



COMMISSION OF INQUIRY
RESPECTING THE MUSKRAT FALLS PROJECT

Transcript | Phase 2

Volume 21

Commissioner: Honourable Justice Richard LeBlanc

Friday

29 March 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, we'll bring Mr. Lemay up now, please, on the screen.

MR. LEMAY: Yeah.

THE COMMISSIONER: Good morning, Mr. Lemay.

MR. LEMAY: Good morning, Sir.

THE COMMISSIONER: You remain affirmed at this time.

And I'll ask Mr. Collins now to continue with his questions.

MR. COLLINS: Thank you, Commissioner.

MR. LEMAY: Good.

MR. COLLINS: So, Mr. Lemay, as I—

MR. LEMAY: Yeah.

MR. COLLINS: — understand it, Nalcor engaged two estimators to do check estimates on your concrete estimates. Is that right, for the powerhouse and the intake? On the — your concrete estimate, they had two — Paul Hewitt and John Mulcahy did check estimates.

MR. LEMAY: Exactly.

MR. COLLINS: That's right. And their estimates —

MR. LEMAY: Yeah.

MR. COLLINS: — were actually quite close to yours.

MR. LEMAY: Yes, it was.

MR. COLLINS: And they were both working for Nalcor, as you understand it?

MR. LEMAY: One was working for Nalcor, which is John Mulcahy.

MR. COLLINS: Yeah.

MR. LEMAY: And Paul Hewitt was an independent consultant.

MR. COLLINS: Do you know if Paul Hewitt had worked for Nalcor in the past?

MR. LEMAY: Yes. I heard that he was at the very beginning of the project in, I guess, I'm thinking, you know, 2007, something like that, he was involved on estimating on the project.

MR. COLLINS: Yup. Do you know anything about how those estimates were put together? Did you —

MR. LEMAY: No.

MR. COLLINS: — help out with other estimates?

MR. LEMAY: No, not me.

MR. COLLINS: You haven't seen them?

MR. LEMAY: No.

MR. COLLINS: So we'll have to explore that issue with other witnesses. Thank you.

So my next questions are about — what are the consequences if your productivity factor is off, if you're too optimistic about performance factors? So if you underestimate — if you overestimate your performance, then you'll need — it will turn out that you'll need more hours than you expected. Is that right?

MR. LEMAY: If it happens that way, yeah.

MR. COLLINS: And then you'll need more workers to get the same work done?

MR. LEMAY: More hours.

MR. COLLINS: Yeah. So more workers or more time?

MR. LEMAY: Yeah.

MR. COLLINS: So if you get more workers – if you get more time, your schedule is blown.

MR. LEMAY: Of course.

MR. COLLINS: But if you get more workers, you need more beds, you need more –

MR. LEMAY: It goes along.

MR. COLLINS: – cooks and cleaners.

MR. LEMAY: Yeah.

MR. COLLINS: You might need a bigger camp.

MR. LEMAY: Exactly.

MR. COLLINS: More plane tickets, more buses.

MR. LEMAY: Yeah, it's automatic consequence.

MR. COLLINS: And if you need more time, the camps will have to stay open longer. You'll pay the same number of cooks and cleaners but you'll pay them for a longer time.

MR. LEMAY: Of course.

MR. COLLINS: You still need more plane tickets, more buses, all of that. And either way you'll need more tools and more PPE, more supplies.

MR. LEMAY: Yeah.

MR. COLLINS: And if you hire more workers then you have to start digging deeper into the labour pool and you have to hire people that you might not have picked otherwise.

MR. LEMAY: Mm-hmm, yeah.

MR. COLLINS: And another thing, you'll also get congestion. So as I understand it, you added 200,000 hours to your estimate to reflect the fact that you thought that the worksite was already crowded and congested with a number of workers you expected. Is that right?

MR. LEMAY: No.

MR. COLLINS: No?

MR. LEMAY: Why do you make that deduction? My 200,000 hour that I put was at the beginning. We didn't know that we're gonna blow the schedule.

MR. COLLINS: I understand that. So could we go to your – the SNC-Lavalin basis of estimate again, which is P-00861 and it's tab 8.

And we've looked at this passage before. I just want to confirm what I understood was your evidence.

MR. LEMAY: Mm-hmm.

MR. COLLINS: At the bottom of the page under performance factors.

MR. LEMAY: Which page?

MR. COLLINS: Page 81, sorry.

MR. LEMAY: Okay.

Yeah?

MR. COLLINS: I'm going to wait a moment until this shows up on the screen.

If we scroll down a bit – here we see: "... prior to CCE close-out, SLI has conducted a further review of the structural concrete component of the Project with respect to, amongst others, the aggressiveness of the concreting schedule ... As a result of this review," – we go to the next page – "and notwithstanding Nalcor's directive to maintain unchanged the initial estimate assumptions, SLI has elected to carry in the CCE and additional 200 000 labour hours to cover for the inherent loss of labour productivity that will result from the congestion of the concreting work areas and the strain on the supply chain of materials to the worksite."

So, my understanding is that when you added those 200,000 labour hours you were concerned that even with the workforce you foresaw, the worksite would be congested and the supply chain would be strained. Is that right?

MR. LEMAY: Yeah. It could be interpreted that way as well, but the main purpose, you know, was that 200,000 hours came after the review that we had with Nalcor people. Okay?

And I sat down with Jim Daubersmith and we have adjusted the hour and there is the 200,000 hours that we had, that you saw on the big summary sheet that we spoke about yesterday. And, of course, it would, in the same time, take care – you know, if you have to press your schedule, work overnight on the night shift, you know – it will help out to meet your schedule and catch up if you're late.

So it's all part of the same reason, you know, why you would be able to meet your schedule.

MR. COLLINS: Were you concerned – was the labour site likely to be congested with the workforce you estimated?

MR. LEMAY: I don't understand your question, exactly. Where are you getting at, exactly?

MR. COLLINS: You write that – you write here – or SNC-Lavalin wrote – that SNC-Lavalin “has elected to carry ... and additional 200,000 labour hours to cover for the inherent loss of productivity that will result from the congestion of the concreting work areas”

I take that to mean that SNC-Lavalin foresaw that the concreting work areas would be congested and that would reduce labour productivity on site.

MR. LEMAY: That is one interpretation. Yes.

MR. COLLINS: Is there another interpretation?

MR. LEMAY: Well, you know, that is what is being said there but it doesn't mean that it will necessarily happen that way, you know.

MR. COLLINS: Okay.

MR. LEMAY: Probably it will not happen. These are, you know, probability.

MR. COLLINS: But, certainly – if that productivity – if that probability, as you say, did

happen, then adding even more workers would make the congestion even worse.

MR. LEMAY: Yeah. You better have your people to work on a night shift or a, you know, to catch up your delay, than having too many workers, because, as you mentioned earlier, you need more beds, you need more everything else. So you would more use your night shift to catch up where you're late a little bit, you know.

MR. COLLINS: If you put more workers on the night shift that will also affect your productivity a little, won't it? Because the night shift is a little less productive than the day shift.

MR. LEMAY: Yes. Yes, because it's – during the night you know it's not the same pattern than on the day shift.

MR. COLLINS: So, there are also limits to how many workers can work effectively at sites. If you double the workforce you don't necessarily double the amount of work that gets done, do you?

MR. LEMAY: No, that's what I just told you.

MR. COLLINS: Yep.

MR. LEMAY: You're not gonna help yourself if you put too many men at the same place.

MR. COLLINS: And similarly, if the word gets 'round to other contractors that labour productivity at Muskrat Falls isn't going well, that could lead them to increase their bids. Is that right?

MR. LEMAY: What? What?

MR. COLLINS: If contractors hear that labour productivity at Muskrat Falls isn't very good, then if they're bidding for work, they might increase their bids.

MR. LEMAY: That's a possibility.

MR. COLLINS: Yeah. And, similarly, if your schedule – if you start losing your schedule at all, that can start affecting other contractors. So, if the powerhouse is behind – if the powerhouse concrete is behind, then the contractor who's

supposed to install the turbines is gonna have – have problems, is that right?

MR. LEMAY: Of course, you know, it's a chain reaction.

MR. COLLINS: It's a chain reaction, and you can get claims, the costs can snowball quite a bit.

MR. LEMAY: Yup.

MR. COLLINS: And so, do these – do any of these costs belong in the base estimate? Was it your job to estimate any of these knock-on effects?

MR. LEMAY: You know, like I said earlier, the experience I got in Eastmain-1 does include, you know, these situation on a certain extent. It depends what kind of delay you're talking about.

When a contractor has a 48-month job and he's late for two, three months, you know, it is spread over four years. Some weeks, some months he has to stress a little bit, it's within a certain range. And the factor that we had at the Eastmain-1 took care of this situation, because all kinds of thing happen on a – like, a project in Eastmain. You had a big fire during in the summer, you had to evacuate everybody, you know.

So you know, it has some impact and it all include in there, to a certain extent, if you put too many – if you, how can I say that – you cannot foresee that we'll have an extend of 25 or 30 per cent, because you're gonna be completely far off. You could – you could put some things in there but not too many as well, you know, otherwise –it's going to be – your price's gonna be too high.

MR. COLLINS: So I'm asking if – there's always a risk. It could be a big risk or a small risk, but there's always a risk that your productivity estimate will be quite wrong – too optimistic. Whose job is it to estimate what would be the consequences of that risk and how to deal with it? Was that your job?

MR. LEMAY: No, not the risk. I was not involved with the risk itself.

MR. COLLINS: And so your job is to come up with the best estimate you can and –

MR. LEMAY: Yeah.

MR. COLLINS: – and whatever the consequences are of your estimate being wrong, those are meant to be dealt with by the risk evaluators?

MR. LEMAY: Yes.

MR. COLLINS: Thank you.

There's a – I have a –

MR. LEMAY: Welcome.

MR. COLLINS: – a couple of points – a couple of more questions about your benchmarking. And we focused quite a bit yesterday on Nipawin but there's one avenue – side of it I didn't explore. Nipawin is a much smaller project than Muskrat Falls, isn't it?

MR. LEMAY: I beg your pardon?

MR. COLLINS: Nipawin was a much smaller project than Muskrat Falls, wasn't it?

MR. LEMAY: Yeah.

MR. COLLINS: It was –

MR. LEMAY: In was the same (inaudible) concrete dam.

MR. COLLINS: It's a three-turbine project with a total capacity of 255 megawatts, whereas Muskrat Falls is a four-turbine project and each turbine has 206 megawatts. Is that right?

MR. LEMAY: Mm-hmm.

MR. COLLINS: And if you look at it from another perspective, from the amount of concrete, as I interpret your sheet, there's 63,000 cubic metres of concrete poured at Nipawin compared to 328,000 that you estimated at Muskrat Falls?

MR. LEMAY: Mm-hmm.

MR. COLLINS: So, I won't repeat the other – the rest of the conversation we had yesterday about Nipawin. When you did this estimate, were you hoping the project would go ahead?

MR. LEMAY: Of course.

MR. COLLINS: And were you aware that if the estimate was too high, then the project would not be sanctioned?

MR. LEMAY: No.

MR. COLLINS: You were not aware of that?

We've lost you, Mr. Lemay.

THE COMMISSIONER: Okay.

So in the backroom we might – I think we had a problem with the – with a button there yesterday so maybe that's the same thing that's happened today. So could we just see if we can get him back online?

UNIDENTIFIED MALE SPEAKER:
(Inaudible.)

THE COMMISSIONER: Pardon me?

UNIDENTIFIED MALE SPEAKER: System crash (inaudible).

THE COMMISSIONER: Okay.

So we'll take a minute then to bring him back. So we'll just adjourn for a moment.

CLERK: All rise.

Recess

CLERK: Please be seated.

THE COMMISSIONER: All right, I believe we have Mr. Lemay back. If could just bring him up, please.

Thank you.

Sorry, Mr. Lemay, I think we had a crash on our end here.

Michael, or Mr. Collins.

MR. COLLINS: Thank you, Commissioner.

So, I was asking: were you aware that if the estimate was too high, the project wouldn't be sanctioned?

MR. LEMAY: No.

MR. COLLINS: You weren't aware?

MR. LEMAY: No.

MR. COLLINS: Do you remember giving an interview on August 9, 2018? I wasn't there but Commission co-counsel were there.

MR. LEMAY: Mm-hmm.

MR. COLLINS: Do you remember that interview?

MR. LEMAY: With Ms. O'Brien?

MR. COLLINS: Yeah.

MR. LEMAY: Yeah, and? What is your question?

MR. COLLINS: Well, so we had a transcript of that interview. Have you had a chance to review the transcript?

MR. LEMAY: What passage in particular?

MR. COLLINS: If you go to page 39 of your August 9, 2018 transcript.

MR. LEMAY: I don't have that transcript with me.

MR. COLLINS: Could I read you what the transcript says? You could have – it says: Ms. O'Brien asks you: You don't want the cost to get too big because if the cost gets too big then perhaps the project won't go ahead; it won't be sanctioned.

And you say – Mr. Lemay: Well, it is one of the reason.

MR. LEMAY: It's not all the reason. I mean, it could happen. Of course, if a project is really too high against the expectation, it could not go

ahead but I have not made my estimate, you know, thinking that the project will not go.

I estimate the job for what it should cost and hoping that the cost that we're going to develop will meet the budget that Nalcor had. And I was not aware of the budget at all. I was hired to estimate the project with the drawing that we have prepared and I came up with a number, and after that, it's out of my control.

MR. COLLINS: You don't know what Nalcor's budget was, but if you know that if your estimate was higher than that budget, the project wouldn't go ahead.

MR. LEMAY: Well, it's the same thing with any project, Sir. If you are going to produce an estimate that is beyond, you know, the budget that you had for it, the project will not take place. It's normal.

MR. COLLINS: So, you did know that if your estimate was too high the project wouldn't go ahead?

MR. LEMAY: Well, of course.

MR. COLLINS: And if the project didn't go ahead, SNC-Lavalin would lose hundreds of millions of dollars of EPCM work?

MR. LEMAY: Well, you see, you're speculating here again. This is out of the point completely to me. You know, I don't know why you're making that statement. Of course, if you're not in business you're not doing money – you're not making money.

I have not made that estimate thinking on all these things. I've been hired for the experience I had in Eastmain-1, okay, especially for that. Jason Kean hired me for the expertise and the 40 years of experience to do that estimate for Muskrat Fall because, you know, I had the fresh experience, very similar to Muskrat Fall was going to go, and that's the end of my participation on that.

I was not doing that with any thought would it be at – that high if I do this, if I do that? I don't work that way. When somebody asks me to do a job, I do it, period, you know, for what I have – the drawing in front of me. And I said if you

want to build this building with this much concrete, this much rebar, it will cost that much, end of the story.

MR. COLLINS: And that's why you chose the Nipawin project to benchmark against?

MR. LEMAY: No. Nipawin, I told you yesterday, is strictly a guide. This job I have used my Eastmain-1 experience. And for the benefit of having some other projects to look at – you have a kind of a guide of how it looks – I chose these various project, but all these project are very different one of the other. What is important is everything that I put on Muskrat Falls is what I just left in Eastmain-1, and that's what I've done.

MR. COLLINS: Thank you, Commissioner.

Those are my questions.

THE COMMISSIONER: All right, thank you.

All right, Government of Newfoundland and Labrador, any questions?

MR. RALPH: No questions, Commissioner.

THE COMMISSIONER: Okay.

Nalcor Energy.

MR. SIMMONS: Thank you, Commissioner.

Good morning, Mr. Lemay.

My name is Dan Simmons. I'm for Nalcor Energy. We met over Skype before, last fall.

And the only thing I want to ask you about is to follow up on the questions – the line of questioning that Mr. Collins just asked you about. He had brought you to a – or quoted a question and part of an answer from your interview on August 9, 2018. And I think you were interviewed again by Commission counsel on March 2, 2019, not long ago. Is that correct?

MR. LEMAY: Yes, Sir.

MR. SIMMONS: Okay.

And that same topic of whether you were aware if the estimate was high the project wouldn't be sanctioned, that came up in that interview as well. Do you remember that?

MR. LEMAY: Not on the 2nd of March –

MR. SIMMONS: Okay.

MR. LEMAY: – in particular.

MR. SIMMONS: Let me –

MR. LEMAY: My answer would be the same thing.

MR. SIMMONS: Yes, and I just want to read a couple lines – a few lines from page – starting on page 83 of your recent interview. And the transcript reads that you were asked: Were you aware that if the estimate was high the project wouldn't be sanctioned? You answered: Not at all. You were asked: That wasn't something – is that something you've heard before now? And you answered: Nobody talked to me about that.

So is that a correct statement of your position, that whether your estimate was high it would affect sanction of the project, that that was not something that anyone from Nalcor ever brought to you as an issue?

MR. LEMAY: Exactly.

MR. SIMMONS: Okay.

Thank you very much, Mr. Lemay.

MR. LEMAY: Welcome, Sir.

THE COMMISSIONER: All right, thank you.

The Concerned Citizens Coalition.

MR. BUDDEN: Good day, Mr. Lemay.

My name is Geoff Budden; I'm the lawyer for the Concerned Citizens Coalition.

I also questioned you back in the fall. And as you may remember – you may not remember – the Concerned Citizens Coalition is a group of individuals who were – or had been for many years – critics of the Muskrat Falls Project.

I've got a few questions for you today, about 20 or 25. And if you don't understand my question at any time, please ask me to clarify it and I'll try to do so.

MR. LEMAY: Okay.

MR. BUDDEN: The first thing I'm going to ask you is you've given evidence yesterday – and I'm going to try not to cover the same questions as Mr. Collins has already covered in great detail, but I do ask: Did most of the members of your estimating team come from SNC-Lavalin or did you hire them from elsewhere?

MR. LEMAY: Some came from SNC and some from elsewhere. I had two consultant: one in Quebec City and one in United State which – Jim Daubersmith, that we spoke about yesterday.

MR. BUDDEN: So I think you said yesterday – and correct me if I'm wrong – but that your team was about 20 people? Was that correct or was it – is it a different number?

MR. LEMAY: No, we were – I had 11 people working for me on this project.

MR. BUDDEN: Okay and how many of those were –

MR. LEMAY: In estimating.

MR. BUDDEN: And how many of those –

MR. LEMAY: That –

MR. BUDDEN: – were SNC-Lavalin people?

MR. LEMAY: There was three from Calgary and there was in-house another three, so about six. So it would be, like, 50/50, yeah, approximately.

MR. BUDDEN: Okay.

Madam Clerk, could we please bring up Exhibit P-00014? And this is, of course, the Grant Thornton report from Phase 1. And it's page 58 that I would like to go to.

THE COMMISSIONER: What page again?

MR. BUDDEN: Fifty-eight.

THE COMMISSIONER: Page 58.

MR. BUDDEN: What I'm going to do – I don't think you have this in front of you, Mr. Lemay, but I will read it to you – it's about five lines – and then I will ask you some questions about it.

And I'm reading from line 14, so you can scroll down a little more, Madam Clerk. Thank you.

And this is what I am going to read, Mr. Lemay: "Labour productivity hours were estimated based upon normal working conditions and then they were increased by an additional 20% to account for the lack of skilled labour in 2012 and potential reductions in productivity due to weather and other circumstances. According to SNC's Lead Estimator" – which I understand is you – "the total labour hours estimated for the project was initially 12.6 million and then an additional 2.5 million hours were added to that which represented the additional 20%. We understand that Nalcor developed mitigation plans to address labour productivity."

So – and again this is – was somewhat covered yesterday but I have a follow-up question or two. That 20 per cent, Mr. Lemay, can you tell us again where that came from? Why 20 per cent?

MR. LEMAY: Yeah, that 20 per cent that I have put is a – my decision to put that percentage of possible labour unproductivity. And I thought that over 10 million direct hour you're showing on the document – you just show me 12 million – I think it has been reviewed by Nalcor, but ... And the capital cost estimate, we were talking about 10 million direct hours, Sir, so adding 20 per cent, which is 2 million hour, I thought it was reasonable.

MR. BUDDEN: Why 20 per cent? Why not 10 per cent or 30 per cent?

MR. LEMAY: Well, I felt that 10 was a bit too low and 30 was too much, so I went with the 20 per cent. It was an honest evaluation to me.

MR. BUDDEN: Okay. And did you base that because of your experience on other projects where 20 per cent was used? Again, I realize

that you've been doing this for 30 years or more and we're not going to be able to get into your thinking entirely, perhaps, because some of it, perhaps, is instinct. But, again, it's a very specific number, and I'm asking, again, why 20 per cent? Can you explain your thinking a little more?

MR. LEMAY: Yeah.

Again, like I told you, yeah, that 20 per cent, I thought this was reasonable. Throughout my career in estimating, you know, we don't have always these conditions, because I suspect that the labour pool in Newfoundland – because of the Hebron Project that was running in the same time, you know, we would be not taking – you know, having the best of the labour carpenter people so that would affect, you know, the productivity. So that tends to me that to be more – like, instead of 10, more like 20 per cent would be a reasonable percentage.

MR. BUDDEN: Okay. And I'll ask again, why did you think 20 per cent was reasonable? Did you do research and show that Hebron would have a particular influence? Did some of the Nalcor people who, perhaps, knew Newfoundland better than you did – did they suggest the 20 per cent? I really would like to explore that a little more because I'm still confused as to how you arrived at 20 per cent.

MR. LEMAY: Yeah. Again, this 20 per cent was an allowance, okay? So I have not start making specific inquiry with the pool – how many Kiewit at that project of Hebron? When it will – you know, I didn't spend too much – that much time in going into detail.

You have to remember that this estimate was a huge effort. We had – talking a lot yesterday and this morning about the concrete was 35 per cent, but there was 65 per cent of other things – the transmission line, all the substations. We had something like 54 big binders of information and – that I had to supervise, and, you know, I didn't have that much time of making specific inquiry when we have to take a decision where we need to allow – make an allowance for these probability, and I think 20 per cent was a reasonable factor – percentage.

MR. BUDDEN: Before you decided on 20 per cent, to what degree did you discuss that with anybody else? Perhaps – I'm thinking specifically of some of the engineers from Nalcor you worked with, who perhaps knew Newfoundland a bit better than you did.

I assume you didn't just come up with a figure yourself and not discuss it with anybody.

MR. LEMAY: Yeah, well, mainly, you know, I had – my thinking on that, I was responsible for this, so mainly that was my goal. Of course I spoke with the people around me a little bit, but, you know, it was a consensus on their side as well that 20 per cent was a reasonable percentage, Sir.

MR. BUDDEN: And did your thinking start off at 30 – at 20 per cent? Did it start off at another number and go up or go down through this consensus process?

MR. LEMAY: Yeah, you see, like I told you again, I could've taken 10, could've taken 30, and my feeling was that with the experience – with the 40 years of experience I had on a project like this, putting two million hour on the top of 10 million, it was a good, safe number.

MR. BUDDEN: And was your thinking always 20 per cent? Or did it go up or down as you consulted with other people?

MR. LEMAY: Like I told you, I didn't spend that much time of making, you know, research on that. It was my thinking. You know, you've got your – with your experience, it come from your belly here; you know, it's inside. You feel that this is reasonable, and every time I had to take a decision, I don't ask 200 people what they think about. I didn't have the time too much, with everything I had to supervise, to spend too much time, you know, asking opinion, and I believe that – and I still believe – that 20 per cent was pretty reasonable, Sir.

MR. BUDDEN: You're not really answering my question.

My question again is, were you always at 20 per cent? Or did your number go up and down as you consulted with other people?

MR. LEMAY: Well, again – well, when you start, you start – maybe, you know, we'll go to 10; should we go to 15, 20? So, we sit down, say, how much money that give at \$100 an hour? Well, it's – we're gonna have \$2 million, \$200 million, that's a lot of money, yeah, but, you know, it could be – you know, Sir, of course it was not a two-second decision.

I made my own calculation: what was the impact money-wise? You know, we're talking about \$200 million. That's a lot of money, Sir. So after, you know, doing all these things, I went with this number.

MR. BUDDEN: And I'll ask you again, did you start at 20 per cent? Or did you start at another number and, through this consultation process, end up at 20 per cent?

MR. LEMAY: I just told you: we start at 10, then we maybe go to 30, but I finally decide to go to 20.

MR. BUDDEN: Okay. Who was suggesting 10 per cent?

MR. LEMAY: Among our own – a group of my immediate estimators that were working with me.

MR. BUDDEN: Okay, and how about the 30 per cent, same thing? People around you or –

MR. LEMAY: Yeah.

MR. BUDDEN: Okay. Do you recall –?

MR. LEMAY: Yeah, 30 per cent was a lot, yeah.

MR. BUDDEN: I'm sorry to interrupt, but do you recall if the Nalcor engineers you're dealing with in the project management team, were they pushing you more towards 10 per cent, more towards 30 per cent, or were they leaving you alone to make the decision on your own.

MR. LEMAY: I don't recall that they have pointed out to me a specific percentage, well, do this or do that or not. They let me – they hired me to do that estimate, and they felt that I was choosing a good number.

MR. BUDDEN: The \$12.6-million figure in there for the labour hours, again, can you tell us the origin of that figure?

MR. LEMAY: I don't know, because I told you my capital cost estimate revealed 10 million hours so I don't know where this 12.5 million come from.

MR. BUDDEN: Okay. You simply don't recall?

MR. LEMAY: No.

MR. BUDDEN: Okay.

And the labour rates themselves were supplied by Nalcor, I understand?

MR. LEMAY: Yes, it was.

MR. BUDDEN: Okay.

Going to read you a little bit of your interview if I may – sorry, I left it on my desk.

This is when you were interviewed by Commission counsel. I know you were interviewed twice, Mr. Lemay, but this is the one from last August. And I'm going to read you, as Mr. Collins did, a little bit of that interview, and then I'm going to ask you a question or two about it. And this is –

THE COMMISSIONER: Are you on a particular page or ...?

MR. BUDDEN: Yes, it's from page 4, near the top of the page. And this is an answer you gave to a question by Ms. O'Brien, and this is what you had to say: The labour rate was supplied to us by Nalcor because the union agreement for the labour was not in place. We find out that in Newfoundland each project, you know, are set up with a union. When it is a big project like this, they have to sit down with the different trade and get the rate that will be used for the project. But this was not done in the time that we had to finish the estimate for 15th of December, 2011. So Nalcor provided us the labour rate for the trade.

So that's as you just said, and you remember saying that last August?

MR. LEMAY: Yeah.

MR. BUDDEN: Okay.

MR. LEMAY: Exactly.

MR. BUDDEN: Okay.

I guess my question for you is once the labour rates actually came in from the agreements once the agreements were signed, how accurate did your estimates of December 2011 prove to be? Were they high, were they low? Can you give us some indication?

MR. LEMAY: We have to ask Nalcor because I didn't work out the labour rate. I just took it – the list from Nalcor, so – to check if it matched, if it exceeded, or more or less. You would have to ask Nalcor people who supplied us the number if the final labour union agreement matched their number. I don't know, Sir.

MR. BUDDEN: Okay, that's fine – that's your answer.

The – also in your interview you spoke – this is on page 6 and I may read you a bit if necessary, but it may not be necessary. In your interview, you spoke of green sheets and I'd like you, if you can, to tell us what they were, where they came from and what influence, if any, these green sheets had over your estimating process?

MR. LEMAY: In what aspect? A green sheet for – I'm not quite sure what you want to know from me exactly.

MR. BUDDEN: Okay. Well, why don't I read you what you said in your interview and then I may have a question or two. But I mostly want you to confirm the information that you said back in August.

And at that time you said – you were asked what is a green sheet and you said – now these were your words from August: A green sheet is a list of all the structure to be built and there is a budget amount of money against each step of it, you know, to evaluate, you know, how much the project would be – the range.

Then Ms. O'Brien said: Okay. And you say: So that's what we call a kind of green sheet. And

Ms. O'Brien says: So, do you have the green sheet with the budget prior to you starting your estimate? And you say: Yes, I got a green sheet, you know, like I told you of what was the cost of the project at the time for, you know, how can I say that, what was being done – what you call Gate 2.

And just for – I'm – not in your interview now, but Gate 2 is Decision Gate 2, what we call it here.

And then Ms. O'Brien said: So it had a price tag; it had dollars associated with it, your green sheet. And you say: Yeah, yeah, there is a number, but I don't recall that number, how much it was exactly. And Ms. O'Brien says: Okay, but would that have been the Decision Gate 2 estimate? That would have been the Decision Gate 2 estimate, I take it.

And you say: Yeah, probably it was Gate 2, but like I told you, I was not involved in Gate 2; I don't know nothing about that. The only thing I got was the structure. Ms. O'Brien says: You get the structure and you get a budget price for the structure? And you say: I don't recall that, you know, to have what it was, and I don't want to have it because I want to start the project and establish myself how much it will cost. Ms. O'Brien says: Okay. And then you say – and I guess this is where it all culminates for me – you say: Okay, so I didn't want to look at what was done so I was not influenced by that.

So, do you remember saying all of this back in your interview?

MR. LEMAY: Yes, Sir.

MR. BUDDEN: Okay, and is that – do you adopt that here today? Is that all correct, as to your present understanding?

MR. LEMAY: Repeat that question again?

MR. BUDDEN: Oh, sure. Okay, we'll just leave it. Do you – would you change anything about what you said then, or do you adopt it?

MR. LEMAY: Well, of course, you know, what I meant there – I didn't want to look in the one that – you're hired to go on a project, Sir, and you have to estimate – you don't want to be

contaminated by previous information that was done from a green sheet or from whatever else. You prefer looking at the document that you will get and do your estimate from there. So that's why I mentioned that green sheet, you know; I did not want to –

MR. BUDDEN: Okay.

MR. LEMAY: – see that because I don't want to be contaminated.

MR. BUDDEN: Okay, thank you; that's your answer.

Madam Clerk, could you please bring up Exhibit P-00133.

And this may be identical to the Exhibit 00094 that you had yesterday, but I'm not sure; my references are 00133. So that's the one I will use. And it's page 35 that I'm interested in.

This is a –

MR. LEMAY: Is it in my exhibit?

THE COMMISSIONER: No, it's not.

MR. BUDDEN: It may not be.

THE COMMISSIONER: No.

MR. LEMAY: Okay, go ahead.

MR. BUDDEN: Sure.

This is going to be hard to do if you don't have it in front of you, I now realize. Do you have Exhibit 00094 in front of you? Is anybody able to clarify that?

THE COMMISSIONER: He does. It's – tab 15.

MR. BUDDEN: Okay, perhaps you could turn to tab 15, Mr. Lemay, and –

MR. LEMAY: Yeah.

MR. BUDDEN: – turn to page 33 in that and tell me is it an estimating structure? If it's the same document we'll just work from it. Page 33, Madam Clerk.

CLERK: (Inaudible.)

MR. LEMAY: I don't have it in my –

MR. BUDDEN: No, it's –

MR. LEMAY: – tab 15.

MR. COLLINS: Tab 10, Commissioner.

THE COMMISSIONER: Tab 10.

MR. BUDDEN: Okay. No, this is something different. So we'll have to –

MR. LEMAY: Okay.

MR. BUDDEN: Perhaps we can go back to the other exhibit, Madam Clerk –133, page 33. And I'll –

MR. LEMAY: Okay.

MR. BUDDEN: – put some of this. What this is – and I realize you don't have it in front of you, which is difficult for you, but it is a chart that's headed Estimating Structure and Members. And –

MR. LEMAY: Yeah.

MR. BUDDEN: – if we look at that chart, we see you are identified as a lead estimator. And it shows a chain of command that has the – you – immediately above you in one direction is the SLI, SNC-Lavalin project control. And the name there is –

MR. LEMAY: Mr. Berjaoui.

MR. BUDDEN: That's correct, yes. So, was it your understanding that you answered to him within the SNC chain of command?

MR. LEMAY: Yes, Sir.

MR. BUDDEN: Okay.

How – what – could you describe perhaps your dealings with him when it came to input into the estimating process?

MR. LEMAY: Yeah, there was some interference in the line communication. Sorry, your voice has been cut. Can you –

MR. BUDDEN: Oh no, that's not your fault. I will repeat my question.

I'm wondering about, I guess, the contact that you would have had with this gentleman and how much input he – or for that matter anybody above you in SNC-Lavalin – would have had into the estimating process.

MR. LEMAY: Well, Mr. Berjaoui came three weeks before Christmas, you know. So, Mahmoud was replacing Stan Wynne that was there since longer time than him. So when Mahmoud came to the project to replace Stan Wynne, we were almost going to complete the estimate. So the participation of Mahmoud to the capital cost estimate was fairly limited because of that period he came in.

MR. BUDDEN: Okay.

Would there have been an executive committee or any kind of executive review process within SNC-Lavalin to review your own estimating work? Was that ever subjected to an executive review within SNC-Lavalin?

MR. LEMAY: Yeah, well, I had my functional manager in Montreal that came in Newfoundland to review – have a cold eye review to my own estimate. His name was Gilles Simard and he is the person that I sit down with him to go over the whole estimate and made sure, you know, we had not too many pieces falling between two chairs.

MR. BUDDEN: Okay.

MR. LEMAY: That was on the top of the internal review we had with Nalcor a month previous to that.

MR. BUDDEN: Okay.

You made an interesting comment a moment ago; you said when Jason Kean hired me, or something to that effect. I guess I was struck by that, because our understanding is that you were hired by SNC-Lavalin. Which is correct?

MR. LEMAY: Well, I was – Jason Kean was getting the CV from SNC-Lavalin. I was working for Kiewit at Lower Mattagami Project. Then I receive a call from SNC that they have a position for me in Newfoundland on the Muskrat Fall Project.

So the first day that I arrive on the project, Jason Kean came to me and he said: Paul, I'm the one who approved your candidacy, you know. So that's why I'm saying that Jason hired me.

MR. BUDDEN: Okay.

Who did you see yourself as answering to on this project?

MR. LEMAY: Who, what?

MR. BUDDEN: Who did you see yourself as answering to? Do you know what I mean by answering to?

MR. LEMAY: You mean reporting to? I was reporting to my boss at SNC or Nalcor.

MR. BUDDEN: Okay.

You say you're reporting to your boss and I missed the rest of it.

MR. LEMAY: Yeah, I was reporting to – at first time in May the name of the person was André St-Jean. Then, that person had an illness and he was replaced by Stan Wynne until Christmas, when he got himself with a medical problem and Mahmoud Berjaoui replaced him. So as far as SNC was concerned, these are the three person I have been reporting to during the estimate.

MR. BUDDEN: Okay, you actually worked out of St. John's, though, for much of this time, didn't you?

MR. LEMAY: Yes, I worked three years on the project and I was transferred back to Montreal in January 2014. And I remain another four years on the project, until very recently in September 2018.

MR. BUDDEN: Sure.

Have you ever been on the site, been on the project site itself at Muskrat Falls?

MR. LEMAY: I went twice.

MR. BUDDEN: Okay, when were you there?

MR. LEMAY: Once was in 2015 with one of my boss. Not 2014 – it was not 2014. I don't recall exact date but after I came to Montreal, I was – I had a boss that I was reporting in St. John's and his name was Ken McClintock and Ed Bush.

So I went twice on the job: One with – once with Ed Bush and another time in 2015 with another guy who replace Ed Bush. And his name was Anthony – I forgot his last name. I went twice.

MR. BUDDEN: Okay.

MR. LEMAY: There was two site visits.

MR. BUDDEN: Sure.

The – I'm going to have a couple of questions here now. I'd like you to think about very carefully before you answer them. But the first one is: Did the project management team – the people you were dealing with, Jason Kean and others – do you feel that they let you do your job as you wanted to, as you thought best? Or did you feel that you were micromanaged and your decisions would sometimes be overruled?

MR. LEMAY: Well, I'm – during the time we're doing the estimate, like I mention earlier we had Nalcor on our back almost every day. And it was an additional stress to the work and it was tough sometime, but it never – nobody from Nalcor never told me anything about what numbers, you know, or influenced me on whatever my estimate process was.

MR. BUDDEN: You say it was done sometime. What do you mean when you say it was done sometime?

UNIDENTIFIED MALE SPEAKER:
(Inaudible.)

MR. BUDDEN: Or did I misunderstand what you're – well, you said that but then you went on and said – as I understood you, you said it was

tough and it was done sometimes. And if I understood you correctly, I guess I'm asking what are you referring to? That micromanagement was done sometimes, that interference was done sometimes or have I completely misunderstood you?

MR. LEMAY: No, I just mentioned, you know, Nalcor was behind our back on a regular basis. So that was every day of the week, you know, I had Mark Turpin coming in my office and say: Paul, what are you doing today?

You know, so it was stressful to work with people asking you, you know, what are you doing today here and there. So that was stressful to work with, but I thought I could cope with that and do my work and there was nothing else that I could do. I mean, he was our client and we respect that.

MR. BUDDEN: Okay.

The fact he was coming in your office, I'm sure that's not – doesn't have to be stressful in and of itself; people stroll in and out of each other's offices all the time.

What was he coming in your office for?

MR. LEMAY: Like I mentioned, he was coming to know every day what we would – what we were doing today and have you complete what we did – that you said yesterday. I think it was overdoing a little bit to my own point of view.

MR. BUDDEN: Okay. Overdoing it in what way?

MR. LEMAY: Overdoing, over-checking – over-checking. As I said, Mike – Mark, I don't need you to come here every morning to ask me what I'm going to do. I have so much work to do. Let me do my work. It'll go just fine.

MR. BUDDEN: Were – was Mark, for instance – that would be Mark Turpin, I assume?

MR. LEMAY: Yes.

MR. BUDDEN: Okay.

Would he be questioning your decisions? Would he be saying to you, you shouldn't use this number, you should use some other number? Was that the kind of thing that would be happening?

MR. LEMAY: Never.

MR. BUDDEN: Pardon?

MR. LEMAY: No, never. It was just looking at the agenda –

MR. BUDDEN: Okay.

MR. LEMAY: – more, never in the numbers.

MR. BUDDEN: Never in the numbers? Not once?

MR. LEMAY: Well, not when he was coming in the morning to see what – the example I'm showing – I'm telling you, he was checking what I was going to do. We're not discussing numbers, you know.

MR. BUDDEN: Okay, well –

MR. LEMAY: It was just –

MR. BUDDEN: – I guess –

MR. LEMAY: – strictly the agenda.

MR. BUDDEN: – I'm not really too concerned about your agenda or your schedule, but I am concerned about the numbers. So, I guess, ask you flat out – did any of the project management team you dealt with – did they ever attempt to influence your decisions on the numbers, and if so, give us some examples of that?

MR. LEMAY: Never.

MR. BUDDEN: So this number – these numbers for better or worse – whether they turn out to be good numbers or bad numbers – you take ownership of them. You are responsible for them. Is that what you're saying – not Nalcor – not anybody else but you and your team?

MR. LEMAY: I want to make sure what your question is and then you – mostly, I think, are you telling me that Nalcor had influenced me on

the number – had said something to me to influence my number? They never did that.

MR. BUDDEN: Okay. So that returns to my question, which is, for better or worse, these are your numbers and if they're wrong, it's your fault and nobody else's.

Is that fair?

MR. LEMAY: Well – during the meeting that we had, you know, when – we have to be consistent with two period here. The capital cost estimate that I was doing, and after that we were moved into the bullpen. When I'm talking about Mark Turpin coming in my office, asking me about agenda and everything, that was prior December 11.

But after we went in Nalcor's side, then we talk about numbers because then I was reporting to Jason Kean and Mark Turpin and from there then – yes, we talk about money and I already mentioned about this – I gave an example one time that Jason wants to put \$37,000 for a pickup and I said – Jason, this is gonna work – not gonna work. You need to put at least \$100,000, you know for the pickup, and \$37,000 is not enough.

And at one point Jason said – Paul, that's my call. That's my decision and no more discussion. There will be no more discussion. So, you know, that part of the estimate is another story, you know.

MR. BUDDEN: Okay.

MR. LEMAY: Early – so – (inaudible) –

MR. BUDDEN: Yeah. We've seen that email about the pickups. So you're dividing it –

MR. LEMAY: Yeah.

MR. BUDDEN: – really into two periods – before December 11 there was no interference, but after December 11 there was interference.

MR. LEMAY: Oh yes, oh yes.

You know, it's important that we distinguish those two period.

MR. BUDDEN: Okay.

How would you describe your working relationship with Mr. Kean?

MR. LEMAY: I think it was respectful and correctly.

MR. BUDDEN: Okay.

MR. LEMAY: You know, we had some disagreement on some thing but we always remain in good terms. As a matter of fact, that's why they kept me for seven years on the project.

MR. BUDDEN: But he wouldn't hesitate to step in and say we disagree, but I'm going to make the final decision –

MR. LEMAY: Of –

MR. BUDDEN: – on –

MR. LEMAY: – course.

MR. BUDDEN: – on the estimate itself.

MR. LEMAY: Yeah.

MR. BUDDEN: Okay.

How was your working relation with Mr. Turpin, Mark Turpin? Much the same?

MR. LEMAY: Much the same, you know, despite the fact that I rather dislike, you know, his chasing on my agenda, on a regular basis during the capital cost estimate, when we spent four months together in the bullpen. So we were all together, so we had to develop a good relationship together.

MR. BUDDEN: Okay.

And Mr. Parady, any different or much the same?

MR. LEMAY: Who?

MR. BUDDEN: David Parady, is that a name you're – you've worked with, a name you're familiar with?

MR. LEMAY: Yeah, David Parady was one of the person that was working on the project from

Nalcor, and – but I didn't have that many communication with Dave.

MR. BUDDEN: Okay.

MR. LEMAY: It was most of the time with Jason Kean and Mark Turpin.

MR. BUDDEN: Madam Clerk, perhaps we could call up Exhibit 01677, and it's – again, it's page 33 there I'm interested in.

UNIDENTIFIED MALE SPEAKER: Sixteen (inaudible).

MR. BUDDEN: And what this is, Mr. Lemay, is –

THE COMMISSIONER: Tab –

MR. BUDDEN: – the –

THE COMMISSIONER: – 12.

MR. BUDDEN: It's tab 12 for you, page 33, and –

MR. LEMAY: Tab –

MR. BUDDEN: – for everybody –

MR. LEMAY: – 12.

MR. BUDDEN: – else it's the Phase 2 Grant Thornton report.

And it's a question that was put to you – I'm going to read, Mr. Lemay, from the top of page 33, a question that was put to you and an answer that was given to that question.

THE COMMISSIONER: Page –

MR. BUDDEN: Page 33.

THE COMMISSIONER: Thank you.

MR. LEMAY: Mm-hmm.

MR. BUDDEN: And I'll read it just for the benefit of everybody here in the room.

The question is, Astaldi's bid contained a million dollars more direct, or \$1 million, rather,

more direct labour hours than the estimate for CH0007, which is the contract that became Astaldi. What was the underlying cause for that, and your – this is your words here: The main reason is because Astaldi had a higher ratio between staff person and site workers than we used to see here in Canada for similar types of contract. On this CH0007 bid, one of the bidder, Aecon, had the same number of hours – 978,000 hours, than my estimate, 930,000, compared to 1,982,044 hours for Astaldi, which is almost 1 million hours difference.

And this is the part I'm most interested in: Also for the direct labour, the main reason why I have less man hours is because Astaldi has used a productivity average of seven man hour per square metre compared to –

MR. LEMAY: Cubic metre.

MR. BUDDEN: – cubic metre, sorry, yes – three – I didn't do that well in math – compared to five man hours –

MR. LEMAY: It's okay.

MR. BUDDEN: – cubic metre for my estimate. Let's say I was a little bit more optimistic on my productivity.

And what I'm interested in, Lemay, you say I was a bit more optimistic. Is that a decision that you made on your own, or is that a case where Nalcor contributed to that decision and perhaps influenced your optimism?

MR. LEMAY: No. This comment that I have made is – I made that comment at that interview and I was just explaining the difference because he had seven man-hours and I was five. I was just saying compared to this guy, I was a little bit more optimistic than him.

MR. BUDDEN: Oh yeah, I understand what you're saying. But I guess my question is, you say that your number was a little more optimistic – and I understand that – I guess my question is: was this really your number, or was this a number that Nalcor suggested or made you use?

MR. LEMAY: No, this is my number. This is my estimate.

MR. BUDDEN: Okay.

We've heard evidence, and it's been before the Commission, that 70 per cent of the base estimate was SNC-Lavalin, 30 per cent was Nalcor. And I guess my question is, is it common – you've worked in – I presume you've worked in these EPCM situations before – and is it common for the client to make such a significant contribution to the base estimate as happened here, or was this unusual?

MR. LEMAY: I was not aware of that 70 per cent ratio. That is a proportion that I guess Jason had mentioned that it turns out to be, but I didn't work on an EPCM set-up that many times in my career because I didn't – I used to work for general contractor and SEBJ but not – never for engineering firm where I would be in an environment of an EPCM. That was my first time I was in an EPCM environment, so I cannot answer your question.

MR. BUDDEN: Okay.

You seemed surprised at the 70 per cent figure. Do you agree with it or disagree with it?

MR. LEMAY: Well, that's what Jason had find out. It's just probably a simple mathematical result of the cut that he made from the amount of money I had in my estimate and what they had decided to cut and put at the end. But I was not involved, at all, in the process of the estimate after December 2011, certain.

MR. BUDDEN: Okay.

So certainly for the period after December 2011 you wouldn't agree that the estimates were 70 per cent coming from SNC-Lavalin, I take it?

MR. LEMAY: I thought it would remain, you know, what I told Jason, you know, that how much it should be. But again, it's like the example of the pickup truck; I'm not going to change my number but if you want to put another number, that's your call Jason, not my call.

MR. BUDDEN: So you may not change the number but you couldn't help it if the number was changed?

MR. LEMAY: Yeah, of course I could not, because I was not responsible anymore.

MR. BUDDEN: Okay.

The – a couple of more questions. We've heard evidence just from Mr. Béchard, I believe, but from others as well, that no geotechnical studies were available at the time the contracts for the transmission lines were awarded. And, I guess, were you aware of that, were you aware that no geotechnical studies were available at that time?

MR. LEMAY: I don't know which period exactly Normand was referring in his testimony. But for my point of view, when I prepared a capital cost estimate we didn't have any information on the geotech, so that's why I have made an allowance of \$100 million for boring to be done –

MR. BUDDEN: Okay.

MR. LEMAY: – along the 1,000 kilometre of transmission line.

MR. BUDDEN: Why did you believe \$100 million would be adequate? Why that number?

MR. LEMAY: Because the \$100 million is – equals to something like – not something – it equals to \$100,000 per kilometre. So if you do three or four boring for \$100,000, you have enough money to drill this borehole and find out what's in the ground for that amount of money.

MR. BUDDEN: So, in your experience, your knowledge, your belief, that was an adequate amount to compensate for the fact that no geotechnical work had been done.

MR. LEMAY: I think it was a fair allowance, yeah.

MR. BUDDEN: Okay.

The last couple of questions I have are mostly about scheduling and then I have one more or two after that. But – and we've heard evidence again, as I understand it, that you played no role, you had no involvement in any risk assessment around scheduling. Is that correct?

MR. LEMAY: Exactly, Sir.

MR. BUDDEN: Okay.

So your estimate, to what degree did it include any allowance for a schedule risk or did it?

MR. LEMAY: I don't know. I have not considered that in my estimate. It has been done by the risk group and probably Jason Kean, but I was not – it was not included in my capital cost estimate.

MR. BUDDEN: Okay.

The – as we know from the – from other evidence we've heard, I'm sure you know as well, that in 2012, I believe it was, or around there, the SNC-Lavalin, Nalcor contract changed from EPCM to an integrated team. And I guess I'm wondering: How on the ground did that affect your work? That change –

MR. LEMAY: Well, now the only thing that affect – was really not – what – was not that important because I was already integrated in the Nalcor bullpen area, so I was already integrated when the decision came in.

MR. BUDDEN: Okay.

So it made no difference to you because you were already integrated.

MR. LEMAY: Yeah.

MR. BUDDEN: Yeah.

That may be it for my questions but I may just have a moment to look over what I have.

Thank you, Mr. Lemay.

MR. LEMAY: You're welcome, Sir.

THE COMMISSIONER: Edmund Martin.

MR. CONSTANTINE: No questions, Commissioner.

THE COMMISSIONER: Kathy Dunderdale – I don't believe is here.

Former Provincial Government Officials.

MR. J. KING: No questions.

THE COMMISSIONER: Julia Mullaley, Charles Bown – not present.

Robert Thompson.

MR. COFFEY: No questions.

THE COMMISSIONER: Thank you.

Consumer Advocate.

MR. PEDDIGREW: Good morning, Mr. Lemay.

MR. LEMAY: Good morning, Sir.

MR. PEDDIGREW: Good morning.

I won't keep you up there very long, just a couple of questions for you. My name is Chris Peddigrew and I represent the Consumer Advocate here in the Province of Newfoundland.

MR. LEMAY: Okay.

MR. PEDDIGREW: I'd like to take you to – just quickly to Exhibit P-00861.

MR. LEMAY: P-00861.

MR. PEDDIGREW: Which – tab – I'm not sure what tab.

THE COMMISSIONER: Tab 8.

MR. PEDDIGREW: Tab 8 in your binder.

MR. LEMAY: Tab 8.

MR. PEDDIGREW: Yes.

MR. LEMAY: Okay.

MR. PEDDIGREW: So it's the DG3 Capital Cost Estimate –

MR. LEMAY: Yeah.

MR. PEDDIGREW: – of SNC.

MR. LEMAY: Which page?

MR. PEDDIGREW: Page number 79, please.

MR. LEMAY: Okay.

MR. PEDDIGREW: Okay. And down towards the bottom of that page under Cold Weather Concreting.

MR. LEMAY: Yeah.

MR. PEDDIGREW: So it just says: "... costs are included for heating concrete during winter months (generally ½ of each year) as well as a provision for a temporary building enclosure for the Intakes and Powerhouse only at a cost of \$1320/m2 (plus heating and lighting costs)"

I'm just wondering, that \$1,320 per square metre – what information did you have available to you about the structure that was going to be built when you came up with that figure?

MR. LEMAY: Well, to answer that accurately, I didn't know that Astaldi would build such a big winter shelter covering the entire powerhouse, you know. My number that I have put came from my experience in Eastmain-1 where I covered, strictly, the concrete. You know, I stopped the winter shelter at the level of the concrete alternator. So the work that was being done there was not including the steel structure that goes on the top of it.

My numbers that I use is the money that it cost at Eastmain-1, an average between three bids that we had, and the \$10 million that was carried in my estimate was for two group where the three price we received on Eastmain-1 varied between \$12 to \$18 million. So we had an average of \$15 million for three group in Eastmain-1. So here we were covering two group, so here is the \$10 million that I had to do the work.

MR. PEDDIGREW: Okay.

So essentially that \$1,320 figure was based on your experience at Eastmain-1.

MR. LEMAY: Exactly.

MR. PEDDIGREW: Right. It was not based on information that had been given to you about what the structure was going to be at Muskrat Falls.

MR. LEMAY: Not at all.

MR. PEDDIGREW: Okay.

Just in response to some of the questions you were asked earlier today and about – I think your answer was – some questions about congestion, I think, from Mr. Collins. And you had said, when you were talking about the 200,000 hours, well, you better get people working on the night shift. And I guess I just had a question.

So when you are doing an estimate, and if you think about people working on a day shift and people working on a night shift and how much you'll need in the way of camp facilities and beds, do you – I mean, and I don't know how this works. Does somebody who works a night shift sleep in the same bed that somebody who works – you know, somebody works day shift, goes to work; somebody comes into their room, or do you need a brand new room for the person who works the night shift, and do you – and how do you account for that in your estimate?

MR. LEMAY: Well, the estimate that we made for the project was 1,500 men, and they are not sharing the same bed. You know, each one has their own room.

MR. PEDDIGREW: Right, okay, I figured that.

MR. LEMAY: (Inaudible.)

MR. PEDDIGREW: So somebody working on a day shift has their own room, and they go to work; and the person who finishes their night shift, they go to their separate room. That's –

MR. LEMAY: Yeah.

MR. PEDDIGREW: – how you do your estimate.

MR. LEMAY: Yeah.

MR. PEDDIGREW: Okay.

Again, in response to one of the questions you had today, you said that – why you picked 20 per cent in terms of labour unproductivity. And you said that you –

MR. LEMAY: Mm-hmm.

MR. PEDDIGREW: – suspected that the labour pool that you had access to – you might not have your first choice, I guess, because some labourers would be working at Hebron.

MR. LEMAY: Exactly.

MR. PEDDIGREW: Okay. And I'm just wondering, how did your knowledge of Hebron arise? Was that something that you were aware of yourself? Was that something that was brought to your attention by people at Nalcor?

MR. LEMAY: It is – it's something it was in the news that Kiewit had a gravity-base structure similar to the one that I work for Kiewit in 1994 in Hibernia. So I knew that this was a big concrete job that would take a lot of carpenter, you know, from the labour pool.

MR. PEDDIGREW: And so if you had a concern about, I guess, the availability of the calibre of labour and maybe not having access to the best labour, was there also a concern that there might be a shortage of labour given that there was another project ongoing at the same time?

MR. LEMAY: Yeah, well, I don't think they would take all the labour pool in Newfoundland, but, of course, when a new project comes in, you know, it's – the first in is the first one who get the chance of hiring the people. And the way it works, you know, with – it's like you were having the people, the carpenter available, are the one, you know, that are occupied most of the time. And if you're gonna do another job with similar type of work – you know, I mean, forming and pouring concrete – you would be two big contractors – two contractors to pick up the people from the pool, so the pool will be affected.

MR. PEDDIGREW: Right.

I guess I'm just wondering – was that risk or consideration, is that something that was included in your estimate at all? That there might be a labour shortage given that the Hebron Project was happening at the same time?

MR. LEMAY: Yeah, that's why I have put that allowance, you know?

MR. PEDDIGREW: That's – that was part of the 20 per cent?

MR. LEMAY: Yeah, that is the 20 per cent. The 20 per cent is for – on labour productivity and availability –

MR. PEDDIGREW: And availability, okay.

MR. LEMAY: – two words –

MR. PEDDIGREW: Okay.

MR. LEMAY: – the two words were mentioned.

MR. PEDDIGREW: Okay.

Okay, that's it, Mr. Lemay. Thank you.

THE COMMISSIONER: Thank you.

MR. LEMAY: You're welcome, Sir.

THE COMMISSIONER: Okay.

Astaldi Canada Inc.

MR. BURGESS: Good morning, Mr. Lemay.

My name is Paul Burgess, and I'm legal counsel for Astaldi Canada Inc. And I just have a couple of very specific questions that relate and may relate in parts to the questions you were just asked with respect to factoring the productivity.

We've heard evidence earlier during the Inquiry that at the beginning of a megaproject, staffing up for the project is extremely difficult and it – we often see that there's a high turnover of senior staff. First of all, has that been your experience in dealing with megaprojects?

MR. LEMAY: Well, I don't know that we have that much turnover in senior. Which senior are you talking about? Are you talking the general contractor?

MR. BURGESS: No, I'm talking about when you're doing an estimate up –

MR. LEMAY: (Inaudible.)

MR. BURGESS: –when you were doing your estimate up – well, first of all, has it been your experience on other projects – not this specific project but when you are involved in megaprojects have you found, in your experience, that at the beginning of a megaproject when you start, it’s difficult staffing up; there’s a lot of people to hire, there’s expertise you need. And not only is it difficult, but there is a high turnover oftentimes. Is that an experience that you have seen?

MR. LEMAY: Oh, of course.

MR. BURGESS: Okay.

When you are doing your estimate up, is that something that is factored in inherently, or is that part of that 20 per cent you put in, or is there a separate line item for that aspect of it?

MR. LEMAY: There was a separate line item. I made an allowance for the Newfoundland project, for Muskrat Fall, because of that conjunction – congestion of two big project together. We would be probably affected by the fact that the labour pool will be, you know, affected by these two projects and would have to make an allowance to carry about that.

MR. BURGESS: Okay.

And that factoring that you’ve included in your estimate, I take it that is not only at the craft level but at the higher senior management level. Is that correct?

MR. LEMAY: Well that 200 – that 20 per cent includes the direct people and supervision people of the contractor.

MR. BURGESS: Okay.

Thank you, Mr. Lemay. That’s the only questions.

MR. LEMAY: Welcome, Sir.

THE COMMISSIONER: Former Nalcor Board Members.

MS. BUIS: No questions, Commissioner.

THE COMMISSIONER: All right, I don’t believe we have the Trades Council here.

MS. QUINLAN: No questions, Commissioner.

THE COMMISSIONER: Oh, sorry, we do have her there. All right.

Dwight Ball, Siobhan Coady – not here.

Grid Solutions, ANDRITZ, Barnard-Pennecon.

Counsel for SNC-Lavalin.

MS. MURPHY: I have a number of questions, Commissioner.

Are you planning to take a break in the next little while? And, if so, would you prefer to take it now and then have me go ahead, or would you like me to start now?

THE COMMISSIONER: I’d like you to go ahead first.

MS. MURPHY: Okay.

THE COMMISSIONER: Okay?

Actually, I should’ve referred to you as counsel for Mr. Lemay because SNC are not a party.

MR. LEMAY: Excuse me, Mr. LeBlanc.

THE COMMISSIONER: Yes.

MR. LEMAY: Can I ask: can we have a sanitary break?

THE COMMISSIONER: Sure, we can.

So we’ll take our 10 minutes now and we’ll do that.

MR. LEMAY: If it’s not too much to ask.

THE COMMISSIONER: No, no, it’s not too much to ask.

We’ll come back in 10 minutes.

CLERK: All rise.

MR. LEMAY: Thank you, Sir.

Recess

CLERK: All rise.

Please be seated.

THE COMMISSIONER: All right, Ms. Murphy, when you're ready.

MS. MURPHY: Good morning, Commissioner.

THE COMMISSIONER: Good morning.

MS. MURPHY: Good morning, Mr. Lemay.

MR. LEMAY: Good morning, Ms. Murphy.

MS. MURPHY: I have a few questions. Now, if I go too fast – I have a tendency to speak quickly – if you don't understand the question, please let me know. I'll slow down or I'll rephrase.

MR. LEMAY: Okay.

MS. MURPHY: Okay.

So I understand your evidence to be that you have over 40 years' experience in the construction industry and in estimating, correct?

MR. LEMAY: Yes, it is.

MS. MURPHY: Okay, and that experience has, for the most part, been in Canada, correct?

MR. LEMAY: Yes.

MS. MURPHY: Okay.

And much of that work has been for remote sites, yes?

MR. LEMAY: A good portion of it, yes.

MS. MURPHY: Okay.

In fact, I understand that you have worked on over 20 projects and have completed over 200 estimates throughout your career, is that correct?

MR. LEMAY: Yes, even more.

MS. MURPHY: Okay, thank you.

Prior to being the lead estimator on the Muskrat Falls Project, you had just finished producing the estimate for the Eastmain-1 and Eastmain-1-A for Hydro-Québec, is that right?

MR. LEMAY: Yes, exactly.

MS. MURPHY: Okay, and I understand from Mr. Normand Béchard's evidence that Eastmain-1 and Eastmain-1-A projects were completed on time and on budget, correct?

MR. LEMAY: That's what I heard from Mr. Béchard's testimony and I was very pleased to hear that.

MS. MURPHY: Okay, now the Eastmain-1-A project, as I understand it, had winter cover on it, and I think we've just heard some evidence you gave to Mr. Peddigrew on that.

MR. LEMAY: Yeah, on Eastmain-1-A only.

MS. MURPHY: Okay.

I'm gonna take you back to when you joined the Muskrat Falls estimating team. You said earlier you were hired by Jason Kean; I think you corrected that. So you received a call from SNC-Lavalin to come work on the project, is that right?

MR. LEMAY: Yes, I first received a call from SNC to go to Muskrat Falls.

MS. MURPHY: And then Mr. Kean told you that it was he who had approved you joining the project and becoming the lead estimator.

MR. LEMAY: Exactly.

MS. MURPHY: Okay and what was Jason Kean's position?

MR. LEMAY: Jason Kean was the project manager, I believe – deputy manager, I believe, for Nalcor.

MS. MURPHY: Okay, so the job you were hired for at Muskrat Falls was lead estimator.

MR. LEMAY: Yes, as a lead estimator and I was confirmed by Jason Kean when – I already

mentioned earlier, he came to see me, said: Paul, I have approve –

MS. MURPHY: Okay –

MR. LEMAY: – your candidacy – because Nalcor has to approve every people that are hired under the project.

MS. MURPHY: Okay.

So, as I understand it, SNC-Lavalin was contracted in May 2011 to be the EPCM contractor for the Muskrat Falls Project. So I'd like you to turn to tab 1 of your binder, Exhibit 02637.

MR. LEMAY: Tab 1?

MS. MURPHY: Yes, please. If you just –

MR. LEMAY: Yeah.

MS. MURPHY: – if you just scroll down a little, you'll see there under number 1. Item 1 of that document says that "SLI are responsible for preparing a Class 3 ... estimate for Components 1, 3 and 4 under the EPCM Services Agreement, which represent a portion of the overall cost estimate prepared by Nalcor."

So, Mr. Lemay, is that correct? That's what you understood the mandate was?

MR. LEMAY: Yes, it was.

MS. MURPHY: Okay.

So I'd like to go down to page 3 of that document please, Madam Clerk.

MR. LEMAY: Yeah.

MS. MURPHY: When we scroll down, you appear to be writing to Jason Kean. And one of the things you state is that – if you look at the last bullet: "SNC will present at the 16th of June workshop, a preliminary overview planning on the 'Estimate ground rules' to be thoroughly followed by each estimator (action by Paul Lemay)."

So I'd like to scroll up now to Mr. Kean's response in the very last paragraph. It's on page 1, I think. Maybe – top of page 2. I apologize.

MR. LEMAY: Mm-hmm.

MS. MURPHY: No, bottom of page 1.

Now, the part in bold says: "Given the critical nature of the workshop and the need to ensure clarity on key messages, I would like to review all material being presented prior to this session."

So this was dated June 13. My understanding is you worked on the Muskrat Falls Project – you started in May, is that correct?

MR. LEMAY: Yes.

MS. MURPHY: Okay.

So I just want to be clear on what this document is telling me. Is this telling me that you, as the lead estimator for the EPCM contractor who was responsible for preparing the class 3 estimate for components 1, 3 and 4 under the EPCM contract – you were told by Nalcor on June 13, shortly after you started, that you had to provide Nalcor with all material – in bold – being presented at the workshop, including your estimating ground rules, prior to presenting them to your estimating team.

Is that correct?

MR. LEMAY: Yeah, that was the request from Jason.

MS. MURPHY: Okay.

So even though you were lead estimator, you had to get approval from Nalcor on setting the ground rules for your estimate?

MR. LEMAY: Yeah.

MS. MURPHY: Okay. Thank you.

I'd like to go to tab 2, please –

MR. LEMAY: Yeah.

MS. MURPHY: – of your binder. That’s Exhibit P-002638.

MR. LEMAY: Yeah.

MS. MURPHY: Okay.

So we heard some evidence at this Inquiry from Mr. Béchard this week. And he spoke about needing to get the approval of Nalcor to hire any individuals that he wanted to have on that team. And I’d like to look at this Exhibit 02638 in that background.

This is an email from you to Mr. Stan Wynne, as I understand it, copying Mr. Béchard. To me, this seems to be an email showing that Nalcor has cancelled HCSS training. I’ll start with that. I understand it was – HCSS was the software system used for producing the estimate. Is that correct?

MR. LEMAY: Yeah.

MS. MURPHY: Okay.

So were you trying to arrange training for the estimating team on the HCSS software?

MR. LEMAY: Yes, I was trying to do that but it was tough, as you can see.

MS. MURPHY: Okay. So Nalcor didn’t approve the training?

MR. LEMAY: No, not at the first place.

MS. MURPHY: Okay.

So you couldn’t even provide training to your estimating team without first getting approval from Nalcor to do so.

MR. LEMAY: Exactly.

MS. MURPHY: Okay.

In the middle of the document, we see a discussion about Mr. Jim Daubersmith. Who was Jim Daubersmith?

MR. LEMAY: Jim was the concrete estimator that was referred to me by Luc Turcotte, who was the engineer – chief engineer. And we hired

Jim because of his experience in the concrete estimate for a similar project that we were doing. So that’s why we have recommend the candidacy of Jim to Nalcor –

MS. MURPHY: Okay. So when I look at –

MR. LEMAY: – for approval.

MS. MURPHY: – the paragraph that’s up before you right now in the middle, it says: “The cancellation of Jim Daubersmith candidacy and replaced by myself, will automatically have repercussion on my (scheduled work frame as former lead estimator to be put aside), in order to execute the Powerhouse estimate.”

MR. LEMAY: Yeah.

MS. MURPHY: Okay.

So do I see this – from this – that you had put Mr. Daubersmith’s name forward as part of your estimating team and it had somehow not been approved? Is that correct?

MR. LEMAY: Yeah. And that’s why Jason had decide not to hire Jim Daubersmith, but hiring me to do the concrete estimate. So I said: Jason, you cannot do that. I am the lead estimator. I am not estimating. I hire estimator and I coach the estimator. If you want me to do that, you know, we’re going to suffer.

MS. MURPHY: Okay.

So in this email you appear to be asking Mr. Stan Wynne to intervene to make sure that Mr. Daubersmith gets put on the project. But you didn’t –

MR. LEMAY: Exactly.

MS. MURPHY: You weren’t able to put him on there yourself, even though you were the lead estimator.

MR. LEMAY: Yeah, exactly.

MS. MURPHY: Okay.

Speaking of Mr. Daubersmith, much was discussed with Mr. Collins yesterday about the

concrete estimating. And I'm not going to go back over all of that, but am I correct when thinking that there was more to the Muskrat Falls estimate than concrete? Is that a fair statement?

MR. LEMAY: Repeat that, Ms. Murphy.

MS. MURPHY: Were there other things –

MR. LEMAY: What was the question?

MS. MURPHY: – were there other things that you needed to estimate in addition to concrete?

MR. LEMAY: For Jim?

MS. MURPHY: For the Muskrat Falls DG3 estimate?

MR. LEMAY: Well, that's the only estimate that we have the two – well, as the concrete, we had the transmission line; we had a lot of other things to estimate. I am not sure what you are ...

MS. MURPHY: Okay. All right, let's just take a second.

So when you were speaking with Mr. Collins yesterday he gave you tab 14 – which was a very short document, it was about four pages long – of different projects in Canada that had been discussing – there was a discussion about benchmarking for concrete –

MR. LEMAY: Mm-hmm.

MS. MURPHY: – on those projects.

MR. LEMAY: Yeah.

MS. MURPHY: Okay. That was about four –

MR. LEMAY: Yeah, okay.

MS. MURPHY: That was about four sheets of paper. Correct?

MR. LEMAY: Okay.

MS. MURPHY: Okay.

MR. LEMAY: That's okay, yeah.

MS. MURPHY: So my understanding, from speaking with you and from your testimony earlier, is that the estimate that you produced is roughly – and this is a four-inch binder I'm holding up – it's about 54 of these. That's how big it is in terms of paper. Is that correct?

MR. LEMAY: Yes, it is.

MS. MURPHY: Okay. Is it 54? I can't remember if it's 54 or 52, I apologize.

MR. LEMAY: Yeah, 54 binder. Yeah.

MS. MURPHY: Okay, so there's 54 binders of backup material. So it's not just those four pages that you talked about when you were doing benchmarking or backup calculations for your estimate.

MR. LEMAY: No, of course. This was only for the concrete.

MS. MURPHY: Okay.

MR. LEMAY: You know, concrete was in a proportion of about 35 per cent of the whole project. There is another 65 per cent for a substation transmission line, that combine and came to the 54 binder of information that we have all produced during the capital cost estimate.

MS. MURPHY: Okay.

MR. LEMAY: So that's what the – size of the work.

MS. MURPHY: Okay.

So that's already been supplied – all of that information has been supplied to the Commission. Correct?

MR. LEMAY: Yeah.

MS. MURPHY: Okay.

MR. LEMAY: Exactly.

MS. MURPHY: All right.

So you just pulled those four sheets, my understanding was, in response to a request:

Show me an example of benchmarking. Is that correct?

MR. LEMAY: Exactly.

MS. MURPHY: Okay.

MR. LEMAY: Exactly.

MS. MURPHY: So those four sheets are just an example of some of the types of information you would use when you were benchmarking this project.

MR. LEMAY: Exactly.

MS. MURPHY: Okay.

So I want to go back to tab 13, Exhibit P-02644.

MR. LEMAY: Yeah.

MS. MURPHY: When I heard your evidence yesterday, I heard you say that you sat with Jim Daubersmith when he was doing the concrete benchmarking and you had reviewed that benchmarking with the Eastmain-1-A numbers that you knew.

Did I mishear –

MR. LEMAY: Yes.

MS. MURPHY: – that or did I get that right?

MR. LEMAY: Exactly, you know. I was comparing the number that Jim came up with, since I knew myself what was the Eastmain-1 factor. So that's why I had to review with Jim.

MS. MURPHY: Okay.

So it's not fair to say that you benchmarked all of the concrete only to Nipawin?

MR. LEMAY: No. Nipawin, like I said earlier this morning, was strictly an example, a guide that showed the various type of the things that we do when we do an estimate – period. And all the other projects that are there are very different one or the other. So it's only, you know, an example.

MS. MURPHY: Okay.

MR. LEMAY: My real benchmarking, Ms. Murphy, is Eastmain-1. And I came from there and I had all the factors, you know, very fresh in my mind. So that's why I use it and that's why hired – I was hired by Mr. Kean.

MS. MURPHY: Okay, all right.

Thank you for that.

MR. LEMAY: Welcome.

MS. MURPHY: Is it safe for me to assume that – and you can correct me if I'm wrong – is it safe for me to assume that the Eastmain-1-A estimate numbers that you used when you compared them to what Jim Daubersmith was doing must've been accurate or okay if we know that the Eastmain-1-A project came in on or under budget? Is that a fair assumption for me to make?

MR. LEMAY: Yeah, yeah, yeah, it is.

MS. MURPHY: Okay, all right.

Going back to the binders – and I know they're very large – with respect to those binders, it's my understanding that they contain printouts of the estimate and backup. Is that right?

MR. LEMAY: Yes, it is.

MS. MURPHY: Okay.

So, you have no – you don't have that in electronic format. You have no method of electronically searching through your binders for information that's in them anymore. Is that right?

MR. LEMAY: Unfortunately not, yes.

MS. MURPHY: Okay.

MR. LEMAY: Exactly.

MS. MURPHY: Well that's fair, it's eight years later.

When you were on the project and you were operating the estimate, and doing the estimate, you could search through the HCSS software to

find your information as you were going. Is that right?

MR. LEMAY: Yes, while I was in St. John's until 2013, and that period, we had our licence for HCSS valid.

MS. MURPHY: Okay.

So, when you print off items for the estimate in HCSS – those binders – I understood from your testimony yesterday that those subfolders won't necessarily print; it's just the estimate itself. Is that right?

MR. LEMAY: Yes, exactly.

If you want to show different information, you have to recall another sub item output, printout that would show what you want to see. You know, there is various program that you can print out to show the estimate in different level of detail.

MS. MURPHY: Okay.

So, would that explain why you can't find or put your fingers on some documents sometimes?

MR. LEMAY: Exactly.

You know, that's why I said yesterday I could not identify and show the \$200 million – exactly, it's \$300 million allowance that I have made on the project because I cannot have access with the HCSS any more.

MS. MURPHY: Okay.

MR. LEMAY: But I swear to God we put it in there.

MS. MURPHY: Okay.

All right.

And further with respect to your comment about benchmarking from Eastmain -1-A, I'd like to call your attention to tab 4, please, of your binder, Exhibit P-02640.

MR. LEMAY: Yeah.

MS. MURPHY: So, it starts with an email from Jason Kean to Keith Dodson, but below that is an email Keith Dodson to Jason Kean, and further along on page 2 this appears to be an email from you, Mr. Lemay, to Jason Kean, Mark Turpin, Jean-Daniel Tremblay –

MR. LEMAY: Yeah.

MS. MURPHY: – and paragraph – just below the stars there, the third paragraph down: as a benchmark information, at Eastmain-1-A, we had a hundred –

MR. LEMAY: Mm-hmm.

MS. MURPHY: – thousand cubic metres poured in 23 months – and it goes on from there.

MR. LEMAY: Yeah.

MS. MURPHY: Am I correct when I read this, that this is an example of you using Eastmain-1-A in your benchmarking for the concrete at the Muskrat Falls Project?

MR. LEMAY: Exactly, you're right on, that's a good example.

MS. MURPHY: Okay, thank you.

MR. LEMAY: Welcome.

MS. MURPHY: When you're benchmarking, my understanding from piecing things together, is that benchmarking is a way to use other projects to get an idea of what a particular project might cost, is that right?

MR. LEMAY: Yup.

MS. MURPHY: Right.

So, in terms of benchmarking, do you use – do you take all the same factors from one previous project, and cut and paste them into another? Do you –

MR. LEMAY: Never –

MS. MURPHY: – gather bits and pieces, how does that work?

MR. LEMAY: Never.

The benchmarking definition, in my interpretation, is showing that we did not pick up our numbers from the clouds. It's a kind of a guide to show the comparison of what I had used, what I have lived, in Eastmain-1, are comparing with. So, you know, it reassure the people that we did a good job. You know, we did not pick up numbers from the clouds.

MS. MURPHY: Okay.

I had a couple of – just a few more points. You've testified earlier – new topic – you've testified earlier that after the DG3 estimate was delivered to the client, there was a fine-tuning done – I think you called it in the bullpen – and a redistribution of the estimate into contract packages.

This was all done under the supervision of Jason Kean and the Nalcor team, correct?

MR. LEMAY: Exactly.

MS. MURPHY: Okay.

But prior to the delivery of the G – DG3 estimate, Nalcor still had significant input and a degree of control over the SNC portion of the capital cost estimate, didn't they? (Inaudible) –

MR. LEMAY: There were –

MS. MURPHY: Now, perhaps –

MR. LEMAY: – there were –

MS. MURPHY: – give you some examples.

MR. LEMAY: Some example like during the capital cost estimate –

MS. MURPHY: So –

MR. LEMAY: Oh –

MS. MURPHY: – for example.

MR. LEMAY: – sorry.

Sorry, I missed that word. Go ahead –

MS. MURPHY: Okay.

MR. LEMAY: – Ms. Murphy.

MS. MURPHY: So, as an example, the Jim Daubersmith example.

They controlled who worked on your estimating team, correct?

MR. LEMAY: Yes.

MS. MURPHY: All right.

You also gave evidence that there was a meeting in November, approximately November 9 to 12, at a hotel in St. John's Airport for Nalcor people asking questions. Everybody was asking questions about the estimate. There was a number of things written down, and then there were some changes made to the estimate following that meeting. Isn't – is that correct?

MR. LEMAY: Exactly.

MS. MURPHY: All right. So, could I take from that that Nalcor and its members, under Jason Kean or whoever, had influenced that estimate, or had input into it at least?

MR. LEMAY: Well, the purpose of the internal review with Nalcor was exactly to make sure that nothing fall between two chairs. You know, that was the purpose of that meeting, that we had covered everything. But they didn't specifically say, like they said after the capital cost estimate, use that number or not. Most of the intervention was more likely on the logistic of the estimate – what should go here in this package, what should not. It was more like that than money-wise.

MS. MURPHY: Okay. Thank you.

MR. LEMAY: Welcome.

MS. MURPHY: I understand from Mr. Tremblay's evidence – this is a – I'm moving along from that topic – I understand from Mr. Tremblay's evidence that the SNC basis of estimate in June 2012 was never finalized because you or Mr. Tremblay were told that it was going to be incorporated by Nalcor into the Nalcor basis of estimate to make one complete basis of estimate.

Is that your understanding as well, is that your evidence as well?

MR. LEMAY: Yeah, exactly.

MS. MURPHY: Okay. All right.

I had a point to clarify as well. You were asked some questions this morning about the hundred million dollar allowance with respect to the geotechnical study. I understood you to mean that the hundred thousand – that the hundred million dollars was an allowance for conducting the geotechnical study, 'cause you were talking about numbers of boreholes per kilometre.

Am I right, this wasn't to account for the risk or the contingency on the cost of building the transmission line; that was just an allowance that you made for conducting the geotechnical study? Is that correct?

MR. LEMAY: Boring.

MS. MURPHY: Boring.

MR. LEMAY: Boring. Not study, boring.

MS. MURPHY: Okay.

MR. LEMAY: Because just the study itself, Ms. Murphy, does not cost \$100 million.

MS. MURPHY: Okay.

MR. LEMAY: The \$100 million is for the boring for the thousand kilometres, you know, to be done. So that's the allowance I have made.

MS. MURPHY: Okay.

But to be clear, that was not for the risk or the contingency on the cost of building the transmission line?

MR. LEMAY: No.

MS. MURPHY: Okay.

MR. LEMAY: It's strictly an allowance.

MS. MURPHY: All right.

Two final points. Were you ever told that this estimate that you had given was poor quality?

MR. LEMAY: Yeah, I heard that but I heard the contrary as well.

MS. MURPHY: Okay.

Prior to testifying at this Commission of Inquiry, had you been told that the estimate was of poor quality, or had you received other feedback?

MR. LEMAY: No. It was gossiping that I heard.

MS. MURPHY: Okay. So did you have any knowledge – I think you've already testified to this – about commentary given by the AACE on the quality of the estimate?

MR. LEMAY: Yeah, that I was told by Jason Kean that Mr. John Hollmann, who is the chairman of the American Association of Cost Engineer [sp. Engineering], said that he had never seen such a good estimate in years. And he gave us a 4A score on that estimate.

MS. MURPHY: Okay.

Mr. Lemay, there was one last thing I wanted to ask you. You were told prior to participating in this Commission of Inquiry that your assistance and your testimony and any evidence that you give to this Inquiry would not result in any negative repercussions against you personally for testifying before or co-operating with this Inquiry.

Can you tell me the circumstances surrounding how it is you came to leave the Muskrat Falls Project after seven years there estimating?

MR. LEMAY: Yeah, that – I was pretty disappointed that after seven years on the project that, curiously, just a few weeks before my testimony at the Commission, I received an information that my PAA was abruptly cancelled. It was supposed to be terminated at the end of the year and all of a sudden it's at the 14th of September or 21st, I can't recall. They say it's terminated, so it was really shocking for me.

MS. MURPHY: Had you already been interviewed by Grant Thornton and by the Commission of Inquiry at that stage?

MR. LEMAY: Yeah.

MS. MURPHY: Okay.

Thank you very much, Sir. I have no further questions for you.

Thank you, Commissioner.

MR. SIMMONS: Commissioner, if I might –

MR. LEMAY: Thank you.

MR. SIMMONS: – just ask a couple of questions to follow up on that last point.

THE COMMISSIONER: Sure.

Yes, I think it's fair, Mr. Simmons.

MR. SIMMONS: So, Mr. Lemay, this is Dan Simmons again, just following up on that last point. You've just said that the timing of your departure from the project was after you'd been interviewed and before you'd given testimony. Were you given any reason by anyone from Nalcor as to why your contract was ending when it was ended?

MR. LEMAY: None. I didn't get nothing – no reason in particular.

MR. SIMMONS: Were you given any information by anyone in authority at SNC who are communicating this to you, about the reason for the ending of your contract?

MR. LEMAY: My boss was – informed me it was – perplexed himself. He said probably it has to do with the fact that you will be testifying pretty soon, but that's all we can say.

MR. SIMMONS: Okay.

So, aside from the timing of this, do you have any evidence at all or anything you can tell us, that would connect in any way the timing of your departure from your participation in the Inquiry or in the investigation?

MR. LEMAY: I don't know. I don't know. It – maybe it was, maybe it was not, you know, but it was curious. You know, it was too close.

MR. SIMMONS: Okay.

Thank you, Mr. Lemay.

MR. LEMAY: Welcome.

THE COMMISSIONER: Redirect.

MR. COLLINS: Thank you, Commissioner.

Mr. Lemay, I'd like to start –

MR. LEMAY: Yes, Sir.

MR. COLLINS: Mr. Simmons read you a portion of the March 2 interview where – I don't know if you recall. He read you a portion a few minutes ago from page 83?

MR. LEMAY: Which tab?

MR. COLLINS: It's not one of the tabs. Do you remember the March 2 interview where you and Ms. O'Brien and I –?

MR. LEMAY: Yes, I –

MR. COLLINS: Yes. So –

MR. LEMAY: Yeah, yeah, you were there.

MR. COLLINS: Yes.

And Mr. Simmons read a portion of that transcript where – about whether you knew that a high estimate would be likely to result in the project not being sanctioned. I wanted to read to you a little bit from the following pages because I think it puts what you said there in context.

So on page 4 of that transcript, Ms. O'Brien asked you: Are you aware that when decisions are being made about whether to sanction a project or not – you say: Mm-hmm. And she says: One of the things – one of the key things they're looking at is what's the estimate of how – you say: Well – she says: What's – what the project's gonna cost?

And you reply: I assume, you know, that the people who are hiring us – Nalcor in that case – you know, have their own budget and they hoped you know, that it will come within their prediction, their provision. And they're probably saying to themselves, we hope that they're gonna come with a number closer to our budget. But they don't come to tell us that. But I assume they have it. It's like I asked – if I asked you to come to me and say, I'd like to buy a house. What is your budget, you know?

Ms. O'Brien says: Right. And you said: And, okay, I'll try to find something to fit your budget. And then, on page 85 of that transcript, I asked you –

UNIDENTIFIED MALE SPEAKER: Michael.

MS. MURPHY: Mr. Commissioner? Sorry, Mr. Commissioner, I understood that this was covered in direct and it was covered substantially in cross-examination by a number of parties.

THE COMMISSIONER: That doesn't necessarily mean I'm not gonna allow a redirect from Commission counsel, so go ahead, Mr. Collins.

MS. MURPHY: Okay.

MR. COLLINS: I – Mr. Simmons read a portion of this interview –

THE COMMISSIONER: Correct.

MR. COLLINS: – I wanted to make sure that that was put in context.

THE COMMISSIONER: You don't need to explain it to me –

MR. COLLINS: Thank you.

THE COMMISSIONER: – go ahead.

MR. COLLINS: So on the next page, I asked: And so you wouldn't even guess that if the estimate was too high, the project wouldn't be sanctioned? That wouldn't enter your mind? You said: No.

Ms. O'Brien asked: It would never occur to you that if a cost was too high that – and you said: Oh well, I'm not totally, you know, stupid. Of course, if we're gonna end up, you know, three times their budget, of course they will have no project.

So do you remember making those remarks, Mr. Lemay?

MR. LEMAY: Of course I do.

MR. COLLINS: And those remarks are accurate?

MR. LEMAY: Yeah.

MR. COLLINS: That's my first question, thank you.

Mr. Budden asked you about tab 11, which is P – sorry, P-00014, sorry, page 58. That's the first Grant Thornton report, but it's not in our book.

He asked you about a figure that appeared there of 12.6 million labour hours, and you expressed some confusion about where that came from.

MR. LEMAY: Yeah, because in my capital cost estimate, we had 10 million hours. So I don't know what this 12.6 million is coming from, who wrote that. I'd never seen that.

MR. COLLINS: So I thought it might be helpful for us to go to P-01843, which is tab 11.

MR. LEMAY: Just a second.

MR. COLLINS: Absolutely.

MR. LEMAY: Yeah.

MR. COLLINS: And at page 4 of that document –

MR. LEMAY: Mm-hmm.

MR. COLLINS: – you write – these are answers, I believe, that you gave to Grant Thornton. Do you recall that?

MR. LEMAY: Yeah. As I mentioned around 20 per cent of that 2.5 million hour for over a grand

total of 12.5 direct hour was included in the base estimate under a sum of 200 million.

MR. COLLINS: So you just read the passage I was going to point you to. But this passage—

MR. LEMAY: Yeah.

MR. COLLINS: — suggests that you — that 2.5 million hours were added over a grand total of 12.6 million direct hours.

MR. LEMAY: I don't — yeah. I can see that, but I don't recall in watch — I have to remember in which context it has been said. Two point five million over a grand total of 12.6 million direct hours —

MR. COLLINS: I —

MR. LEMAY: Yeah.

MR. COLLINS: I was wondering, Mr. Lemay —

MR. LEMAY: (Inaudible.)

MR. COLLINS: — you say grand total of 12.6 million hours. If you — if that was including the 2.5 million hours that were added, then that would leave the 10 million hours of your base estimate.

MR. LEMAY: Yeah —

MR. COLLINS: Can you —

MR. LEMAY: — you know —

MR. COLLINS: You can't confirm that's what happened?

MR. LEMAY: Yeah. No, you know — again, you know, this talking about Astaldi document, and Astaldi bid came after the capital cost estimate.

MR. COLLINS: Yes.

MR. LEMAY: So maybe during that period, where Nalcor was in charge of the estimate, the picture changed in the total quantities of direct hours, you know, because I never saw the final

number that ended up with the money they put, you know, in the sanction amount.

But before December '11, I have document that proved that amount — the 54 binders — that the amount of 10 million hours, direct hours, that we had, that's what we had, and I can send you any time a copy of that evidence.

MR. COLLINS: This exhibit I was just pointing you to, P-01843, those are your words though.

MR. LEMAY: Yeah, they are my words, but they refer to another period, okay? You have to understand it's a — you know, when we talk about quantities in the time during the bullpen period, and prior to December '11 — 2011. You know, when I talk about 10 million hours, it's strictly the capital cost estimate prior to December 11 — December 2011.

MR. COLLINS: So my next questions — Mr. Peddigrew asked you about the cost of the temporary enclosure, and you actually provided two answers to us about that —

MR. LEMAY: Mm-hmm.

MR. COLLINS: — and I wanted to refer the Commissioner to them in case that's important. So the first is Exhibit P-02729, which is tab 15, on page 1, question (ii), you indicate —

MR. LEMAY: Yeah.

MR. COLLINS: — you give the cost as \$3,343 per square metre, with 6,400 square metres for a total of \$10.7 million.

MR. LEMAY: Yeah. Yeah.

MR. COLLINS: And the second answer is at page, Exhibit P-02730, which is exhibit 16. And your answer is in question 3, also on page 1. And, you give the same answer you gave in your evidence that at Eastmain it cost \$15 million for three turbines, so at Muskrat Falls \$10 million for two.

MR. LEMAY: Yeah. So that's how I came up with the numbers: \$15 million for three, \$10 million for two.

MR. COLLINS: Ms. Murphy asked you about HCSS training and Nalcor's reluctance to pay for HCSS training. And, I was wondering if I could get your comments on – just in that connection – P-00094, which is Nalcor's basis of estimate, and I believe it's tab 10. At page 36 of that document –

MR. LEMAY: Yeah.

MR. COLLINS: – on the first paragraph it says: “In an effort to develop a true database estimate, HCSS Heavy Bid Estimating software version 2010.3 ... was selected as the software to be utilized by the Project team. Unfortunately, the proficiently level of many of the members of the estimating team was limited, while limited time was available to support their competency development.”

Is the limited proficiency of members of the estimating team and the limited time connected to Nalcor's unwillingness to fund training?

MR. LEMAY: I don't know who wrote that, you know, I – I'm not aware about this statement.

MR. COLLINS: Does this statement seem accurate to you?

MR. LEMAY: Not at all.

MR. COLLINS: No, so you believe the team was proficient?

MR. LEMAY: Yes.

MR. COLLINS: Okay.

So Ms. Murphy also asked you about the November meeting – the estimate review. And she tried to suggest examples where Nalcor might have given you directives. I wanted to refer in that connection to P-00861, which is the SNC-Lavalin basis of estimate. And this is a passage we've looked at before; it's tab 8, page 83 – 82.

MR. LEMAY: Yeah.

MR. COLLINS: And it says: “As a result of this review and not withstanding Nalcor's

directive to maintain unchanged the initial estimate assumptions ...”

Do you recall that directive?

MR. LEMAY: Which page?

MR. COLLINS: Eighty-two –

MR. LEMAY: (Inaudible.)

Eighty-two. Which paragraph?

MR. COLLINS: The very top paragraph.

MR. LEMAY: Okay, methodology, yeah.

MR. COLLINS: “... not withstanding Nalcor's directive” –

MR. LEMAY: Okay. “As a result ...”

Yeah.

MR. COLLINS: “... not withstanding Nalcor's directive to maintain unchanged the initial estimate assumptions ...”

Did Nalcor give you a directive to maintain unchanged the initial estimate assumptions?

MR. LEMAY: I'm not familiar with all what they say here; I got to read this, in which context. And you're talking to a – I'm not quite sure where – I'm getting you there. What are you looking for exactly?

MR. COLLINS: Did Nalcor give you a directive to maintain unchanged your initial estimate assumptions?

MR. LEMAY: No, they never tell me that.

MR. COLLINS: So this document's inaccurate?

MR. LEMAY: Not – no, it's not accurate. I know it's – doesn't work.

MR. COLLINS: Very good.

Ms. Murphy also referred to a – comments made by John Hollmann – that Jason Kean had told you about comments made by John Hollmann.

Were you – you said that in response to one of Ms. Murphy’s questions. Did you ever see John Hollmann’s full report?

MR. LEMAY: No.

MR. COLLINS: We talked about – Ms. Murphy also referred you to the size of this estimate, that this is a 54-binder estimate. It – that the Muskrat Falls powerhouse and intake, while they’re huge, they’re only a portion of this job. We’ve gone in deep on one productivity factor, which we felt was the most important. But there are a lot of different productivity factors in that estimate, aren’t there?

MR. LEMAY: Yeah, of course. There is the different type of work building the transmission line, and building, you know, a powerhouse – a concrete powerhouse – it’s two different baby.

MR. COLLINS: And each of those factors requires the same combination of benchmarking and judgment that you brought to bear on the powerhouse and intake labour productivity factor, doesn’t it?

MR. LEMAY: As much as possible, yes.

MR. COLLINS: And you didn’t do a better or a worse job on any of those factors, did you? You did –

MR. LEMAY: I did the same job everywhere.

MR. COLLINS: Thank you.

Could we go to P-02640, which is tab 4?

MR. LEMAY: Tab 1?

MR. COLLINS: Tab 4.

This is another document Ms. Murphy referred to at page 2.

MR. LEMAY: Mm-hmm.

MR. COLLINS: You refer to various – you refer to Eastmain-1-A data. This document –

MR. LEMAY: Yeah.

MR. COLLINS: – this analysis is about the schedule, isn’t it? It’s not about the capital cost estimate.

MR. LEMAY: Yeah, it’s about the scheduling – yeah.

MR. COLLINS: So this is not an example where you used the Eastmain-1-A data to inform the capital cost estimate?

MR. LEMAY: Yeah, well this is kind of a benchmarking, you know? That one was talking about my experience at the Eastmain-1, how long it takes to do a certain portion of the concrete and what we came up with and – versus what we’re facing now. And I think it concludes that the schedule was aggressive and my suggestion was that instead of doing that in 36 months, we should go to a longer period.

MR. COLLINS: That wasn’t part of the capital cost estimating, though. This isn’t an example of Eastmain data being used in the capital cost estimate?

MR. LEMAY: Yes.

MR. COLLINS: It – yes, it isn’t?

MR. LEMAY: It is, yeah.

MR. COLLINS: It is an example –

MR. LEMAY: Yeah (inaudible) because of –

MR. COLLINS: – of Eastmain being – so this is about the capital cost base estimate you prepared? This document is about that.

MR. LEMAY: Exactly.

MR. COLLINS: Isn’t it about the schedule? And isn’t the schedule separate from the capital cost estimate?

MR. LEMAY: Yes, it is separate but it’s just an example.

I was answering a question from Jason. He was asking me my opinion, so I came with a lot of experience what we had been facing and what we had end up with. So if you want to know my opinion, I was not in charge of the schedule but I

had to answer the question of Jason and I said, you know, you better talk to your schedule people. It's going to be tight, that's all.

MR. COLLINS: Mr. Lemay, this is an example of you using your Eastmain-1 experience, but it's not an example –

MR. LEMAY: Exactly.

MR. COLLINS: – it is not an example of you using it to inform the capital cost estimate.

MR. LEMAY: You know, these comment that I – I made it in 2012 during the time that I was reporting to Mr. Kean, you know, in the bullpen. I didn't have control of everything was going on in there and, you know, you can make assumption.

As far as I'm concerned, you know, I expressed my opinion for, again, a true experience, specifically on that production we got in the Eastmain-1 and that's all. I don't know what you're getting at, really.

MR. COLLINS: Very good.

Now, the last area is you – as I understood your comments during your interviews, you – the sheet you gave us, P-02645, which is tab 14, represented the benchmarking analysis you used to develop the productivity factors which we used on the Muskrat –

MR. LEMAY: No, no, no.

MR. COLLINS: No, it isn't. So you're –

MR. LEMAY: No.

MR. COLLINS: – now changing that?

MR. LEMAY: No, no.

No, no, I'm not changing. I told you earlier when you asked me the question I finish my answer with you. I did not use Nipawin, I used Eastmain-1. I show Nipawin as an example, a guide, you know, strictly because each job are very different. It was just to show you, you know, how it works on the other project. But all Muskrat Fall, I used Eastmain-1, always.

MR. COLLINS: So you benchmarked Muskrat Falls not against any of the examples on your benchmarking sheet for you which you have data, but based on a different sheet, a different project for which you didn't have complete data, for which no product performance data is included on your benchmarking sheet. And –

MR. LEMAY: I explained you – I explained you that yesterday. I couldn't get to know the information on Eastmain-1 because it's not finished, but I was there, I knew what it was. So I used on Muskrat Fall what I just been living, which was the real thing to do. But for the benefit of comprehension in a big project like this, there is other project that had similarity, some similarity even there. And that purpose of putting that bid sheet, was just to show you, you know, what is happening somewhere else, but I did not copy-paste Nipawin in 100 years.

MR. COLLINS: When we – when I asked you why you emphasized Nipawin, I put to you that Nipawin – that your – the global general factor you assumed of man-hours per cubic metre –

MR. LEMAY: Il comprend pas non plus.

MR. COLLINS: – was better than any of the projects you – on this sheet except for Nipawin. When I put that to you, you explained that Nipawin they used Kaplan turbines. That was the major factor that led you to choose Nipawin over the others. At Eastmain, what kind of turbines do they use?

MR. LEMAY: Which project?

MR. COLLINS: At Eastmain-1 and Eastmain-1-A they have this – do they have Kaplan turbines?

MR. LEMAY: Kaplan. No, there was Francis.

MR. COLLINS: So the reason that Nipawin stood out, you – at first you referred us to Nipawin, you pointed to the Kaplan turbines and now you say Nipawin is just an explanation for –

MR. LEMAY: Yeah.

MR. COLLINS: – Eastmain, a project which, in fact, doesn't have Kaplan turbines.

MR. LEMAY: There is something that – there is some similar things that could – that are comparable, because in the whole project the powerhouse itself it had the same place. The difference between Kaplan and Francis turbine, you know, it's the height of the –

MR. COLLINS: Yes.

MR. LEMAY: – water coming in. You understood that –

MR. COLLINS: I do.

MR. LEMAY: – and you told me that yesterday. So among the factors that are there, they're not all wrong and they are not all copy-pasting, you know. Some of them are comparable, some are not. So for what I lived through Eastmain, what I used was the best of my knowledge and it happens to be, according to the testimony of Mr. Béchard earlier this week, that it went pretty good. That's all I can say.

MR. COLLINS: When you did this analysis you weren't aware of whether the project had come in on time or on budget?

MR. LEMAY: No.

MR. COLLINS: Those are my questions.

Thank you.

THE COMMISSIONER: All right.

MR. LEMAY: Welcome.

THE COMMISSIONER: Thank you, Mr. Lemay, for your time.

And we'll let you go now. I appreciate you starting early this morning.

MR. SIMMONS: Commissioner.

THE COMMISSIONER: Oh, I'm sorry.

MR. SIMMONS: Oh sorry, Commissioner, if I might.

I had referred to a section, an excerpt from Mr. Lemay's interview on March 2 and Mr. Collins has as well. In order to put both those in the

proper context I'm going to suggest that Commission counsel look at just entering pages 83 to 85 from that transcript, because both of the references come from there and it'll put them both in context.

THE COMMISSIONER: Well, I think there was a reference on page 4, too, wasn't there?

MR. COLLINS: Yes, but 83 to 85 were the page –

THE COMMISSIONER: Right. Well, I want – I would like to see all the references related to that issue so –

MR. COLLINS: Including the August 9 transcript also?

THE COMMISSIONER: No, no – well, do we want – do we need the August 9 one? Is there any dispute about what's in the August 9 one?

MR. SIMMONS: In from – I'm not looking to have that put in.

THE COMMISSIONER: Okay.

MR. SIMMONS: It hadn't been one that I'd referred to or I thought Mr. Collins referred to.

THE COMMISSIONER: Okay.

So the interview of March 2, 2019, we'll take from that interview any references to that point, which I understand are at pages 4, 82 and 83, based upon the questions. Now, I could be wrong but I'll leave it up to – between you, Mr. Collins and Mr. Simmons. You can figure out what it is that needs to be made in exhibit.

MR. COLLINS: I'll send you my suggestions and you can reply.

MR. SIMMONS: We'll work it out, Commissioner.

THE COMMISSIONER: Okay.

All right, so it would be added as an exhibit. We can add that Monday morning, once we figure out what it is.

Again, Mr. Lemay, thank you so much and we'll let you go now.

MR. LEMAY: Right.

THE COMMISSIONER: Thank you.

MR. LEMAY: Welcome, Mr. LeBlanc.

THE COMMISSIONER: Thank you.

All right, so we're finished, I guess, for the day, Mr. Learmonth.

And we start Monday with who?

MR. LEARMONTH: Thomas Marshall.

THE COMMISSIONER: Thomas Marshall and we also have Ms. Dunderdale that day, as well.

MR. LEARMONTH: That's right.

THE COMMISSIONER: Okay.

All right, so we're adjourned 'til 9:30 on Monday.

CLERK: All rise.

This Commission of Inquiry is concluded for the day.