



COMMISSION OF INQUIRY
RESPECTING THE MUSKRAT FALLS PROJECT

Transcript | Phase 2

Volume 5

Commissioner: Honourable Justice Richard LeBlanc

Thursday

21 February 2019

CLERK (Mulrooney): All rise.

This Commission of Inquiry is now open.

The Honourable Justice Richard LeBlanc
presiding as Commissioner.

Please be seated.

THE COMMISSIONER: All right.

All right. Good morning.

Mr. Shaffer, you remain affirmed at this time.

Yesterday, we had a new exhibit introduced and I indicated to counsel that they would have an opportunity to review it overnight and if there were any additional questions to ask, to advise me this morning. I think, I'll go through my list and then when we finish the list, I'll see if anybody else wants to with regards to that exhibit.

All right.

MR. LEARMONTH: I have some exhibits to put in, if I could do so—

THE COMMISSIONER: Okay. Just go ahead, Mr. Learmonth.

MR. LEARMONTH: – before Mr. Burgess starts?

So the new exhibits are P-01823 to P-01825, P-01846, P-01847, P-01873, P-01874, P-01888, P-01892, P-01897, P-01902, P-01904, P-01905, P-01907 to P-01923, P-01925 to P-01928, P-01932, P-01949 and P-01958.

Could they be entered into evidence?

THE COMMISSIONER: Yes.

Those will be entered as numbered.

MR. LEARMONTH: Thank you.

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

MR. BURGESS: Good morning, Commissioner – sorry – good morning, Commissioner.

Good morning, Mr. Shaffer.

My name is Paul Burgess and I'm legal counsel for Astaldi Canada Inc.

I'm going to be asking you questions, there's going to be two general areas. The first few questions will be in relation to the report, generally, and the second part of my questions will be specific sections of your report.

And we heard earlier in your evidence that you with, I think, two other people, essentially, wrote this report.

Is that correct?

MR. SHAFFER: Correct.

MR. BURGESS: And when you did that, did you write certain parts and the other people write other parts? Or how did that go?

MR. SHAFFER: Some parts were written by – the answer is yes, however, in – I reviewed the report, probably spent, over the course of October and November, 200 hours on the report, and made changes and edits. And also wrote certain sections myself, so it's my report.

MR. BURGESS: Okay.

So section 3 is your – the whole report is yours, so section 3 in particular.

MR. SHAFFER: My report.

MR. BURGESS: Okay.

And with respect to the interviews that were conducted, who conducted the interviews of the various witnesses?

MR. SHAFFER: Primarily, it was myself and David Malamed.

MR. BURGESS: Right.

Now I understand that your expertise is as a forensic accountant and so that focuses, I take it, on the accounting aspect and issues rather than the engineering expertise areas.

Is that correct?

MR. SHAFFER: That's correct.

MR. BURGESS: And the report – the purpose really is – as a forensic auditor, you report on the facts.

Isn't that correct?

MR. SHAFFER: Yeah.

The report is structures, procedures that we performed in our findings.

MR. BURGESS: Right.

And it appears when I look through your CV, your experience is focused, mainly, on litigation and disputes that kind of – those kinds of issues.

Is that correct?

MR. SHAFFER: It's really, probably – it's mixed, between investigations, and litigations and disputes.

MR. BURGESS: Right.

MR. SHAFFER: I have various CVs. One's primarily focused on investigations, another primarily focused on litigation.

MR. BURGESS: Right.

MR. SHAFFER: But I do both.

MR. BURGESS: Have you ever done a report before for a public inquiry?

MR. SHAFFER: No.

MR. BURGESS: Okay.

Are you aware, for a public inquiry, its purpose is not to find civil or criminal liability? Is that something you're aware of?

MR. SHAFFER: I was made aware of that, in this case.

MR. BURGESS: Right.

And are you aware, as part of the public inquiry, its purpose is to inform the public of the various issues?

MR. SHAFFER: That's my understanding of this, yes.

MR. BURGESS: All right. So, in that sense, it's very different than a litigation file, isn't it?

MR. SHAFFER: No doubt, it's a different type of engagement.

MR. BURGESS: Right.

One of the things that I'd just like to clear up, because there seems to a perception, in the public, that Astaldi did all or most of the work at Muskrat Falls. And, in fact, if – but you go by value, at least – Astaldi's portion of the work was less than 20 per cent.

Would you agree with that?

MR. SHAFFER: I would have to double-check the exact percentage, but there's no doubt that they did a portion of the work, not the whole project.

MR. BURGESS: Right.

So, if you take the current forecast value of 1.9 billion and the overall contracts of a value of 10.1, 10.2 billion, in fact, that's a little over 18 per cent. Agreed?

MR. SHAFFER: If that's how – what the math would come out at, I'll take your word for it.

MR. BURGESS: Okay.

One of the things I'd like to deal with, in particular, as well, is a perception – some of the statements that you made when you were being examined on direct examination by Mr. Learmonth is – you referenced poor performance of Astaldi. And I'd suggest to you that that's not a particularly accurate description, because your opinion and your analysis was comparing. It had nothing to do whether Astaldi was at fault or blame, was it, for the construction aspect and the overruns?

MR. SHAFFER: No. When you – when I say poor performance or what I'm comparing is: what was the actual productivity on the direct labour hours per cubic metre that was actually –

that actually occurred versus what was in the bid.

MR. BURGESS: Right.

So – and that was going to be my next point is that that’s the – the comparison you’re making is: what was achieved, compared to what was bid. So, it’s almost like a production analysis.

MR. SHAFFER: That’s one way of looking at it, sure.

MR. BURGESS: Okay.

You deal in your report with the ICS or what people often refer to as the dome. Again, just to clarify, your expertise is not in relation to the ICS, and any comments with respect to the ICS or its construction, I take it, you would defer to others, like the engineers.

Is that correct?

MR. SHAFFER: Correct.

MR. BURGESS: Now if I could take the witness, Madam Clerk, to Exhibit P-01677, which is the Grant Thornton report. And all my references, Mr. Shaffer and Madam Clerk, will be to pages in that report.

Madam Clerk, if you could bring up page 29 of that exhibit, please. And this screen doesn’t appear to be on here. It’s –

THE COMMISSIONER: Just give us a minute. We’ll just get one of the technical people out just to get your screen working there, Mr. Burgess.

MR. BURGESS: I don’t profess to be technically adept, but I think I hit the power on and it may be coming on. It’s there.

THE COMMISSIONER: Oh, okay.

MR. BURGESS: Hope I didn’t cross any union agreements or anything like that.

THE COMMISSIONER: Adept or not, when you turn the power on things do sometimes work.

MR. BURGESS: So you’ll see on your screen – and I want to refer to line 1, Mr. Shaffer, and that’s the quote there that we have.

And this Edward Merrow, you quote him quite extensively in your report. Can you explain to me why you place such reliance on Mr. Merrow?

MR. SHAFFER: Mr. Merrow, as I understand it, is the CEO and founder of IPA. IPA was the consultant – one of the consultants that Nalcor used in this project. Additionally, just based – I first learned about Mr. Merrow from John Hollmann, who’s a well-respected engineer, part of the AACE; he writes the standards there.

And in my course of my interview with Mr. Hollmann he indicated Mr. Merrow is one that has a database of megaprojects. And through all that I decided to buy his book and see what he says about megaprojects.

MR. BURGESS: Okay, so what you’re doing here is you’re taking quotes from a book that you purchased and he – I take it he’s an expert in the field?

MR. SHAFFER: Yes.

MR. BURGESS: Okay.

Now, the quote that you referred to on page 29, it refers to a very low bid. And I would suggest to you that when Mr. Merrow is dealing with a very low bid, it’s in instances more likely when you have one outlier bid more so than in this case where we have two bids at just over a billion and two bids over 2 billion. Would you agree that the reference is more analogous for a single outlier than say a couple of bids?

MR. SHAFFER: Not necessarily.

MR. BURGESS: Why not?

MR. SHAFFER: I – because the words speak for themselves.

MR. BURGESS: Okay.

MR. SHAFFER: I mean that’s the way I’m interpreting it.

MR. BURGESS: All right.

When you quote from Mr. Merrow at line 4 and it says: "When the 'winning' contractors realize the magnitude of their low bids, they immediately started to try to recover their losses." The quote goes on: "They floated the schedules longer to minimize costs believing (correctly in most cases) that they could avoid liquidated damages."

You're not suggesting in any way in your report that Astaldi did that in this case, are you, Mr. Shaffer.

MR. SHAFFER: No.

MR. BURGESS: In your direct evidence you stated that from what you could see that Astaldi had a slow start on the project and that was recognized by Nalcor early 2014. Do you remember making that statement?

MR. SHAFFER: Yes, it was in the January '14. It was part of the monthly progress report –

MR. BURGESS: Right.

MR. SHAFFER: – that Mr. Harrington prepares.

MR. BURGESS: And would you agree with me that the fact that Nalcor insisted Astaldi start in November of 2013, being the winter months and the climate in Labrador, rather than July 2013, that would be a significant factor in the slow start? Would you agree with that?

MR. SHAFFER: Well, based on the winter season and based on what Mr. Delarosbil told us, I would think so.

MR. BURGESS: Right.

And as I understand your evidence, that your understanding for the delay from rather than a July start to a November start was the fact that Nalcor was delayed in the environmental assessment and achieving financial closure. Is that correct?

MR. SHAFFER: That's my understanding, yes.

MR. BURGESS: All right.

Next, Madam Clerk, page 32, please.

And, Mr. Shaffer, that's the part of your report dealing with labour hours. And in your evidence when you were discussing direct and indirect labour hours you – as I understand what you stated was that indirect hours are supervisory and direct hours is people pouring concrete. I'm not sure that that's entirely accurate and we will have clarification with other witnesses.

But are you certain what constitutes indirect and direct hours or would you defer to engineering and other people?

MR. SHAFFER: I know the indirect includes other things like administrative and some other – other types of expenses that are part of it.

MR. BURGESS: Right, so it's not limited to supervisory, correct?

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

MR. BURGESS: All right.

And there are numerous quotes in your report from Williams Engineering. And, again, based on your evidence previously and what you've said in response to my questions, am I right in saying that you defer to someone from Williams Engineering to provide testimony on that. That's outside your expertise, isn't it?

MR. SHAFFER: That's correct, yes.

MR. BURGESS: Right.

Next, Madam Clerk, page 33. And I want to look at lines 15 to 22 and those are three bullets. And it says at the top on line 15 that it's based – it's your conclusions. Correct?

MR. SHAFFER: Based on the answers that we received from Paul Lemay, yes.

MR. BURGESS: And that's what I wanted to just go through. At line 16 your conclusion is that: "The DG3 base estimate, compiled by Nalcor, included a 20% increase in hours to account for lack of labour availability and productivity"

And I'm not sure the screen is up on page 33, Madam Clerk? Oh, I'm sorry, yes, it is.

So that conclusion, that's solely based on Mr. Lemay's statement that you cite just above that. Correct?

MR. SHAFFER: All three of these conclusions are, yes.

MR. BURGESS: Yes and same with line B. That's, again, from Mr. Lemay's statement. And Mr. Lemay, he's the same individual that was responsible for the estimates that were about the estimates being the – person-hours for the pouring of the concrete, is he not?

MR. SHAFFER: Yes.

MR. BURGESS: Right.

MR. SHAFFER: My understanding, he relied on an individual by the name of Jim Dober Smith for the concrete placement production hours.

MR. BURGESS: Right. And those numbers – that's the same individual whose numbers were about half of what the four bidders presented, wasn't it?

MR. SHAFFER: Yes. I mean, the estimate, as far as direct labour hours, indicate it'd be about five direct labour hours per cubic metre of concrete poured, whereas in the estimates were different.

MR. BURGESS: Right, but if you look at page 32, the DG3 estimates, you will see there the DG3 estimate, that's Mr. Lemay's numbers or his –

MR. SHAFFER: Yes.

MR. BURGESS: Right.

MR. SHAFFER: Yes.

MR. BURGESS: And they're 3.66.

MR. SHAFFER: Correct.

MR. BURGESS: And then if you go back, you compare it to Astaldi which was similar to the

other bidders. If you want to look at page 28, at line 8, all those numbers are – from 9.51 million for IKC and they go down the line. So those numbers at the DG3 estimate, I'd suggest to you, are about half of at least three of them.

MR. SHAFFER: Well they're – well, remember, you're saying they're about the same. I mean, that's quite not true because the total labour hours that are – that's on the chart on page 28, that doesn't include the LMax hours.

MR. BURGESS: Right.

MR. SHAFFER: So when you add the LMax hours into it, what you have is IKC is about 12.5 million hours, Aecon is 14.4 million hours and Astaldi is about 7.6 million hours.

MR. BURGESS: Right.

MR. SHAFFER: So I don't think that they're the same.

MR. BURGESS: Right, but they're considerably above what the DG3 numbers are.

MR. SHAFFER: Oh, definitely.

MR. BURGESS: Right.

And the conclusion number three that: "The base estimate assumed the Integrated Cover System" – the – "(ICS) would allow the workers" – I'm sorry, I'm back on page 33, Mr. Shaffer, and line 20: "The base estimate assumed the ... (ICS) would allow the workers to work comfortably inside the structure during the winter season resulting in no loss of labour productivity due to the climate."

Now, given that the DG3 estimate, by my understanding, was done in December of 2012, correct?

MR. SHAFFER: It was actually completed in December of 2011 and then there were addendums to it.

MR. BURGESS: Okay.

And that the bids for this work came in in April of 2013, I believe?

MR. SHAFFER: Yes.

MR. BURGESS: So when the DG3 estimates were done, no one would have known about the ICS, in the form at least, that was being proposed by Astaldi, would they?

MR. SHAFFER: I don't know. You would have to talk to SNC about that –

MR. BURGESS: Okay.

MR. SHAFFER: – and Nalcor.

MR. BURGESS: But if they didn't have the bid from Astaldi, how would they know what ICS was being proposed by Astaldi?

MR. SHAFFER: I'm not privy to any of the conversations. Maybe they had conversations prior to when the bids came in.

MR. BURGESS: Okay.

Page 34. If I could get them turned, Madam Clerk, to page 34. Mr. Shaffer, and on line 3 to line 8, there's a quote from Paul Harrington. And in that, he is explaining at least, or expressing a view that the CH007 bid – which is the Astaldi work, I'll call it – exceeded the bid – the final cost exceeded the bid for a variety of reasons, including – and according to Mr. Harrington, the “... *contractor risk perception. Contractors view NL as a difficult and expensive place to carry out work, plus the civil/local contractors are feeding this with high pricing and productivity concerns.*”

And the second bullet by Mr. Harrington, “*contractors have concerns with the large quantities of concrete, the availability of labour and the complexity of the undertaking....*”

Other than Mr. Harrington's comment on this issue, do you have – did you find any other support, quantitative or otherwise, for this statement?

MR. SHAFFER: Well, I know early on – as part of the strategic risk exposure calculation – that was one of the strategic risks that was identified by Nalcor and Westney.

MR. BURGESS: Okay. All right.

If we could go to page 36 of your report, Mr. Shaffer, and there's that – you've been brought to this earlier in your testimony. There's the chart there, and then the paragraph from lines 14 to line 22 is an explanation of an analysis.

And I would suggest to you that analysis is a very, very high-level analysis. Is it not?

MR. SHAFFER: I'm not sure what you mean by high-level.

MR. BURGESS: Okay.

Well, let's just take a look at it. Were you aware that Astaldi shut down on its own? The site never did any work from December 2015 to March 2016?

MR. SHAFFER: I believe that production reports indicated there was no concrete poured during that time frame from what I recall.

MR. BURGESS: Right.

So in your chart, there's no indication of the chart, for example, that there was a shutdown and no concrete pouring in that period. Correct?

MR. SHAFFER: I mean, it would be in the numbers. I mean, I'm not sure – the chart is based on the average – the annual average concrete being – I'm sorry, the monthly average concrete being poured for that year.

MR. BURGESS: Right.

And that's why – that was in reference to my question of very high analysis. It's not digging down to see each month and plotting each month's production.

MR. SHAFFER: It's merely taking the numbers for the annual pour every year and dividing it by 12 or the number of months, in which case, in 2014, might have been by six.

MR. BURGESS: Right.

So the analysis doesn't take into account a site shutdown in this analysis that you've just laid out here. Correct?

MR. SHAFFER: Well, again, it'd be in the total. I mean, if they're not pouring concrete, then the total's gonna be less.

MR. BURGESS: Right.

And on line 19, you make the comment that the production level of 13,300 cubic metres per month was attained and, I think, you changed it from nine times out of 57 to 10 times out of 50. Correct?

MR. SHAFFER: Yes.

MR. BURGESS: But that analysis – there was several months, I would suggest to you, that were 100 cubic metres or just shy of the 13,300. That wasn't included and could change those numbers.

Would you agree with that?

MR. SHAFFER: I agree, but what, I think, ties this all together is the chart on the following page, where we talk about direct labour hours per cubic metre.

MR. BURGESS: Right.

MR. SHAFFER: That's really where the rubber met the road here.

MR. BURGESS: Right.

But neither this chart – and let's turn then to the chart on page 37 – neither of those charts take into account or express or show events that shut down the project, whether they were shut down by Astaldi or protests or anything.

That's not contemplated or shown in this analysis, either chart, is it?

MR. SHAFFER: I disagree.

MR. BURGESS: Okay.

How does – where does it show?

MR. SHAFFER: If the site is shut down – let's say during the wintertime – you're not incurring direct labour hours, you're not pouring concrete. So these numbers here, on the chart on page 37,

is when they are incurring labour hours and they are pouring concrete.

MR. BURGESS: Okay.

In that chart, but not the chart on page 36.

MR. SHAFFER: It's in the numbers.

MR. BURGESS: Right.

And – but the numbers on page 37, for example – if you look at your August 31, 2018, that table wouldn't reflect, for example, the impact of a claim that Astaldi might have against, for example, another contractor for delay – or not against another contractor, but a delay caused by another contractor such as ANDRITZ. That wouldn't be – we wouldn't see that analysis in this.

MR. SHAFFER: If there's reasons for the productivity differences between what Astaldi's bid was and what actually occurred, this chart does not isolate those reasons. This chart is taking – doing a productivity measurement of what actually happened versus the bid.

MR. BURGESS: Right.

MR. SHAFFER: Basically.

MR. BURGESS: Okay.

Now, Mr. Shaffer, Madam Clerk, page 39, please – is the Observations and Findings for this section.

And I just want to go down through a few of the, I'll call them bullets. But the first one is at line 5, is you're stating that "\$272 million of the \$1.207 billion overrun is attributed to the executed contract amount exceeding the base estimate due to design changes and the labour premium (hours) required by Astaldi."

Now the \$272 million is – would it not be more accurate to call it an over budget than an overrun? Because you're comparing what was budgeted in the DG3, are you not, with the contract value, the 1.207?

MR. SHAFFER: An overrun to me is defined as the cost of that particular scope of work versus what was budgeted for.

MR. BURGESS: Right.

So over budget would be a correct work as well, would it not?

MR. SHAFFER: No.

I'm calling it an overrun and that's what it is.

MR. BURGESS: I know what you're calling it, but you just said to me in your explanation: The overrun is what it was compared to what was budgeted.

Is that what I – did I understand you correctly?

MR. SHAFFER: The cost incurred versus what was budgeted –

MR. BURGESS: Right.

MR. SHAFFER: – yes, that's an overrun.

MR. BURGESS: Okay.

MR. SHAFFER: You want to call it over budget? Okay. But to me, it's an overrun.

MR. BURGESS: Well, it may be tomatto, tomahtos, but is it – is over budget not an accurate description of it?

MR. SHAFFER: No, it's an overrun.

MR. BURGESS: Okay.

Line 8, you talk about the \$884 million of the \$1.207 billion overrun was a result of Astaldi's performance issues.

You had documents and you're aware of – there was a claim by Astaldi to Nalcor for extra funds and you referenced the completion contract in your report.

You're familiar with that, aren't you?

MR. SHAFFER: Yes.

MR. BURGESS: Right.

And so that's – that \$884 million that you reference there, that's actually what Nalcor agreed to pay Astaldi for their claim. Correct?

MR. SHAFFER: I don't know I have direct knowledge for a claim, but that's what the agreed to pay Astaldi.

MR. BURGESS: Right.

But in your analysis, you looked at a justification for incremental compensation document and the completion documents. So you see that there was a – you would have seen when you were preparing your report, there was a claim by Astaldi to Nalcor for additional funding, which resulted in the completion contract, which resulted in this \$884 million. Correct?

MR. SHAFFER: Let's assume you're right.

MR. BURGESS: Well, let's not assume. Is that your understanding?

MR. SHAFFER: Again, I read it a while ago, but Nalcor agreed to pay it. And if there was claim involved, I'll take your word for it. I would have to go back to the documents.

MR. BURGESS: Okay.

And line 17 is the \$18 million of change orders. That's a pretty standard charge and that's approved. So there's no issue there, I take it, that you're raising, just an acknowledgment of there was change orders amounting to \$18 million, correct?

MR. SHAFFER: Yes, and it was part of the overrun.

MR. BURGESS: Okay.

Now, in preparing your report, Mr. Shaffer, were you aware that, prior to Nalcor accepting the bid by Astaldi, that Nalcor had complete access to Astaldi's labour productivity assumptions and did a line-by-line review of the bid with Astaldi. Were you aware of that in your due diligence or your preparation of your report?

MR. SHAFFER: I don't recall.

MR. BURGESS: If that was the case, is that process what is commonly referred to as an open-book approach where a contractor comes in, sits down, opens its books with an owner and says, here's what we bid, here's the basis for it. Is it – that's an open-book approach, is it not?

MR. SHAFFER: In addition to here's how I'm getting the numbers, here's my cost, here's my profit. Typically, complete transparency in the process.

MR. BURGESS: Right. And that's the open-book approach?

MR. SHAFFER: That's open book in my –

MR. BURGESS: Right.

MR. SHAFFER: – mind. Yeah.

MR. BURGESS: Now, I looked at the report – and appreciate, Mr. Shaffer, please that some of it's redacted for purposes that – what I can see. But when I looked at it – page – there's a table on page 24 – but when I looked through it, I couldn't see any major contract managed by Nalcor in this project that wasn't significantly over budget – or if you want to call it overrun. All of the contracts seemed to be significantly overrun. Would you agree with that?

MR. SHAFFER: All of them?

MR. BURGESS: Well, all the major ones, sorry. All the major contracts.

MR. SHAFFER: Well, we picked the ones that were overruns.

MR. BURGESS: Right. And those were the significant contracts, were they not?

MR. SHAFFER: The ones that were over \$100-million overruns. That's what we picked. Now, there could be situations where there's contracts where they came in at or below what the DG3 budget was.

MR. BURGESS: Right.

MR. SHAFFER: That'd be part of financial forecast. The costs that be prepared by Nalcor as

of either March of '18 or whatever is current at this point.

MR. BURGESS: Okay. Thank you. I don't have any further questions. Thank you, Mr. Shaffer.

MR. SHAFFER: Okay.

THE COMMISSIONER: All right.

Former Nalcor Board Members?

MS. MORRIS: No questions, Commissioner.

THE COMMISSIONER: Thank you.

Dwight Ball. Siobhan Coady?

MR. O'FLAHERTY: No questions.

THE COMMISSIONER: Newfoundland and Labrador Building and Construction Trades Council?

MR. LENEHAN: No questions.

THE COMMISSIONER: Is Grid Solutions here? No.

So that's it. Redirect.

No, sorry, Mr. Learmonth.

Yesterday, as I said earlier, everyone received a copy of 08170 – I think it was – and I indicated I would give everyone an opportunity to review that in case they had any additional questions they wanted to ask. Rather than go through everybody – is there anybody here who is needing to ask any questions as a result of that exhibit being entered?

No?

Mr. Learmonth, redirect.

MR. LEARMONTH: Mr. Shaffer, I'd like you to turn to page 4 of your report. And that's the paragraph that Mr. Simmons referred to at the beginning of his questioning, lines 2 to line 8. Do you have that?

MR. SHAFFER: Yes.

MR. LEARMONTH: And there's some suggestion that the sentence meant that – somehow that Emera owned part – are a part of the Muskrat Falls Corporation, do you remember that?

MR. SHAFFER: I do.

MR. LEARMONTH: Yeah.

But I think there's another – I want to ask you whether there's another interpretation, namely this: that for – there's a comma missing after Muskrat Falls Corporation at the end of line 5. Can you just look at that?

MR. SHAFFER: Yes.

MR. LEARMONTH: Okay. So in other words –

MR. SHAFFER: Yes.

MR. LEARMONTH: – I'm asking you whether this was what you intended to state: that the – Nalcor Energy, the Newfoundland and Labrador Crown corporation which owns Muskrat Falls – comma – with Emera undertook the project?

MR. SHAFFER: My understanding is, yes, they undertook the project with Emera.

MR. LEARMONTH: So the with Emera is a reference to Nalcor and Emera undertaking the project?

MR. SHAFFER: That's correct.

MR. LEARMONTH: Yeah. It's not a reference to any ownership interest that Emera may have in the Muskrat Falls Corporation?

MR. SHAFFER: That's correct. I know –

MR. LEARMONTH: Okay.

MR. SHAFFER: I know that Muskrat Falls is 100 per cent owned by Nalcor.

MR. LEARMONTH: Yeah. I just wanted to clarify that.

MR. SHAFFER: Yeah.

MR. LEARMONTH: Okay.

Now, in your – during the questioning of Mr. Simmons, you referred to your understanding as to what a AFE – authorization for expenditure – what that meant.

MR. SHAFFER: Yes.

MR. LEARMONTH: And I want to get some clarification of that because I think you said that – or agreed with the suggestion that an AFE refers to expenses that are already incurred or committed. Do you remember that discussion?

MR. SHAFFER: Probably committed, yes.

MR. LEARMONTH: Yeah.

But I suggest to you that it also can include expenditures which have not been committed, that – future expenses that are expected to be incurred. Do you agree with that?

MR. SHAFFER: I do agree with that.

MR. LEARMONTH: Yeah.

MR. SHAFFER: To me the process is the project management teams compares the forecasts, it goes to the executives, the executives take it to the board, and in that forecast you're going to have dollars that necessarily won't be committed will be incurred as part of the financial forecasts –

MR. LEARMONTH: Yeah.

MR. SHAFFER: – and the board signs off to say you can spend that money.

MR. LEARMONTH: Yes. Because otherwise you could – if that weren't the case, they could never sign a contract because they would have to get – because that would be a committed expense and – well, anyway, I'll just leave it at that, that it also includes expenses to be incurred.

MR. SHAFFER: That's correct.

MR. LEARMONTH: Yeah.

MR. SHAFFER: That's my – yes.

MR. LEARMONTH: And it could also include contingency amounts –

MR. SHAFFER: Yes.

MR. LEARMONTH: – and AFE.

MR. SHAFFER: If it's wrapped up in those numbers, sure.

MR. LEARMONTH: Okay. Very good.

Now, in your questioning – the questioning of Mr. Simmons, you – he directed you to the – a chart on page 16 of your report.

And with respect to the interim – just under – at line 15 – the chart under line 15 – where there's a reference to the interim final, November 29, 2013, report of the independent engineer. And Mr. Simmons referred you quite correctly to the paragraph which says – in the middle of chart: *“The IE typically sees contingency allowances in the ... 6 percent to 10 percent at this stage of project development.”* Correct?

MR. SHAFFER: Yes.

MR. LEARMONTH: Read out what says in the box immediately below that reference.

MR. SHAFFER: *“These contingency values appear ... to be at the low end of the observed range which in our opinion is aggressive.”*

MR. LEARMONTH: Okay. So when you use the term aggressive, were you referring, at least in part, to this characterization of the independent engineer?

MR. SHAFFER: What – I'm sorry, I missed that.

MR. LEARMONTH: When you're saying that the contingency – you said the contingency amount was aggressive, did you not?

MR. SHAFFER: I don't recall, but obviously I think it is – it was.

MR. LEARMONTH: Very good.

You spoke of the experience of the project management team. I'd like you to turn to page

90 of your report. So line 6 says: “Paul Harrington provided us with a list of the core key personnel whom he and Gilbert Bennett VP LCP considered to be individuals that would have been consulted with on key decisions, such as contract award recommendations, project changes, technical matters and project/cost relation matters.”

So that core team is referred to in the chart on page 90, is that correct? Are those the individuals that you're referring to as the core management team?

MR. SHAFFER: Well, the core key personnel was a three-page list that was provided by Mr. Harrington. What we extracted from that is six of the individuals that were on that list that were included on the organization chart on the prior page that basically – these are about the core – well, worked on – the core project team members.

MR. LEARMONTH: Okay.

Okay, I'll just give you some names: Paul Harrington. How much hydroelectric experience did Mr. Harrington have before he undertook work on the Muskrat Falls Project?

MR. SHAFFER: None.

MR. LEARMONTH: The same question for Jason Kean.

MR. SHAFFER: None.

MR. LEARMONTH: The same question for Scott O'Brien.

MR. SHAFFER: None.

MR. LEARMONTH: And he's not on the list, but he was on – Lance Clarke.

MR. SHAFFER: I know it's none.

MR. LEARMONTH: None. And you have Ron Power who had some experience, and that's reflected in your comments in – on page 91, is that correct?

MR. SHAFFER: Yes.

MR. LEARMONTH: Okay, very good.

And Mr. Harrington was the project manager, correct?

MR. SHAFFER: Project director.

MR. LEARMONTH: Project director, yeah.

You mentioned that you, in response to questions put to you by Mr. Fitzgerald, that you had some – you did some work on the Oversight Committee, the work of the Oversight Committee. Is that correct?

MR. SHAFFER: We did. We looked at the Oversight Committee reports and we interviewed two of the Oversight Committee members that I testified to yesterday.

MR. LEARMONTH: Yes. Did you do any analysis or form any opinions as – on the work of the Muskrat Falls Oversight Committee?

MR. SHAFFER: No.

MR. LEARMONTH: No.

You mentioned in your report at page – I think it's 108 or 109 – that it was your understanding that the large packages for the contracts were used because the lenders wanted it to be done that way. Is that correct?

MR. SHAFFER: Yes.

MR. LEARMONTH: Okay. Who told you that?

MR. SHAFFER: If you could go to the statement it should be footnoted. And we – I've seen it in documents.

MR. LEARMONTH: The – I believe you indicated at one point that someone from the project management team told you that. Is that correct?

MR. SHAFFER: Yes. It was actually – if you look at page 109.

MR. LEARMONTH: Yes.

MR. SHAFFER: If you look at lines 3 through 7, it was the project management team that was indicating that. And that was part of the presentation that was titled: The sanction decision briefing note as requested by Nalcor legal counsel, January '18, page 13.

MR. LEARMONTH: Yeah. Was that information – as to the, we'll say, direction from the lenders on that point. Was that something that you followed up by asking questions of other – of executives at Nalcor, or did you just rely on the project management team's information?

MR. SHAFFER: I relied on this.

MR. LEARMONTH: Okay.

You – in answer to a question put to you by counsel, you said that you had no problem in – someone who had asked for an expert report, in reviewing it and making comments before it was put into final form. Did you remember saying that?

MR. SHAFFER: I do remember saying that.

MR. LEARMONTH: Yeah. And – now, were you referring to changes or edits that might be made on factual basis or on opinions?

MR. SHAFFER: I would think more a factual basis to get the facts right.

MR. LEARMONTH: The facts right.

MR. SHAFFER: Yeah, I mean – but, in all fairness, if there's a basis to change that opinion and the expert signs off on it and can defend it, that's up to the expert.

MR. LEARMONTH: Yeah. But, principally, you're referring to factual errors or factual changes as opposed to opinions. Is that correct? I'm not trying to put words in your mouth. I want to know exactly what your point of view is on that.

MR. SHAFFER: I would typically go over reports with, let's say with attorneys in litigation cases and damage cases for example, where we're really just going over the facts that I have the background right. I can tell you from an

opinion perspective, it's – I don't recall a time in my life when I actually changed an opinion per se.

MR. LEARMONTH: No.

MR. SHAFFER: If this helps.

MR. LEARMONTH: Would it be fair to –

MR. SHAFFER: (Inaudible) having discussions with an attorney.

MR. LEARMONTH: Would it be fair to say that there can be occasions where if, in your situation, you identify a factual error, that can cause the writer of the report to change an opinion?

MR. SHAFFER: Absolutely.

MR. LEARMONTH: But that's – once the facts are established, it's up to the person preparing the report to make any changes to the opinion.

MR. SHAFFER: Correct, and to have a basis for any of the changes.

MR. LEARMONTH: All right.

Those are my questions.

THE COMMISSIONER: All right.

Thank you, Mr. Shaffer. You can step down.

MR. SHAFFER: Thank you.

THE COMMISSIONER: So, perhaps I could ask where we go from here? I understand we have two more witnesses for this week?

MR. LEARMONTH: Yes, we do – tomorrow.

THE COMMISSIONER: Okay. And we're not going to hear from them today, obviously.

MR. LEARMONTH: No. I think the plan is to start at 9:30 tomorrow morning. So if I'm correct on that, I guess we'll have the rest of the day to prepare.

THE COMMISSIONER: Okay.

All right. Then we'll adjourn until tomorrow morning at 9:30, and we'll begin again at that stage.

CLERK: All rise.

This Commission of Inquiry is now concluded for the day.