired by government or Nalcor?

MR. SHAFFER: No.

MR. FITZGERALD: So, when you look at this with fresh eyes, your team at Grant Thornton is looking at it with fresh eyes, I should say, and you're making material findings and observations based upon the information that you have?

MR. SHAFFER: Correct, and based on interviews.

MR. FITZGERALD: Yes.

You received co-operation from government and from Nalcor with respect to document production throughout?

MR. SHAFFER: I did.

MR. FITZGERALD: I notice you thank them in your delivery letter.

MR. SHAFFER: Yes.

MR. FITZGERALD: And you don't believe that you were impeded with respect to doing your forensic audit in terms of attaining information and being able to report to the Commissioner?

MR. SHAFFER: No.

MR. FITZGERALD: In terms of interviews, you reference – pardon me, Mr. Shaffer – you reference on page 6 of the report, I believe, line 21, that you: "Conducted interviews with and/or attended presentations from: Nalcor executives, senior management, other employees and contractors; industry experts; concerned citizens; and, past members of the Muskrat Falls Oversight Committee."

Correct?

MR. SHAFFER: Correct.

MR. FITZGERALD: Yep.

Do you recall attending an interview with myself and Ms. Mullaley and Mr. Bown over the summer?

MR. SHAFFER: I do. I looked at lunchtime, and I do recall that, yes.

MR. FITZGERALD: And they were former members of the Oversight Committee.

MR. SHAFFER: Yes, both of them – at the time, Ms. Mullaley was the former chair of the Oversight Committee, and Mr. Bown, I think, at that time, was a current chair.

MR. FITZGERALD: Yes.

And they co-operated in the interview?

MR. SHAFFER: Yes.

MR. FITZGERALD: And I note there's a number of individuals named throughout this report. There's hundreds of names in this report. Maybe not hundreds, but there's an awful lot of names –

MR. SHAFFER: A lot.

MR. FITZGERALD: – in this report. I note that Ms. Mullaley's name doesn't appear and neither does Mr. Bown's.

MR. SHAFFER: Correct.

MR. FITZGERALD: If there was a material finding in relation to your terms of reference or scope of work in relation to those individuals, would it be a practice to note it in the report?

MR. SHAFFER: We would have noted it.

MR. FITZGERALD: I also note there's no reference to Paul Carter or Mr. Craig Martin. They were the executive directors of the Oversight Committee, and there's also no reference to those individuals in your report also. Would you agree with me on that?

MR. SHAFFER: Correct.

MR. FITZGERALD: And if you had found a material fact or finding or observation in relation to their conduct, you would've put it in here as well?

MR. SHAFFER: Correct.

MR. FITZGERALD: I know you're going to provide a list to the Commissioner. Were there any other individuals from government that were interviewed by Grant Thornton or former government officials or politicians in relation to your forensic audit?

MR. SHAFFER: I don't recall, Mr. Fitzgerald.

MR. FITZGERALD: Okay, you don't recall?

If you – this is assuming there were – if there were other government officials that were interviewed or former politicians and you discovered a material finding, a fact or observation in relation to your terms of reference you would have included that in your report, wouldn't you?

MR. SHAFFER: Yes.

MR. FITZGERALD: Would you agree with me that the report is noticeably absent of any significant adverse findings or any adverse findings by government officials or public servants?

MR. SHAFFER: Yes.

MR. FITZGERALD: With respect to the SNC-Lavalin report – just to be clear – there's no evidence that the government received that at the time in 2013 either, is there?

MR. SHAFFER: No.

MR. FITZGERALD: Thank you, Mr. Shaffer.

MR. SHAFFER: Thank you.

THE COMMISSIONER: (Inaudible.)

Consumer Advocate.

MR. HOGAN: Mr. Shaffer, my name is John Hogan. I'm counsel for the Consumer Advocate.

MR. SHAFFER: Good afternoon, Mr. Hogan.

MR. HOGAN: Good afternoon.

If you're not aware, the Consumer Advocate represents the ratepayers and the ratepayers are the individuals who will be paying for the cost of this project.

MR. SHAFFER: Okay.

MR. HOGAN: So, that's the interest that I have and I guess my many clients have here at this Inquiry.

MR. SHAFFER: Thank you.

MR. HOGAN: So, I'm just going to walk you through your report – certain specific questions I have – not as much detail, obviously, as everybody else has been through, or you've been through over the last couple of days. But if we could first, please, Madam Clerk, turn to page 10 – and line 10, specifically? So, it says – "During the period between project sanction and financial close Nalcor continued to advance the LCP."

So, my question is: Is this normal to have sanction and financial close months apart, as opposed to being at the same time?

MR. SHAFFER: I don't know.

MR. HOGAN: You don't know?

MR. SHAFFER: I don't know.

MR. HOGAN: And you don't know that in the context of public projects like this or private projects like this, or both?

MR. SHAFFER: I just haven't – I have not been involved in a project like this in terms of sanctioning and then financial close and looking at those issues.

MR. HOGAN: Okay.

And ones you have been involved in, it's just never been an issue or normally it is done at the same time?

MR. SHAFFER: No, I just haven't looked at it before.

MR. HOGAN: Okay.

Why – you haven't looked at it before because it hasn't come up as an issue?

MR. SHAFFER: Because my engagement in other projects has been more along the lines of auditing the costs of the project. Not so much in terms of an investigatory – investigation of the project.

MR. HOGAN: Okay.

But what – like, I guess my question is then – and maybe you can't answer it – is that liabilities are being incurred after sanction. Do you agree with that? Money's being spent?

MR. SHAFFER: I would assume before sanction too.

MR. HOGAN: Before sanction too.

Wouldn't it be prudent to get your financing and financial close in place before expenditures are being made?

MR. SHAFFER: From a business perspective you would think so.

MR. HOGAN: If we could turn to page 12, please? So I'm going to get into a little bit, I guess, about what the Commissioner was asking you – was talking about and when Mr. Smith was asking you some questions.

First, so the contingency was exhausted four months into the project. So my question is, what does that tell you? Other than there's no contingency left? Does it tell you that the DG3 numbers, the estimates at that point were low?

MR. SHAFFER: It tells me that, I think –

MR. HOGAN: I know they were low. I should say. Was there – does it tell you there was a mistake in those numbers?

MR. SHAFFER: Not necessarily a mistake, but maybe the estimate has to be looked at again, that maybe they have to rethink the approach.

MR. HOGAN: Okay.

Maybe they should or they should?

MR. SHAFFER: Well, I mean, the prudent thing would have been to at least sit down and certainly look at it again.

MR. HOGAN: Does it tell you that for the contracts and the bids that are yet to come, chances are that those estimates are going to be low as well?

MR. SHAFFER: Yet to come past what point?

MR. HOGAN: Well, past financial close let's say. Or past the point of when the contingency is exhausted.

MR. SHAFFER: Well, they knew – they meaning the project management team and executives – knew, I believe, that by July of '13 there was a problem because it was – they already forecast a $7 billion cost.

MR. HOGAN: So then there's – when you look at the original DG3 estimate of 6.2, I suggest that there's two strikes at this point when you get to financial close against that number. One being that the contingency is gone so you're going to have to have more contingency. And the second strike being that DG3 estimates to that point were low, and likely the remaining DG3 estimates are low. Do you agree with that?

MR. SHAFFER: I do agree with that. And it's really what's on lines 7 through 10 where I talk about that, you know, by April of 2013 you still have $4.2 billion of that budget left with no contingency left on the remaining $4.2 billion.

MR. HOGAN: So, at a minimum at financial close, the prudent thing would be – at a minimum, I would suggest – is to add contingency, 'cause there is no contingency left.

MR. SHAFFER: Well, I think at that point, knowing what's going on, by April – it should have been looked at way before financial close.

MR. HOGAN: Right.

And, again, you've been asked about whether the numbers should have been rerun as well. That would have been a prudent thing to do.

MR. SHAFFER: I think they needed to sit down and look at this and really scratch their heads a little bit and say: Gee, maybe we have an issue here.

MR. HOGAN: Okay.

And when Mr. Smith talked to you about that $600-million number at financial close – the number's actually $230 million, right, in your report? That's the number that's been – over budget at that point in time, is that correct?

MR. SHAFFER: Well, at actual financial close, if you remember, I thought the number was $6.5 billion, which was $300 million over and above the $6.2 billion excess.

MR. HOGAN: Well let's just look at –

MR. SHAFFER: What the 6 –

MR. HOGAN: I don't have (inaudible). Yeah, go ahead.

MR. SHAFFER: What the $599 or the $600 million here is – these are bids that are coming in and I'm – and it was being compared by the project management team – this is where I got this information from – to the DG3 estimate.

And that's all this is. And the whole point of this is that, again, that by April they knew they had a problem and there's no doubt that – and it was – contingency was exhausted by then.

MR. HOGAN: The contingency was exhausted, but you were over – the $600 million was over – go ahead.

MS. O'BRIEN: Page 11 – sorry, page 11 of the report is the table that may assist you, Mr. Hogan. You can see the 600 at the bottom and the April number above.

MR. HOGAN: Yeah, so the 600 is over – the $600 million at that point is over what the DG3 estimate is.

MR. SHAFFER: Right.

In other words –

MR. HOGAN: The contingency was – correct?

MR. SHAFFER: The 600 was over what?

MR. HOGAN: Over the DG3 estimates for those bids.

MR. SHAFFER: By financial close, yes.

MR. HOGAN: Right.

But the contingency was only 368.

MR. SHAFFER: At –

MR. HOGAN: At financial close.

MR. SHAFFER: – at –

MR. HOGAN: Total, right?

MR. SHAFFER: Well, no – no, I don't think that's –

MR. HOGAN: Okay.

MR. SHAFFER: – right, no.

I think that the contingency was 368 at DG3. The budget was increased to – from 6.2 to 6.5 at – by the time financial close happened.

So, the question – you know the question is how did they increase the budget; I'm not sure. They could have just easily increased the contingency another $300 million.

MR. HOGAN: Correct, okay.

So, I guess my point with the $600 million, though, is that that's not necessarily the only overage you're going to have. It's only the overage that exists at that point in time.

MR. SHAFFER: (Inaudible.)

MR. HOGAN: So when Mr. Smith says, well, we got $2.4 billion to work with, that's not necessarily accurate, is it?

MR. SHAFFER: Well, I – correct.

And I think the easiest way to look at that is, by April 2013 you have basically $4.2 million left of work that had to be done, at least that was in the budget, and there's no contingency left against that $4.2 billion.

MR. HOGAN: Right.

So my last question on this is: If you do rerun the numbers, obviously that gap between the Isolated Option and the integrated option is going to be smaller at this point in time, isn't it?

That's logical, isn't it?

MR. SHAFFER: It could be. Without rerunning it, I – who knows?

MR. HOGAN: Okay.

MR. SHAFFER: But my – the whole critique –

MR. HOGAN: Logically, if the costs of the integrated option go up, the gap would close though, correct?

MR. SHAFFER: You would think so, yes.

MR. HOGAN: Okay.

MR. SHAFFER: All other things being equal.

MR. HOGAN: All other things being equal, sure.

If we could turn to page 13, please. Line 22? This says: *"NL Crown commits to do the following…provide the base level and contingent equity support that will be required by Nalcor to support successful achievement …"*

I just wanna be clear that the equity from the Crown is not necessarily equity; that could be debt that the Crown has to borrow to give to Nalcor.

Are you aware of that?

MR. SHAFFER: No, not aware of that.

MR. HOGAN: Okay.

Did you encounter, when you did interviews or looked at any documents, any issues with the project management team and how they felt about the fact that these – they weren't – the bids that were coming in weren't meeting the DG3 estimates? If there was any thought process regarding the mentality that they had a blank cheque?

And I use the term blank cheque because we heard that in Phase 1 – that a blank cheque had been written to this project to get completed.

MR. SHAFFER: I didn't get that impression, no.

MR. HOGAN: Okay.

If we could turn to page 19, please. I think you've been taken here a couple of times now.

So, you obviously included this chart for a reason. You feel that it's a significant issue – significant enough to put in your report?

MR. SHAFFER: Yes.

MR. HOGAN: Can you elaborate on it a little bit further – about why it's in there and what it means?

MR. SHAFFER: Sure.

MR. HOGAN: Please?

MR. SHAFFER: The whole point of this is to show the difference in timing between when the executives knew that the costs were going up, and what the new costs would be versus when the AFE was finally issued.

MR. HOGAN: So does it mean that Nalcor is spending without approval of the board?

MR. SHAFFER: No, I don't think it means that. I think they knew that the cost was going up, and potentially the board didn't know it in a timely fashion, at least on those two AFEs.

Now, with that said, I don't know if there was any sidebar conversations that the executives were having with the board that weren't memorialized anywhere; that very well could be.

MR. HOGAN: So it shows the costs are going up but it doesn't necessarily show that there's expenditures being made.

MR. SHAFFER: Yes.

MR. HOGAN: Okay.

If we can just, sort of scroll through – I'm sure you've seen it a thousand times. Pages 19 to 22.

These are briefings that were provided by the project management team to the executive, correct summary?

MR. SHAFFER: Yes.

MR. HOGAN: So, I guess these are not done on a regular basis, do you agree?

MR. SHAFFER: Based on what we were given.

MR. HOGAN: Based on what you were given.

MR. SHAFFER: I mean, this is what were given.

MR. HOGAN: Okay.

MR. SHAFFER: There's a couple that were missing because there was no change in anything to note.

MR. HOGAN: Okay.

Does that fall below any standard in terms of regular reporting?

MR. SHAFFER: I think it depends on the parties.

MR. HOGAN: Well, in your experience, I mean, you've done this a lot, so would you like to see more reporting on a more regular basis?

MR. SHAFFER: Well, the only thing that I noted here that I saw unusual was there's gaps that started to happen between May and – of '14 and February of '15, and then from March of '15 to May of '16. Now with that said – remember I left a couple presentations out of there – it very well could be filled in that way.

MR. HOGAN: Okay.

In terms of this being a public project and public funds, is there any higher onus on any extra sort of reporting in meetings or anything like that, that you're aware of or should there be?

MR. SHAFFER: I can't comment to that.

MR. HOGAN: Should the project management team be meeting with anyone else on a regular basis other than the board, such as the shareholder?

MR. SHAFFER: I think whatever the protocols are, that's what they should be doing.

MR. HOGAN: Did you see any evidence that the board had sought more meetings?

MR. SHAFFER: With who?

MR. HOGAN: With the executive.

MR. SHAFFER: No.

MR. HOGAN: Did you see any evidence from the board that they were concerned or raised any issues with the amount of – with the delays – not the delays, I guess, but with the large gaps between these reporting meetings?

MR. SHAFFER: Not that I recall.

MR. HOGAN: If we could please turn to page 28.

So, Mr. Shaffer, I'm going to ask you to explain this to me. I might have some further questions and I might not.

Yesterday you made it a point to clarify that – or to elaborate on the hours for Astaldi and Aecon. You remember that?

MR. SHAFFER: Yes.

MR. HOGAN: And I think what you said was that if you look at the LMax, the Aecon hours would be 14.4 and the Astaldi hours would be 7.7, correct?

MR. SHAFFER: That's with the LMax hours included in there, yes.

MR. HOGAN: Can you explain why that's relevant?

MR. SHAFFER: Well, because what it says is that when you add the LMax that the Aecon hours are almost twice as much as the Astaldi hours.

MR. HOGAN: Which would make sense because the Aecon bid is twice as much as the Astaldi bid?

MR. SHAFFER: Yes.

MR. HOGAN: Is that one way to look at it?

MR. SHAFFER: Yes.

MR. HOGAN: Okay.

So if we can look at the further breakdown at P-00196, please? Page 16. Sorry, that's not even close – P-01964, page 16. We can scroll down to the bottom of this page, I believe.

So, Mr. Shaffer, these are the bid numbers – $2.1 billion, $1.1 billion, $2.0 billion – which we just saw, correct?

MR. SHAFFER: Yes.

MR. HOGAN: And the total hours there – 12, seven and 14 – includes the LMax which, I guess, is what you just stated to me, correct?

MR. SHAFFER: Correct.

MR. HOGAN: So this is what I want explained: Does that mean that this is what the bid – this is what the contract is going to cost if these are accepted: 2, 1.1, 2.0?

MR. SHAFFER: If –

MR. HOGAN: Why –

MR. SHAFFER: If the LMax kicks in, yes.

MR. HOGAN: Okay. That's what I want you to explain.

MR. SHAFFER: Well, if it was going to be structured like the Astaldi contract that was going – basically, if they go up above the target cost of – target labour costs – if the contractors would've gone above it, then the contractors had that cushion for the LMax to get to a maximum price for the cost of labour. So if they needed those extra hours they were there for them but anything over and above that LMax price – the LMax price then it would've been the contractor's risk –

MR. HOGAN: So –

MR. SHAFFER: – if it was structured the same way as Astaldi.

MR. HOGAN: If Astaldi were to hit the max LMax they would be paid 1.1, correct?

MR. SHAFFER: Assuming that all the other components –

MR. HOGAN: Yeah.

MR. SHAFFER: – came in at what they're at, sure.

MR. HOGAN: And does that mean that they would – the person-hours worked by Astaldi would be 7.6?

MR. SHAFFER: I'm sorry?

MR. HOGAN: Does that mean the number of hours worked by Astaldi would be 7.6?

MR. SHAFFER: If they come in at that price and don't go above it, you mean?

MR. HOGAN: Yes.

MR. SHAFFER: Yes, if it's that price; there's also the risk to Astaldi that they wind up incurring more hours over and above the 7.6 –

MR. HOGAN: I think I'm – in a perfect world for this contract.

MR. SHAFFER: Okay, okay.

MR. HOGAN: Yeah.

MR. SHAFFER: In a perfect world, yes.

MR. HOGAN: Okay.

So does that – you talked – you were asked today about drilling down into bids, especially Astaldi, you said you would've drilled down because of the hours. Is this an example of drilling down? Because intuitively to me, without being an expert in this, it looks like to me Astaldi's number is quite different because the hours are much lower.

MR. SHAFFER: There's no doubt, and when you look at these three numbers – these three columns lined up, and if you do a little math, what that's really saying to me that from a total direct and indirect hour perspective, which is what the bottom line represents, IKC and Aecon is somewhere in the area of 26 to 30 hours where Astaldi is 15 hours per cubic metre poured of concrete. And that to me would've been a red flag.

MR. HOGAN: So Astaldi is an outlier when you drill down?

MR. SHAFFER: To me it is, yeah.

MR. HOGAN: To you it is.

MR. SHAFFER: Yeah.

MR. HOGAN: I just wanted to make that clear because the – what was put to you today was that there was two bids for $2 billion and two bids for $1 billion, so there's not really an outlier. But when you do drill down, there does seem to be one that doesn't fit with the rest.

MR. SHAFFER: Well, you have to put this in context of what was going on here, right? I mean, these bids received in April of 2013, all through the course of the process Nalcor was working with SNC and Westney. SNC does the bid – or I'm sorry, does the estimate. They're coming in at – in terms of direct-labour hours per cubic metre at five direct-labour hours per cubic metre. Astaldi's bid comes in at seven direct-labour hours per cubic metre.

The other two are probably twice as high as that, and Westney's telling them at that time, based on a discussion that we had with Keith Dodson, that there's risk here of – because of productivity, he didn't think they were going to hit those productivity numbers, and potentially that risk was another $2 billion. So that's what – so in context of all that, you know, when this bid comes in you look at that and it questions: Do you scratch your head and say, gee, maybe Dodson could be right here? That's the way I look at it.

MR. HOGAN: Okay, thank you.

If we could turn to page 32 please – sorry, back to the report, please. Lines 12 to 15, so this is talking about labour hours – a question you put to Mr. Harrington, I believe. Now he's –

MR. SHAFFER: No, this was Mr. Lemay.

MR. HOGAN: Oh, sorry, Mr. Lemay. "*We have then included in the base estimate a 20% majoration if the labour force to address a possible lack of labor availability and potential unproductivity*."

Do you know where that 20 per cent number comes from?

MR. SHAFFER: No.

MR. HOGAN: Do you know if there's any analysis done?

MR. SHAFFER: I don't know.

MR. HOGAN: Do you know if it was a guess?

MR. SHAFFER: I don't know.

MR. HOGAN: Should there be an analysis to get that number if Mr. Lemay put that number in there?

MR. SHAFFER: I think you'd have to talk to Mr. Lemay about that.

MR. HOGAN: Do you think he should have an analysis to back up his 20 per cent number?

MR. SHAFFER: I think you need to talk to Mr. Lemay. I don't have an opinion on that.

MR. HOGAN: Okay, thank you.

I just want to go back to something about Astaldi again; if we could look at page 32, please. You can scroll down to the second table, please.

So just in terms of the indirect and direct numbers, it's pretty clear that the ratios are different when you compare Astaldi's bid to the estimate, if you know what I mean – the indirect to direct for Astaldi is not the same ratio as the indirect to direct for DG3.

MR. SHAFFER: Correct.

MR. HOGAN: So can you tell me what that is? It seems to me it would be a totally different work concepts.

MR. SHAFFER: We asked Mr. Lemay about that, and one of the things he told us was that Astaldi's bid assumed more direct – I'm sorry – more supervision than what he assumed in the estimate.

MR. HOGAN: Was that –

MR. SHAFFER: Meaning more indirect-labour hours.

MR. HOGAN: Yeah, I mean, that's obvious, though, isn't it?

MR. SHAFFER: I think – that's what you asked me, though, right?

MR. HOGAN: I'm asking you if you can add anything other to the obvious fact that there are more indirect. So why would Astaldi view this project as needing more indirect hours compared to – for direct hours, compared to what Mr. Lemay thought?

MR. SHAFFER: I don't know.

MR. HOGAN: You don't know. You didn't ask that question?

MR. SHAFFER: No.

MR. HOGAN: Okay.

If we could please turn to page 28, line 5. This is talking about RFP and bidding. It says: "Nine contractors participated in the pre-qualification process of which four contractors were selected to participate in the RFP."

MR. SHAFFER: I'm sorry, what line are you on?

MR. HOGAN: Line 5 and 6.

MR. SHAFFER: Okay, I'm there, yup.

MR. HOGAN: First of all, do you have any information about the other five contractors, the ones that weren't selected?

MR. SHAFFER: I don't know, but we obviously, based on the footnote – is the report where we got this off of, it might be in there.

MR. HOGAN: Do you do any analysis on those?

MR. SHAFFER: No.

MR. HOGAN: Okay. Do you know how the pre-qualification process worked?

MR. SHAFFER: It's listed, I believe, in the recommendation for award summary.

MR. HOGAN: Okay. And do you know who was involved in the pre-qualification process?

MR. SHAFFER: Not off the top of my head. I mean, I don't want to guess.

MR. HOGAN: Okay. So you can't recall if the hours or the value or anything in those other five bids are relevant to anything we should be looking at here?

MR. SHAFFER: I think you have to look at the document and –

MR. HOGAN: You can't recall, is what –?

MR. SHAFFER: I just don't recall, sitting here.

MR. HOGAN: If we could please turn to page 35, line 5.

"This contributed to the ICS being less effective than was planned."

I'm just wondering if there should have been a contingency factor built in specifically for the ICS. Would that have been prudent?

MR. SHAFFER: I don't have an opinion on that.

MR. HOGAN: Okay. But you do realize – I mean, you've seen that there was no backup plan, correct?

MR. SHAFFER: Backup plan if the ICS failed?

MR. HOGAN: Failed, yeah.

MR. SHAFFER: (Inaudible.)

MR. HOGAN: Actually let's just – can we just go to – sorry to cut you off – P-01678, page 17?

So this is Williams' report. In the middle please, page 17. Mm-hmm.

Right there. I'll just read it in. It says: "Without the ICS, Astaldi did not appear to have an alternate plan to deliver the required production rate in order to achieve the overall schedule. Should the ICS not work, Astaldi would need to react quickly to find/buy/transport/erect/operate traditional construction cranes and determine how to meet productivity targets with limited crane placement capacity. Without developing an alternate system quickly, significant delays and increased costs would result." Which we now know is what happened, correct?

MR. SHAFFER: Correct.

MR. HOGAN: So I guess my question is, looking back at those bidding when it was happening, knowing that there was no alternate plan, how do you deal with that in terms of financial analysis?

MR. SHAFFER: You would have to talk to the folks at Nalcor.

MR. HOGAN: So you have no opinion on that?

MR. SHAFFER: No.

MR. HOGAN: I also note in Williams' report, the next paragraph down – if we scroll down a little bit. Midway through it says, "No approvals or acceptance to proceed with this strategy" – the ICS strategy – "should have been given until the ICS could be justified as viable and accepted by all parties."

Did you see any information, do any analysis on whether the ICS was justified and/or viable?

MR. SHAFFER: No, but I wasn't looking for that, necessarily. No.

MR. HOGAN: Okay.

You weren't looking for it necessarily, what do you mean by that?

MR. SHAFFER: Meaning just – we were just looking at the documents, trying to understand what caused the cost overruns.

MR. HOGAN: Okay.

Do you know – I mean, the dome was somewhat built and then taken down, is my understanding, correct?

MR. SHAFFER: That's my understanding also.

MR. HOGAN: So do you have any information about who paid to take the dome down?

MR. SHAFFER: I think there was in the listing of the Astaldi section of the report, I thought one of the change orders was – had to do with the – taking down the dome. But I would have to check the report.

MR. HOGAN: Okay.

So if we could just turn to page 38 – 39, please, line 8.

So I'm wondering if you can try and explain to – I guess I'll call them – my clients. Mr. Simmons walked you through a breakdown of the Astaldi contract today, and he can correct me if I'm wrong, but it sounded like to me a lot, or if not all, of the cost of that contract – the risk, I should say – was on Astaldi. Do you recall that and do you agree?

MR. SHAFFER: I think, over and above the (inaudible) cost of labour and above the lump-sum item, I believe that's right.

MR. HOGAN: And we've also heard evidence that the contracts entered into were reasonable according to Miller Thomson, correct?

MR. SHAFFER: Correct.

MR. HOGAN: So – and maybe you're not the right person to ask – but I'm wondering if you can explain that bullet point there in your report that says – and I'm reading it a little bit backwards – as a result of Astaldi's performance issues on a fixed-price contract that was reasonable –

MR. SHAFFER: I'm sorry, where are you at, exactly?

MR. HOGAN: The second bullet.

MR. SHAFFER: Okay. Go ahead.

MR. HOGAN: As a – I'm reading it a little bit backwards here – as the result of Astaldi's performance issues, $884 million of the $1.2-billion overrun was 'cause of that. Can you try and explain that so maybe the general public can understand why a contract that was at the risk of Astaldi, and a reasonable contract, cost that much money in overruns for Nalcor to pay?

MR. SHAFFER: Well, the only thing that I'm aware of is the Westney analysis that was done in February 2016 where the decision was made to continue with Astaldi, which considered to be a least risk – the least-cost risk exposure to Nalcor. That's the only thing I can point to.

MR. HOGAN: That Westney said keep going with Astaldi?

MR. SHAFFER: That that was their final – yeah, that was their recommendation.

MR. HOGAN: Do you understand how someone in the general public might not be able to reconcile those conclusions that I just mentioned though?

MR. SHAFFER: I do understand that.

MR. HOGAN: Okay.

I just want to pick up on something else Mr. Simmons mentioned. I think he said – and again, he can correct me if I'm wrong – that if they had have chosen – if Nalcor had have chosen one of the higher bidders at $2 billion – at the end of the day you would have had the same result because Astaldi cost $2 billion as well, is that correct?

MR. SHAFFER: Not necessarily. The question – you can't ignore schedule slippage here, and don't forget that that also increases cost.

MR. HOGAN: Schedule slippage for which bid?

MR. SHAFFER: Well, Astaldi was – as we all know – is one of the main contractors here. And if they fall behind in the sequencing of the work, the whole schedule is potentially pushed back. And that's basically what happened here.

MR. HOGAN: Right.

MR. SHAFFER: There was knock-on effects (inaudible) –

MR. HOGAN: Which ended up costing – I think Mr. Simmons' point was it ended up costing what one of the higher bids was anyway.

MR. SHAFFER: If you ignore schedule slippage and just for this scope of work – yes.

MR. HOGAN: Okay. The point I want to make though is if a $2-billion bid had been accepted at the time, again, logically, that would have closed the gap on the CPW analysis, wouldn't it?

MR. SHAFFER: Oh sure.

MR. HOGAN: Okay. So there was benefit to select a lower bid if your goal was to not close that gap? It's a strange way to put it, but I think you know what I mean.

MR. SHAFFER: I see what you're driving at. If that is the number one motivation, then I would agree with your premise.

MR. HOGAN: And one other little piece of information that makes me think it might be motivation is that – what you talked about with one of the counsel here today – was that the bidding process was devised in such a way that the low bid had to be accepted.

MR. SHAFFER: I –

MR. HOGAN: That's not a question.

MR. SHAFFER: Okay. Right. That's why I didn't say anything.

MR. HOGAN: I guess I'm just telling you – completing the circle – let's put it that way.

If we could turn to page 42, please?

This is issues about the transmission line. Lines 7 to 8. Again, we've been through this – "The … package budget was developed" – without [sp. with] – "limited geotechnical data due to" – EA – "restrictions."

I guess, is it safe to say the budgeting would have been more accurate if they had waited for the geotechnical data and waited for the environmental assessment to complete – to be completed?

MR. SHAFFER: I don't know if more accurate, but they certainly would have had more information about geotechnical.

MR. HOGAN: But wouldn't more information – okay – you can – there'd be more reliance placed on it. It could still be the same number, theoretically.

MR. SHAFFER: I think anytime that you get more information about a potential unknown, I think you're in a better position.

MR. HOGAN: So you'd agree it's best practice to wait, get all the information before you sanction a project?

MR. SHAFFER: I don't know about best practice. The question is: Could they have gotten more information had they waited? And the answer there is potentially.

MR. HOGAN: Okay, and potentially the – that estimate, potentially, could have increased.

MR. SHAFFER: Yes.

MR. HOGAN: And looking at the fact that that contract did go up, I assume that means you can probably, logically, infer that that DG3 estimate would've went up if they had the geotechnical data.

MR. SHAFFER: If you compare it to the geotechnical assumptions that were in the estimate to begin with, and now they have actual knowledge of it, and they realize it's going to cost more money, then the estimate would've gone up.

MR. HOGAN: Okay. Thank you.

If we could turn to line 24, please? Same page.

So, this talks about design changes for – to increase system reliability, and I think – if you can just tell me what you said at some point over this week – I think you said you're not exactly sure what that reliability issue is, or why it was triggered.

MR. SHAFFER: Well, I know there was a DarkNL, and as a result, the project management team said these are designed as a result of the Liberty review. They just – these were the design changes to enhance it.

MR. HOGAN: So, it's more reliable now than it was? The system.

MR. SHAFFER: Yes.

MR. HOGAN: Okay.

And are you aware that part of the selling point of this project was that it was, in fact, reliable?

MR. SHAFFER: I'll take your word for it.

MR. HOGAN: Okay.

I just want to turn to a document you probably haven't seen, or maybe you have. It's at P-00049.

Have you seen any reports from an entity called Manitoba Hydro?

MR. SHAFFER: Yes.

MR. HOGAN: Okay, sorry. So, P-00049, please? Page 123.

MR. SHAFFER: A long time ago.

MR. HOGAN: Does this look familiar?

MR. SHAFFER: It was a while ago.

MR. HOGAN: Okay.

If we can just scroll down a little bit, please?

I just – I'm wondering if this is the reliability issue – if this might connect the dots for you a little bit. It says, like – you know, it talks about: "The capital cost estimate of the transmission line at DG2 is reasonable, but at the low end of the range, for this type of construction utilizing industry benchmark costs as a comparison. A design based on a 150-year return period could be accommodated within the variability of an AACE Class 4 estimate ..."

Basically, they use the low end here, and it sounds like, to me, they did go back and upgrade it, which means they went to the high end.

Does that go along with what you see here?

MR. SHAFFER: Give me a chance to read it again.

MR. HOGAN: You might wanna read the paragraph above it as well.

MR. SHAFFER: Okay, what's your question now?

MR. HOGAN: I guess my question is, we're talking about DG2, so if this had been dealt with – if the reliability had been upgraded prior to sanction, it would've meant a higher estimate for cost, but it wouldn't – it would've meant less overruns after the fact. Is that fair to say?

MR. SHAFFER: Well, I just –

MR. HOGAN: I mean the overrun is the result of a scope change, right?

MR. SHAFFER: Well, design enhancements. So – well, we don't know for sure 'cause I got conflicting answers.

MR. HOGAN: Okay.

MR. SHAFFER: All right, so, based on what the project management told us it was because of the design enhancements as a result of the Liberty review.

Now, if what MHI is talking about here is design enhancements, which are the same thing that the Liberty review was talking about, then I would agree with you.

MR. HOGAN: Okay. Thank you.

If we could turn to page 43 please.

UNIDENTIFIED FEMALE SPEAKER: (Inaudible.)

MR. HOGAN: Yes. Line 9. This talks about the bidding again, sorry: "*Applications for bidder responses were sent out to 23 target companies for Phase I screening.*"

Do you have any information about how the list of target companies was developed?

MR. SHAFFER: Not without looking at the documents again.

MR. HOGAN: Okay, is that a normal process – for the owner to develop a target list?

MR. SHAFFER: Yes.

MR. HOGAN: Would there be any benefit of not developing a target list and maybe broadening that scope a little bit?

MR. SHAFFER: I think it just depends.

MR. HOGAN: On?

MR. SHAFFER: What the work is.

MR. HOGAN: Well, in this case, is it – that standard or prudent to do that?

MR. SHAFFER: I don't know if it's standard but, again, you have to talk to Nalcor about it.

MR. HOGAN: Okay.

If we could turn to page 55, please. Scroll down to lines 20 and 21, please.

Actually, so if you look at the end of this paragraph, it says: "*Secondly, the Estimated Contract Value exceeded the budget by more than 50%. It was decided, therefore, to carry out a cost reduction program to identify areas of cost savings, which could be achieved.*"

Which makes sense to me. My question is: For the Astaldi bid, which was $1.14 billion against a DG3 estimate of $752 million, which is also over budget by 50 per cent, was there any evidence that cost reduction strategy was undertaken for that work package?

MR. SHAFFER: If I remember the documents correctly, the final price of the contract came in less than what the bid was.

MR. HOGAN: It did.

MR. SHAFFER: So –

MR. HOGAN: But it came in more than the estimate.

MR. SHAFFER: But it came in more than the estimate, correct.

MR. HOGAN: And it came in closer to the bid than the estimate, I think.

MR. SHAFFER: That's correct. That I do recall.

MR. HOGAN: Okay.

So other than negotiating down the bid to the contract price there was no other, further evidence that you saw about cost reduction strategy for that work package.

MR. SHAFFER: Nothing that I recall.

MR. HOGAN: Okay.

And could they have – I mean, I've seen it before – I mean, could they have revised the scope and sent it out for bidding again?

MR. SHAFFER: Revised the scope in what way?

MR. HOGAN: Well, I don't know –

MR. SHAFFER: I'm not sure I follow you.

MR. HOGAN: – I mean, could you – or talk – change – maybe they needed to step back and say: Look, we're way off here in what we've designed; we need to revisit it, look at it. Maybe we can reduce costs and then send it out again.

As you said this morning, this is the project – this work package, right.

MR. SHAFFER: Yes, yes.

I mean when you look at it, I mean, at that time the bids are coming in higher for a lot of these packages, really. And the reason was the premium that the contractors were requiring for working in the environment here. And as – I'm not sure what repackaging exactly would have done.

MR. HOGAN: Okay.

If we could turn to page 88, please.

Line 13. So this talks about the integrated team and says: "… it appears that the ultimate responsibility and decision making authority rested with the Nalcor PMT."

MR. SHAFFER: We're – what line?

MR. HOGAN: Line 12 and 13.

So this is after the integration. So my question is: Is this a sort of – do you agree with me that it's counterintuitive as to why SNC was retained in the first place?

MR. SHAFFER: In what way?

MR. HOGAN: As the evidence, I think, was that SNC was hired for their expertise in hydro. And as being in charge of the project, they will be in charge of decisions and now that's not the case anymore. Now Nalcor is in charge of decisions in relation to the hydro project and SNC is – I'm not going to say pushed to the side, but their responsibilities have been downgraded, which I think was evidence you gave today. So that's what I mean by counter intuitive. They were hired for that specific reason and now they're not being used for that reason anymore.

MR. SHAFFER: I could see why you're saying that, but I guess – I mean at this point, I'm not sure what choice Nalcor had, given all the problems they were having with SNC.

MR. HOGAN: Okay.

Well, I – could one of the solutions have been to retain other hydro experts? In the –

MR. SHAFFER: I suppose.

MR. HOGAN: From a management perspective?

MR. SHAFFER: I suppose.

MR. HOGAN: Okay.

And I just want to talk to you about that conclusion that you made that they couldn't have done anything else. And maybe that's the case, but there is evidence in your report that all the blame can't be laid at SNC's feet.

Is that fair?

MR. SHAFFER: What specifically are you referring to –

MR. HOGAN: Sure.

MR. SHAFFER: – in my report?

MR. HOGAN: Let's look at line – or page 97, line 25 and 26.

MR. SHAFFER: I'm sorry, what page?

MR. HOGAN: Ninety-seven. This is just one example: "Mr. Bechard responded *'I brought senior men and women and they didn't want any of them.'*"

It sounds like SNC made some effort that was rejected by Nalcor?

MR. SHAFFER: According to Mr. Bechard, yes.

MR. HOGAN: According to Mr. Bechard, right.

So back to my question then, is it fair to lay all the blame at the feet of SNC?

Based on what you've read and who you've talked to –I mean, your evidence is that – it sounds like, there's fault at least on – or probably on both sides.

MR. SHAFFER: I guess I'm trying to understand what you mean by blame. Blame of what?

MR. HOGAN: Okay.

Well, blame is not the right word. Why the decision was made as to switch to an integrated team?

MR. SHAFFER: I mean, it was well-documented and well-reported in my report of the reasons and their justifications for making the switch. I mean, I don't know what more I can say to you.

MR. HOGAN: Okay.

I think, it was implied today that – when you were being asked questions about the SNC risk report that was discussed in April of 2013, with Nalcor, that there might have been some bitterness on behalf of – and that word bitterness is my word – bitterness on behalf of SNC, because they had been downgraded just a month before.

Do you recall that?

MR. SHAFFER: I recall – I forget if it was Mr. Simmons or Mr. Smith that said something like that.

MR. HOGAN: You were asked a question about the timing.

MR. SHAFFER: Yeah.

MR. HOGAN: Okay.

MR. HOGAN: So my question: Did you find any evidence about that, when you were doing interviews with SNC that they were bitter about their downgrade?

MR. SHAFFER: I don't know if I found that necessarily, but I can tell you and – it seemed like, with Mr. Bechard there was some pretty bad blood between him and Mr. Harrington.

MR. HOGAN: Okay.

What was just, you know – can you elaborate on that a little bit?

MR. SHAFFER: Just in – they just didn't get along. That's what I was – that's my understanding.

MR. HOGAN: Okay.

But Mister – but SNC still had the – still made the decision to come to St. John's to discuss risk with Nalcor. Doesn't sound like they're that bitter.

MR. SHAFFER: Well, they did come to St. John's to discuss risk based on what I was told.

MR. HOGAN: Okay.

Just a couple more questions, is it – if we can just turn to page 108, please? Lines 27 and 28.

So this says: *"… They were told by the lenders to reduce the number of risks they were taking…"* And you also mentioned somewhere else in your report that they were told this by the rating agencies.

Do you recall that?

MR. SHAFFER: Yes.

MR. HOGAN: So it just struck me as a bit odd.

Why are rating agencies and financiers directing project decisions?

MR. SHAFFER: I mean, based on my understanding of how this went is that the rating agencies wanted the larger work packages. From their perspective, it was reducing a risk to Nalcor.

MR. HOGAN: Is that normal for rating agencies to get involved in these decisions?

MR. SHAFFER: I don't know.

MR. HOGAN: Just one more question – if we could, please, turn to page 20?

MR. SHAFFER: Twenty?

MR. HOGAN: Yes, please.

Mr. Hewitt asked you about this table.

So there was some evidence about the number at financial close being 6.5 billion. I think, you might have said that today.

Do you recall that?

MR. SHAFFER: I – yes, I do recall saying that.

MR. HOGAN: And where are you getting that $6.5 billion number?

MR. SHAFFER: I testified this, when Mr. Simmons was asking me about it. I thought I saw a document that indicated it.

MR. HOGAN: Okay.

MR. SHAFFER: I just don't remember.

MR. HOGAN: In August of 2013, before financial close, it was 6.9 billion.

Is that – that's what that says, right?

MR. SHAFFER: Well, that's the forecasts for it, right.

MR. HOGAN: Okay.

What does that mean? I – what's – why is the – what is the forecast?

MR. SHAFFER: The forecast is where Mr. Harrington and the rest of the project team is sitting down trying to forecast the costs of the project. And that's what that means.

MR. HOGAN: As opposed to what? Doing estimates? Why is that different –

MR. SHAFFER: No –

MR. HOGAN: – than the six –?

MR. SHAFFER: – I mean, that's their forecasted costs for the project. That's what their job is as part of the project management team.

MR. HOGAN: Okay.

So if they forecast it at 6.9, are you suggesting that it went back to a 6.5 forecast at some point?

MR. SHAFFER: No.

MR. HOGAN: Okay.

So at financial close – my question is: It would have been at least 6.9 if it was 6.9 in August of 2013?

MR. SHAFFER: You would have to ask them about that.

MR. HOGAN: Okay.

My last question then is that other than the contingency being exhausted at this point in time, you're also $700 million over budget in terms of your estimates.

Is that correct if this number is correct?

MR. SHAFFER: As of August of '13?

MR. HOGAN: Mm-hmm.

MR. SHAFFER: Yes.

MR. HOGAN: Okay.

So if you re-ran the numbers, you'd be at least – in terms of CPW analysis – you'd have no contingency left and you'd have $700 million over budget.

Is that correct?

MR. SHAFFER: True.

MR. HOGAN: Okay.

And prudent to add more contingency at this point as well, because the contingency's exhausted – which I think you've already said.

MR. SHAFFER: Well, I – the – well, the 6.9 might include all the contingency already in their mind. So I'm not sure.

MR. HOGAN: Okay, all right.

That's all my questions. Thank you. Okay.

THE COMMISSIONER: (Inaudible) day and come back tomorrow.

So tomorrow, first will be Astaldi – oh, I'm sorry, the Innu Nation.

UNIDENTIFIED FEMALE SPEAKER: (Inaudible.)

THE COMMISSIONER: Oh, sorry.

I think we'll finish for today.

Tomorrow we'll start off – I think the Innu Nation is first, but I don't believe they're present.

So next will be Astaldi – next for cross-examination.

So we'll adjourn 'til tomorrow morning at 9:30.

CLERK: All rise.

This Commission of Inquiry is concluded for the day.