COMMISSION OF INQUIRY
RESPECTING THE MUSKRAT FALLS PROJECT

Transcript | Phase 2 — Volume 56

Commissioner: Honourable Justice Richard LeBlanc

Tuesday — 18 June 2019

CLERK (Mulrooney): All rise.

UNIDENTIFIED FEMALE SPEAKER: Turn it on. Press it.

CLERK: This Commission of Inquiry is now open.

The honourable Justice Richard LeBlanc presiding as Commissioner.

Please be seated.

THE COMMISSIONER: All right.

MS. NAGARAJAH: Okay.

THE COMMISSIONER: (Inaudible.)

MS. NAGARAJAH: Okay.

THE COMMISSIONER: All right. Good morning.

Ms. Nagarajah.

MS. NAGARAJAH: Good morning, Commissioner.

The witness today is Mr. Brendan Paddick. Before he is sworn in, I'd like to enter the following exhibits in: P-04089 to P-04099, P-04109 to P-04114, and P-04192.

THE COMMISSIONER: All right. Those exhibits will be marked as entered.

Mr. Paddick, if you could stand, please. Do you wish to be sworn or affirmed this morning?

MR. PADDICK: I'll swear.

THE COMMISSIONER: Okay.

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

MR. PADDICK: Yup.

CLERK: Please state your name.

MR. PADDICK: Brendan Paddick.

CLERK: Thank you.

THE COMMISSIONER: Okay.

All right, when you're ready.

MS. NAGARAJAH: Good morning, Mr. Paddick.

MR. PADDICK: Morning.

MS. NAGARAJAH: Madam Clerk, can we start with Mr. Paddick's professional profile at P-04114? And that's tab 28 of the binders.

I'll just pull this up for reference, but Mr. Paddick, can you please just give us a brief overview of your professional history and your education?

MR. PADDICK: From an education perspective, I graduated with a Bachelor of Commerce from Memorial University in 1986, followed that up with an MBA from Memorial, 1994. I graduated from the advanced management program at Harvard in 2000.

From a career perspective, I've been in the telecommunication industry pretty well my whole life. Worked for a company that brought cable television to rural Newfoundland called N1 Cable TV, later changed to Regional Cable, but better known as Persona Communications. It's a public company based here in St. John's. Went public in 1998; I was the CEO at the time. We took that company private in 2004.

During that time of running Persona we expanded to the Caribbean, and when we sold the company in 2004 we went – or basically focused all of our efforts on trying to build a telecommunication company in the Caribbean, grew that company, called Columbus Communications, until 2015 when we sold it to Cable and Wireless, which is basically the Bell Canada of the UK.

At the time we were in 40 countries, had built about an 80,000-kilometre fibre optic network that connected every country in the Caribbean, Central America, Latin America, into Columbia, Peru, Ecuador and onwards. We sold that company in 2015 to Liberty Global, which is the world's largest cable television company. I'm a member of the board of directors of that company.

Over my career I've basically been on numerous boards, both private, public and now Crown corporations.

MS. NAGARAJAH: Thank you.

And so you're currently chair of the Nalcor board of directors.

MR. PADDICK: I am.

MS. NAGARAJAH: And you've been chair since December 2016?

MR. PADDICK: Correct.

MS. NAGARAJAH: So I understand that this also includes appointment to subsidiary boards?

MR. PADDICK: Numerous subsidiaries, including Newfoundland and Labrador Hydro, I'm the chair of CF(L)Co, I'm the chair of Nalcor Oil and Gas, I'm on a couple of the Lower Churchill Project subsidiary boards; I believe it's the LIL OpCo, LIL Holdco, and Muskrat Falls Corporation.

So yeah, pretty involved with Nalcor.

MS. NAGARAJAH: Okay, and prior to being on the board, did you know anybody at Nalcor personally?

MR. PADDICK: I had met Stan Marshall several times. In fact, my first work term at Newfoundland Power in 1982, Stan was on that floor, wasn't in the role that most people are – know him for best. Gilbert Bennett I knew from Cable Atlantic days and from NewTel, or Newfoundland Telephone days, so I hadn't seen Gilbert in probably 20 years –

MS. NAGARAJAH: Okay.

MR. PADDICK: – before joining. Robert Hull, who is one of the chief strategy officers at Nalcor, lived with me in residence at Memorial University for a year, so I'm very – I hadn't seen him since 1986. So I would basically say I'm sure there's people there I know, but did not know really anyone that I'm dealing with on a day-to-day basis at Nalcor today.

MS. NAGARAJAH: Okay.

So you applied for the board through the IAC process or the Independent Appointments Commission?

MR. PADDICK: Yeah, I believe I applied sometime around May or June 2016.

MS. NAGARAJAH: Okay.

Can you take us through your experience with the IAC process?

MR. PADDICK: I mean, essentially it was an online process, where you go onto the website at the IAC. I believe you can choose which ABCs you're interesting in serving. I think I only selected Nalcor. I might've said Nalcor and Hydro, I'm not sure. It asks you for your educational background, it ask you for your business background, sort of a – I guess a summary of your accomplishments or how you think that, you know, your skill set could bring something of value to the organization that you're applying for. I can't really recall much more than that but I think it's a pretty typical application process for serving on something like this.

MS. NAGARAJAH: Okay.

And did you receive any communications from anybody in between, you know, making the application and then having a call that you were appointed?

MR. PADDICK: Not a word, I don't think, until Minister Coady called me one Friday afternoon driving up Kenmount Road.

MS. NAGARAJAH: Okay.

So you applied in June 2016 and were appointed in December –

MR. PADDICK: December.

MS. NAGARAJAH: – 2016.

MR. PADDICK: It might have been May or June –

MS. NAGARAJAH: Okay.

MR. PADDICK: – but it was around that time though.

MS. NAGARAJAH: So it was a few months.

MR. PADDICK: It was right around the period where, you know, the current board had resigned and the ensuing turmoil and – with management and the like.

MS. NAGARAJAH: Right.

And you were appointed directly to the chair position?

MR. PADDICK: Yes.

MS. NAGARAJAH: Do you recall when you were applying if you applied for the chair position or if you –

MR. PADDICK: I'm not even sure if you could apply for chair or just as the director. So I don't think I applied for chair.

MS. NAGARAJAH: Okay.

So you had just mentioned the mass, sort of, board resignation and I understand that in – on the – in the interim, the board was filled by civil servants, is that accurate?

MR. PADDICK: Not all civil servants, I think, but a significant – I think the majority of them were. I believe John Green was the interim chair –

MS. NAGARAJAH: Right.

MR. PADDICK: – who still sits on the board today.

MS. NAGARAJAH: Right.

And so how many new board members were appointed along with you?

MR. PADDICK: There were 10 new board members appointed, along with Stan Marshall, to bring the total to 11.

MS. NAGARAJAH: Okay.

And that's what the total is now, is it?

MR. PADDICK: It's still 11 today. We've had one of those board members leave, and was replaced.

MS. NAGARAJAH: Okay.

How long did that replacement take?

MR. PADDICK: Fairly quick, I think, you know, versus other appointments that took place such as Newfoundland and Labrador Hydro's board. Geoff Goodyear replaced Ann Marie Hann and Geoff is a former CEO of Universal Helicopters, which sold to an Indigenous-led investment group. Lived in Labrador for years, so he really brought sort of that Labrador experience to the board that we were lacking at the time. So we actually used the opportunity to fill a void skill set.

MS. NAGARAJAH: Okay, great.

And I understand that it's not a fixed-term appointment to the board.

MR. PADDICK: I thought it was but sort of doing my homework over the last couple of days, I learned that it is basically for no fixed period, so it's open-ended.

MS. NAGARAJAH: Okay.

Can you tell us a little bit about what the orientation process was like once you got appointed?

MR. PADDICK: Yeah, so our orientation – we would've been provided with – typically all of our communications with Nalcor is done by private iPad –

MS. NAGARAJAH: Mm-hmm.

MR. PADDICK: – where we log into a, you know, secure website file-sharing type service. In this case, because we had not met as a board, all of the materials were provided in paper form, and it was, you know, your proverbial brick. It was a very extensive orientation package that included everything from, you know, the acts of government that would, basically, govern the corporation through to a description of each of its operating subsidiaries and then right down through, you know, the résumés of the management team, organizational structure, how the entity operates and then drilling down into the Muskrat Falls Project, each of the relevant components presented by the executive that would be – would have oversight over that particular component.

So, it was drinking through a firehose is how I would describe it, but very thorough, very timely –

MS. NAGARAJAH: Mm-hmm.

MR. PADDICK: – extremely comprehensive. So, certainly – and then management and the executive were, you know, at a – open to our availability if we needed to ask further-up questions.

So, for example, in early January, I spent a couple of days at Nalcor meeting with all the senior team on a one-on-one, just sort of – tell me what you do, what's your background, what's the challenges you're facing, that sort of thing. So it was very open access.

MS. NAGARAJAH: Okay. And I imagine there would have been presentations and things like that at your initial meetings.

MR. PADDICK: Oh, dozens of them.

MS. NAGARAJAH: (Inaudible.)

MR. PADDICK: Yeah.

MS. NAGARAJAH: Okay.

Stan Marshall stated in his interview – and we anticipate he'll give evidence – that – you know, he said, normally it takes a board about two years to get fully up to speed but he said this board got up to speed in about one year. Would that be accurate of your experience?

MR. PADDICK: It's hard to put a thermometer on really. I mean, for some people, the information would have been easier to digest because they would be more familiar with it, just by their area of expertise. So if you're Chris Hickman and you're in the construction industry, there's terms and acronyms that you use every day that others would sort of be flipping to a glossary. Obviously, there's people on the board that have, you know, extreme financial acumen.

MS. NAGARAJAH: Mm-hmm.

MR. PADDICK: So when we're talking about FLG or any of the financings – you know, come to them easier. So, probably a year. In my experience – I've never had an experience, really, where the entire board starts at once. That's pretty unusual. Usually there's succession planning and continuity. So, it's probably a fair statement, but it's tough to put an exact time period on it.

MS. NAGARAJAH: Okay.

So what is your understanding of the board's role?

MR. PADDICK: I mean, overall, the board has a fiduciary obligation to the corporation, and by that I mean it has to act in the best interest of the corporation. A lot of people think boards of directors have to do what's best for shareholders, but that's not quite the case. Hopefully, they're – they align in most cases, but sometimes they don't.

So we're responsible for putting in place a series of processes and systems that ensure and direct how the corporation is managed. The board does not manage the company. The board basically manages how decisions are made, not what decisions are made.

So I think, you know, we would've focused on things like the quality of the financial reporting, assessing the human resources and the management team at the company and what gaps might be needed or what development might be necessary. We would've looked at is there a vision, what are the goals, objectives, strategies and plans that are in place and how should they be pursued.

And then we would've looked at the – basically our role in corporate culture, whether that's through transparency, you know, integrity, trust, all those sort of areas, all that lead to, you know, a better functioning company, one that is credible, timely, transparent, things of that nature.

MS. NAGARAJAH: Okay. And would that sort of include like – is that sort of an oversight role that you're describing?

MR. PADDICK: Yeah, it's an oversight role for sure. I mean, like I said, management runs the company; we oversee management. I think there's – you know, sometimes there's often a myth that a board's role is, you know, to discipline management and crack the whip, and in fact, in my view – and the way that we've tried to run the company or the board since we joined the company is that, you know, you challenge management on their assumptions and certainly around budget time and execution on this project – Muskrat Falls Project for sure.

But, you know, once you all come to a consensus, really your job is to do everything you can to make management successful in executing the plan. So, you know, our sort of relationship with management has not been adversarial. It's –

MS. NAGARAJAH: Mm-hmm.

MR. PADDICK: – been challenging, but, you know, we're – our success is vested in their success.

MS. NAGARAJAH: Right. So as chair what are some of your extra duties or responsibilities?

MR. PADDICK: As chair I guess my primary role is to ensure that all board members have a voice and feel that they've had ample time and that they're in no way restricted – not necessarily reach consensus on every topic, but certainly have an open debate and ensure that all, sort of voices are heard, so to speak.

I would liaison closer than anyone on the board with Stan and perhaps other members of the management team. We basically have adopted a position where Stan speaks for the company and I speak for the board. And it's a – there's a big difference. And most of the government communications would be shared, to be honest with you, because some of it is quite operational in nature, and Stan would handle that, and some of it is more governance related, and typically I would have those type of conversations.

MS. NAGARAJAH: So that's the difference between you speaking for the board and Stan speaking for the company?

MR. PADDICK: Yeah. I think if you were to, you know, tally it up over the last 2½ years, Stan would have certainly had much more communication with government than me, mainly because there's so many departments of government that have an interest in Nalcor. And we've also, in many cases, struck joint committees that involve Nalcor personnel, outside experts and government. So there would be more, you know, daily routine of communicating with government than the board would have.

MS. NAGARAJAH: Okay.

So we've also had previous board members testify that being on the board was a huge time commitment, at times interfering with their other professional lives and their home lives. How are you finding your experience of the board with – in that regard?

MR. PADDICK: Seventy-one meetings in 2017, thought I could get really get that down. I succeeded with 70 meetings –

MS. NAGARAJAH: Yeah.

MR. PADDICK: – in 2018. At the end of this week, I'll have 40, year to date. I should say that in 2017, although I am not a member of any of the committees of the board, I attended virtually every meeting, attended virtually every meeting of subsidiary boards, attended boards – meetings of boards I wasn't on, such as Newfoundland and Labrador Hydro. So, you know, it was a real learning curve, and I thought it was important to, essentially, you know, sit in on all of the committees as well.

MS. NAGARAJAH: Right.

MR. PADDICK: That's just attending board meetings. I mean, obviously there's hours of preparation for each board meeting. The board packages tend to be extremely thorough and detailed. If anything, they probably err on the side of getting into the weeds more than other boards would get, which is something that our board requested because we really wanted to be able to get a good understand of all the topics. So, I mean, these are 11 people – well, absent Stan, but 10 people who have worked literally hundreds of hours, who've attended hundreds of meetings –

MS. NAGARAJAH: Mm-hmm.

MR. PADDICK: – for virtually no pay for the last 2½ years. Kind of unprecedented, I would think.

MS. NAGARAJAH: So the time commitment hasn't changed in many ways (inaudible) –?

MR. PADDICK: I anecdotally was going through – I'm a note-taker, so I was going through my notebooks the other night, and all my notebooks have 140 pages, and the last book, 66 pages were Nalcor.

MS. NAGARAJAH: Okay.

MR. PADDICK: So, that's only anecdotal, but that's – basically, 40 or 50 per cent of all the notes I took last year were on Nalcor. So I think it speaks to just the commitment of the directors, in terms of their time.

MS. NAGARAJAH: And what kind of governance changes have there been since you've been on the board?

MR. PADDICK: Well, we struck four committees for the first time in quite a few years – pretty typical committees. The companies would have Audit Committee; Governance; HR and Compensation; and Safety, Health and Environment and Community. With a couple – a complement of 11 directors, we can actually populate those committees. Committees can go and do their work independently. Put in place more normal reporting where committee chairs report to the board as opposed to every board member participating in every meeting.

We looked at our mandates; made numerous changes to them based on the realities of the day or certain changes that may have occurred over time. Just to give you an example, in the HR committee and governance committee there was areas concerning compensation and recruitment and succession planning for the CEO.

MS. NAGARAJAH: Mm-hmm.

MR. PADDICK: And since the implementation of the IEAC roles, that's actually not within the purview of our board. So we would've amended that – those committee mandates to reflect that. We have been very conscious about being fully transparent in our financial reporting, in our MD&A, being very descriptive. We have held quarterly financial updates that are released on our website and to the public so that people are kept apprised of the performance of Nalcor in real time.

Continue with an annual report; have an annual general meeting; have a whistle-blower program; have a robust internal audit process. So I think all things that a corporation of this size and sort of tenure or life would – we would expect.

MS. NAGARAJAH: Okay.

And you had mentioned earlier that it was unusual for all the board members to come in all at once. And we were talking about the orientation process. And so, in a situation where there's not a fixed-term appointment, have you thought about succession planning in that regard so that situation that doesn't happen again?

MR. PADDICK: Well, with the independent appointment commission process, we really don't have a lot of say in replacing board members – at least the process. Obviously, Cabinet appoints board members.

MS. NAGARAJAH: Mm-hmm.

MR. PADDICK: My understanding is that the IEAC typically if there was one position for example, opened to be filled, might suggest 2, 3, 4, 5, you know, qualified candidates from which Cabinet would choose. My gut is just based on the relationship with the Premier's office and

Natural Resources is that they would include us in the final decision-making.

Ask us what skill sets we're lacking or we need, or what type of person they should be looking for. I don't think that would be an issue. Although, the actual independent appointment process itself is quite – you know, it's rigid.

MS. NAGARAJAH: Mm-hmm.

MR. PADDICK: So very little opportunity to participate in that. Not that that's a negative it's just –

MS. NAGARAJAH: Right.

MR. PADDICK: – it's just the way it works.

MS. NAGARAJAH: Okay.

So former board members have also testified that they felt that there were gaps in expertise on the board.

MR. PADDICK: Right.

MS. NAGARAJAH: Can you speak to the current range of experience on the board?

MR. PADDICK: Very broad. I think pretty balanced. So we would have numerous people who have good financial backgrounds – strong financial backgrounds, whether they were charted accountants or MBA's in finance or had business experience of being in the finance roles or corporate development; numerous members on the board who have great experience in the public sector; former deputy ministers or assistant deputy ministers.

We have two individuals in particular who are very experienced in the oil and gas industry: Mark MacLeod with his 30 some-odd years at Chevron and Brian Maynard at Marathon Oils – president of Marathon Oil, or former president. You know, from that – from sort of working in the public sector, Debbie Molloy is a senior executive human resource professional at Eastern Health. Edna Turpin was the president of Cabot College for years, held other roles with government over the years as well. John Green not only brought great continuity as being the one director who stayed on from the previous board – although it was an interim board –

MS. NAGARAJAH: Yeah.

MR. PADDICK: – has a great understanding of a lot of the constating documents of not only Nalcor and the Energy Act, but also of many of the Muskrat Falls Project documents. And I'm trying to remember who else. Geoff Goodyear, who I spoke about before, good experience with Indigenous Affairs and Labrador issues.

MS. NAGARAJAH: Okay.

MR. PADDICK: And generally, you know, a pretty solid business acumen. Someone like a David Oake, who was an x-wave and Stratos local for years, NewTel, also a former deputy minister. So a very broad range. I'm sure I've missed someone, but just to give you – Chris Hickman I spoke about earlier.

MS. NAGARAJAH: Right.

MR. PADDICK: A large construction background, a solid business person, very well accomplished and, you know, decorated business person.

MS. NAGARAJAH: Okay.

So enough breadth of an experience to ask critical questions.

MR. PADDICK: Yeah, and unfortunately, you know, a CEO who, you know, is very, very well experienced in this industry, so that brought, you know – in some cases Stan was tutoring us.

MS. NAGARAJAH: Right.

MR. PADDICK: Certainly on industry-specific topics.

MS. NAGARAJAH: Okay.

So have you actually – so Stan Marshall is also on the board. Do you ever have in-camera sessions without him?

MR. PADDICK: Oh, at every single board meeting.

MS. NAGARAJAH: Yeah, okay.

MR. PADDICK: I mean part of that best practice as a corporate governance is we would have, at virtually every not only board, but committee meeting an in-camera session without management.

MS. NAGARAJAH: Right.

MR. PADDICK: And then in the case where Stan was actually on the board as well, we would have an in-camera session without Stan.

MS. NAGARAJAH: Okay.

And if there are ever any questions that the board had, would you consider hiring independent experts or advisors?

MR. PADDICK: Oh, we've hired numerous –

MS. NAGARAJAH: Yeah.

MR. PADDICK: – independent experts ranging from, you know, experts in PUB processes, energy experts, legal experts, HR experts. I mean, we've used consultants and advisors quite extensively.

MS. NAGARAJAH: Okay.

And are there any areas that you feel are still lacking on the board?

MR. PADDICK: I actually think we have a pretty good complement right now of skill sets. I don't – maybe attending public inquiries was not one of our strong suits, but otherwise I think we're pretty well equipped.

MS. NAGARAJAH: Okay.

So we've also heard that the Nalcor board is not compensated, and I understand that the current board did try to get compensation at one point?

MR. PADDICK: Yeah, I think from, sort of, reviewing some of the documents, it appears that various boards of Nalcor have been trying to get some form of compensation for quite some time. So, yes, we did ask. Several board members, probably about six months into the process, kind of raised their hand and sort of said, you know, this is a lot more work than I thought it was going to be or I thought I was signing up for; is there really no compensation?

And it was a bit odd that some of our subsidiary corporation directors actually get paid. So if you're on, I think, the Bull Arm board, for example, you get paid – Newfoundland and Labrador Hydro.

MS. NAGARAJAH: Okay.

MR. PADDICK: They're still very modest. I wouldn't want you to think, you know, anybody's retiring on this or whatever, but we made the request, and it was denied.

MS. NAGARAJAH: Okay.

Any idea why it was denied?

MR. PADDICK: Just not the right time to be talking about increasing costs at Nalcor.

MS. NAGARAJAH: Okay.

Do you think that's a barrier to attracting qualified people?

MR. PADDICK: I don't think it was a barrier to attracting this board, 'cause I think we all put up our hands knowing, for the most part, you know, what the compensation was or what the lack of compensation was. My guess is, going forward, it'll be much more challenging.

You know, obviously Nalcor is such a public company, and not public in the traditional sense, but, you know, its business is in the public quite a bit. Processes like this will likely, you know, cause second thoughts from people and especially if it's at no compensation. I mean, it's a lot of time and effort put in for –

MS. NAGARAJAH: Okay.

MR. PADDICK: – the –

MS. NAGARAJAH: So –

MR. PADDICK: – remuneration.

MS. NAGARAJAH: – why was this board willing to go into it without any compensation? What was – what –?

MR. PADDICK: Yeah, it's tough for me to speak to everybody's motivation 'cause I didn't know who the board was until it was announced just like –

MS. NAGARAJAH: Right.

MR. PADDICK: – everybody else, but I'm assuming that most people likely applied within the same time frame that I did, which is this appears to be a company that's in a state – in a pretty difficult state: board resigns en masse, CEO resigns, new CEO is in, you know, an interim board's in place. I'm sure – hey, I think I can help here. This is somewhere I think I can use my expertise or experience over the years for the benefit of the people of the province or the province in general.

MS. NAGARAJAH: Okay.

So I know compensation in these circumstances can't be compared to what you might be getting in the private sector, but can you speak to what you think might be a reasonable amount?

MR. PADDICK: Maybe I'll answer it another way.

MS. NAGARAJAH: Sure.

MR. PADDICK: I mean, this is a billion-dollar-revenue company with $200 million of operating cash flow, 19 – close to $19 billion worth of assets that's operating in power generation, power supply, oil and gas, fabrication, energy marketing and a few other lines of business: businesses that are susceptible to fluctuations in foreign exchange, commodity prices, production levels in oil and gas that are outside of our actual control. Very complex relationship with the shareholder and the public. Managing a lot of risk, working on an unprecedented project that's, you know, been challenging. I don't know what fair compensation would be, but I think I would be safe to say that zero is not fair.

MS. NAGARAJAH: Okay. Thank you.

So how do you perceive the role of the government in relation to both the board and Nalcor?

MR. PADDICK: The role of government?

MS. NAGARAJAH: That's right.

MR. PADDICK: I mean, quite simply, the government is the sole shareholder, is the shareholder. So, I guess, from the board perspective that does put us in somewhat of a unique position and that what we've been concentrated on is, basically, the how decisions are made, not what decisions are made. And then once decisions are made, communicating them with government in a proper order so that we do the analysis. We have management do the work; they make their proposals. We challenge those proposals; decisions are made and they're articulated to or communicated with government.

The unusual part, I guess, from my experience is that in most public company boards is once the board of directors makes the call, that's the call, right? That's – we say go, we go. We say we're not doing it, we don't do it. We say we're going to pay this much, we try and do a deal at this much. In this case the government really has the ability to accept our recommendation, reject our recommendation, ignore our recommendation or implement something else that's some hybrid of the suggestion.

So it's a bit different for me, personally, in that perspective, and certainly several of the board members.

MS. NAGARAJAH: Right. And I guess –

MR. PADDICK: It has not been some cantankerous, you know, aggressive battle, by any means.

MS. NAGARAJAH: Right.

MR. PADDICK: It's just, you know, communicating is a challenge.

MS. NAGARAJAH: Right. And I suppose that difference is there as – by virtue of, you know, Nalcor being a Crown corporation as opposed to being a private corporation.

MR. PADDICK: Yeah, I mean, it's a function of the very nature of the beast.

MS. NAGARAJAH: Right.

MR. PADDICK: I don't think – it's not anybody not doing their job or not communicating, it's just the difficult structure.

MS. NAGARAJAH: Okay.

So how often do you meet with government?

MR. PADDICK: There's no real – I mean, Stan has a set pattern. I know Stan meets with government at least every quarter, officially, so to go over the quarterly results.

We would have numerous ad hoc meetings. So for example: when the government was moving toward spin out of OilCo; we would've met when the government was looking at the PUB reference question; we would've met – so there's no real set pattern. I speak to the minister, I would think, monthly would probably be on average, but sometimes it might be three times in a month and sometimes it might be every second month, and so there's no real set pattern. I would say communication between myself and the minister, which is really my direct line into the government, is extremely open. She's quite easy to get a hold of and I would hope I'm the same and, you know, we speak quite regularly.

MS. NAGARAJAH: Okay, so –

MR. PADDICK: We've also had both the Premier and the minister attend board meetings on occasions –

MS. NAGARAJAH: Okay.

MR. PADDICK: – to sort of hear it from the horse's mouth, so to speak.

MS. NAGARAJAH: Okay, so –

MR. PADDICK: Both ways.

MS. NAGARAJAH: Sorry.

So, other than your, you know, meetings with government, you have other regular communication?

MR. PADDICK: Oh yeah, I mean, we speak on the phone quite often. You've got in your exhibits some letters that have exchanged hands, so there's – it's pretty frequent and robust communication, I would describe it.

MS. NAGARAJAH: Okay. And is that with the purpose of keeping them up to date with what's happening with the company?

MR. PADDICK: Yeah, I would say half of the communication is updates and half of it is specific issue related –

MS. NAGARAJAH: Okay.

MR. PADDICK: – if I was to try to break it down.

MS. NAGARAJAH: So we heard from Cathy Bennett last week about her role, both on the board and subsequently in her role as Finance minister. So she made a couple of statements that I'm just gonna ask you to comment on.

So she said that when she was in Finance, it became clear to her that Finance officials did not have a sense of confidence and comfort in the material and information they had from Nalcor, that there was a communication chasm. She expressed concern that the Finance Department wasn't sure that they had all the information needed from Nalcor.

So have you thought about how communication can better flow between government and Nalcor, and what the board's role in that would be?

MR. PADDICK: Well, I think, you know, Stan is the day-to-day conduit between the corporation and government, mainly because Stan runs the company, and most of these issues are not policy issues, they're operational issues, especially as it relates to the Muskrat Falls Project.

I think, you know, we have worked hard on our quarterly communications, both to government and the public – it's addressed to government but it goes to the public – so that we can be as transparent as we can on where costs are, how the company is operating from a financial perspective. Certainly we communicate with government and the Department of Finance on things like rate mitigation.

And I think over the last couple of years, I alluded to it earlier, that one of the ways that we try to improve communication is the joint – is to form joint committees or committees that are comprised of both government officials and Nalcor officials so that we're actually sitting at the same table, making sure we're on the side – on the same page, bringing in people from other departments. Because I think you suggested earlier, and I think in Ms. Bennett's testimony there was some discussion on it's not just Finance, it's Natural Resources, there's the Premier's office, there's other – you know, Environment, there's a whole bunch of issues that come in or departments that have a, sort of, dog in the race.

So I think we really worked hard on that communication, and I can't really speak to what it was like when Ms. Bennett was the chair but I think, you know, we've come a long way in the last couple of years.

MS. NAGARAJAH: Okay.

She also said that when she was a board member with Nalcor, she said: My expectation and assumption was that the work that was being undertaken at Nalcor was simultaneously being undertaken at government because of the significance of the project. My understanding is that – or my impression was that there was rigorous analysis happening inside the provincial government and that, you know, Finance through Natural Resources was engaged. So then she was surprised to go to government as an elected official and find out that that wasn't the case.

So what are your thoughts on the government's current level of engagement?

MR. PADDICK: That's – again, that's a tough one because I think the time frame that Ms. Bennett is referring to is prior to sanction.

MS. NAGARAJAH: Okay.

MR. PADDICK: When – in my experience, if we were looking at a significant capital project in the telecom industry, the most rigour takes place prior to deciding whether to go or no go, which vendors to use, which route to build, you know, which financing package to avail of, what are the returns, what are the assumptions?

So I really – we're really not in that same mode with government. I mean, we're basically in a position where we've got a project, you know, that's many billions of dollars over budget and we're trying to finish strong. I mean, that's what this board is focused on, is – you know, Stan – I guess the best way to put it is when management comes into the board meetings they tell us where we are, Stan comes in and tells us where we're going, and our job is to try and get there in the most expeditious manner, in the most cost-efficient manner we can. That includes government in that conversation, but it's not at the level of detail and rigour that would've been required to sanction the project.

MS. NAGARAJAH: Okay.

MR. PADDICK: So, I mean, very much – I mean, where we are now is we're literally down to the last strokes on completing this project. We're well over 90 per cent completed, the transmission is a hundred per cent completed for all intents and purposes. We're down to one or – I think there's three contractors or three main contracts left on the entire project. So, you know, that – the rigor is not necessary at this point. It's not that it's not necessary, it's just there's nothing to rigor –

MS. NAGARAJAH: Okay.

MR. PADDICK: – or less to rigor.

MS. NAGARAJAH: So there wouldn't necessarily be any higher level of engagement as described by Ms. Bennett but it's just not necessary at this point?

MR. PADDICK: Well, I just don't think it's like – you know, the – like the gravity of the decision is very different now, right? So we're in a reporting mode and a completion mode as opposed to a sanctioning mode.

So, I mean, from my personal experience, I have government officials that I have met with on various projects who are very well informed and very engaged on these topics. And, if anything, I've been surprised that when, you know, our board has some epiphany moment that: Hey, we should strike a rate mitigation committee, for example, and let's brainstorm on areas of rate mitigation and then report to Stan that we've identified, for example, two individuals at the company who've really impressed us at the board level and could we second them to rate mitigation. Only to find out that those two individuals are on a rate mitigation committee that started six months ago that includes members of government on it.

MS. NAGARAJAH: Okay.

MR. PADDICK: You know, so if anything, I felt kind of the opposite that, you know, whenever we push a topic we've come to realize that Nalcor and government are on it, in many cases.

MS. NAGARAJAH: Okay.

Madam Clerk, can you please pull up P-00722? That's at Tab 12 of the binders – or sorry, 00721. Oh no, sorry, 00722. And can you please scroll to page 4? Oh, page 3, please.

THE COMMISSIONER: Page 3?

MS. NAGARAJAH: Page 3, sorry.

THE COMMISSIONER: Okay.

MS. NAGARAJAH: Okay. So can you scroll down a bit? So the paragraph that begins: The Board discussed the timing. Oh, that's good.

"The Board discussed the timing of them becoming aware of correspondence and meetings involving SNC-Lavalin. Mr. Marshall stated that the matter was operational in nature and was being dealt with, but quickly became an issue that was raised to higher levels of Government."

And then later says: "It was agreed that on a go forward basis when information is provided to the upper levels of Government, the Board of Directors will be informed as well, as quickly as possible."

So it seems from that, that the board took issue with something being brought to government without being run by the board first. How was that issue resolved?

MR. PADDICK: If I recall this situation, essentially this was over water levels, impounding the reservoir, and SNC had written a letter suggesting that the water levels be back up – be brought back up, because if you bring the levels down for a protracted period of time there's a chance of landslides or settling into the reservoir, 'cause you can imagine you flood it and then you'd bring the water back down, there's seepage and things of that issue.

I think what happened there was the board actually learned about the SNC-Lavalin letter in the newspaper, and the next time we met in business arising, several board members raised the issue that they found it awkward to read about something about Nalcor in the newspaper first.

MS. NAGARAJAH: Okay.

MR. PADDICK: Stan basically said look, this was a dynamic process. We were talking about an operational issue of raising or lowering the water levels. Government asked for some support for our position, we gave them the letter. A minister or maybe the Premier, you know, mentioned the letter in a scrum and it ended up in the newspaper. And we simply said look, you know, understand that, it happens, it's – but going forward, we'd appreciate it if any sort of information that is kind of that nature or material, before it go to government at least we see it at the same time, at best, so that we're basically apprised and not caught off guard.

This thing happens every day in almost every large corporation on planet earth, right? So it's – I don't think – I think if you go through every minute for the rest of the meetings it never happened again and it's just a – you know, it was addressed and moved on.

MS. NAGARAJAH: Okay.

So, you sort of have a clear set of – how communication should be done?

MR. PADDICK: Yeah, and I don't think – I mean, I don't even think this was a misunderstanding. This was Stan feeling that, you know, water levels at the reservoir was an operational issue that didn't require board approval or input, and it was basically he's supporting his case, or his management team's case for what they'd like to do. He provides the letter from an expert to support that case and somehow it ends up in the press. I mean, it's not – you know, it's not something that points to a lack of governance or some lack of controls at Nalcor.

MS. NAGARAJAH: Sure.

All right. So in 2017, the premier wrote the board to ask that billing rates for imbedded contractors such as Paul Harrington, Jason Kean, Lance Clarke be released. He wrote on behalf of the board (inaudible) a lot of that information wouldn't be released.

Can you explain the reasoning that was provided?

MR. PADDICK: So, I – it's the part just before (inaudible).

MS. NAGARAJAH: So, you wrote on behalf of the board –

MR. PADDICK: Yeah.

MS. NAGARAJAH: – sort of outlining why that information couldn't be released.

MR. PADDICK: Right.

MS. NAGARAJAH: Can you explain the reasoning there?

MR. PADDICK: Basically, it would have entailed releasing commercially sensitive information. You can imagine that many of the contractors, be they sole proprietors or larger organizations or consulting firms, engineering firms would not want their day rates or their hourly rates published. It's a competitive – for competitive reasons and commercially sensitive reasons. We would've sought legal advice, both internal and external, on this.

So although I penned that letter, I obviously didn't write every word of it.

MS. NAGARAJAH: Mm-hmm.

MR. PADDICK: Nor, probably, did the premier write every word of the letter to me, quoting sections of acts and the like.

But, basically, our understanding of the act as it relates to this type of information, and in many ATIPP requests are similar, is that not only is the information deemed to be commercially sensitive but we are required to withhold it. It's not a choice. So there was a bit of back and forth on that. Obviously, the premier and Nalcor would like to be as transparent as possible but in some cases, you know, your hands are tied behind your back.

MS. NAGARAJAH: Okay.

And you said you sought legal advice. Who did you seek legal advice from?

MR. PADDICK: We would've got both internal and external –

MS. NAGARAJAH: Okay.

MR. PADDICK: – legal advice on the topic.

MS. NAGARAJAH: Okay. And any other input?

MR. PADDICK: Yeah, I think, you know, part of our response was trying to – I think there was a presentation attached to that letter that sort of showed staffing on the Muskrat Falls Project over a period of time. And what it showed was the use of imbedded contractors allowed Nalcor to be much more flexible and nimble with respect to staffing up and staffing down as we moved through various phases of the project.

And although perhaps the total number of people working on the project in the project management team stayed fairly consistent, the skill set of those people change quite dramatically as we move from phase to phase. So had we not used imbedded contractors and used full-time employees, for example, we would've likely been in a situation where we had a much elevated employee numbers, not to mention much higher employee obligations at the end of the project, whether it be in the form of severance or pension or benefits or things of that nature. So by the use of embedded contractors, I mean you can basically – I wouldn't say turn on a dime, but you can react much more quickly. So if we have a protest on the site, for example, you can send home embedded contractors. You can send home your employees too, but you're still paying them, right?

So I think what we were trying to get across was not only (a) that we felt that their day rates or their hourly rates were commercially sensitive, but (b) that the use of embedded contractors was consistent with best practices in the industry. And allowed Nalcor to react more nimbly and to be more efficient in the overall management of the project and to have the right people on the job at the right time working on the right projects, as opposed to having all of these expertise in-house.

MS. NAGARAJAH: Okay.

And who did you consult for that information?

MR. PADDICK: Part of that was my own background. We did lean on people like Chris Hickman who would be very familiar with construction projects and modules and work packs and things of that nature.

And we also did some research as to sort of industry best practices of project management offices as a percentage of project costs so that we could make sure we did, you know, some fact checking and making sure we were in line with sort of those performance standards.

MS. NAGARAJAH: Okay.

So the Premier did write back and said he disagreed with the board characterization. I can pull up that letter, it's at P-04095 and that's tab 18. And the letter says – if you scroll down a little bit more there. That should be good.

He said: "I question the full denial in these circumstances, especially in the context of individuals who incorporate themselves." And he later says: "For instance, was there consideration of releasing information in the aggregate such that, where billing rates were commercially sensitive, the total amount paid to each individual contractor could be released?"

Did you give any consideration to that?

MR. PADDICK: I think we actually did that.

MS. NAGARAJAH: You did do that?

MR. PADDICK: In the end, yeah.

MS. NAGARAJAH: Okay, very good. All right.

Okay, so there was an AFE in June 2017 that raised the capital cost to $10.1 billion. Leading up to that AFE, did you have any indication that their final project cost would be going up?

MR. PADDICK: Yes.

MS. NAGARAJAH: You did. Okay.

MR. PADDICK: From pretty well the first meeting of December 2016.

MS. NAGARAJAH: Okay, so you had some regular updates there.

MR. PADDICK: Well, the first meeting, which was our orientation, was also – we were also faced with the Astaldi extension decision or change order. So I guess our very first baptism by fire was a $270 million change order so, obviously, the $9.1 billion was going up.

I believe that in that period we had board meetings in December, January, February, March, May and June. In each of those meetings we discussed, in detail, the project costs, basically, project by project, line by line. And we had agreed with Stan Marshall in the very first meeting that in his June update we would make an update to the cost. And there was a very strong desire by the board to do it once.

MS. NAGARAJAH: Okay.

MR. PADDICK: So let's not – this can't death by a thousand cuts. Every time we meet, we can't be changing the budget. Let's do our homework, understand it and come up with the firmest number we can in June and stick to it. And that's what we've done.

MS. NAGARAJAH: Okay.

Would you expect to continue receiving, you know, updates on anything that could impact cost schedules –

MR. PADDICK: To this day, you mean?

MS. NAGARAJAH: – post (inaudible) now, to this day?

MR. PADDICK: Oh, God, I mean, in our board meetings now we go through still, literally, sort of, project number by project number where we are, where anticipated to be, can we take – do we need to draw from contingencies, can we return contingencies back into the budget? Like, it's a very granular – it's more granular than most boards would do –

MS. NAGARAJAH: Okay.

MR. PADDICK: – typically, in my experience, but that's – on the project cost, that was something that we were very adamant that we wanted to have full visibility on.

MS. NAGARAJAH: Okay.

MR. PADDICK: So, yeah, we're still doing it.

MS. NAGARAJAH: Okay, because I understand, you know – I'm sorry – costs might fluctuate.

MR. PADDICK: Yeah.

MS. NAGARAJAH: So since you've had, you know, the 10.1 AFE, has there been any indication that it could continue to go up?

MR. PADDICK: No. I think we're confident as of today that we can still operate within that budget envelope.

MS. NAGARAJAH: Okay.

So we've also heard evidence at the Inquiry that earlier in the project, Nalcor management would – on a continuous basis they'd put together what they considered to be their best estimate of the final project costs and they called this the management outlook. It was allowed to exceed the final forecast cost, as approved by the AFE and sometimes, you know, approved to be more accurate than the actual AFEs. Do you know if that practice continues?

MR. PADDICK: I think that's probably describing what I just described. I don't know –

MS. NAGARAJAH: Okay.

MR. PADDICK: – if we used those exact words, but –

MS. NAGARAJAH: Okay.

MR. PADDICK: – essentially, it's going, you know, DG9, DG10, DG11; this is the balance of plant, this is the North Spur. This is the cofferdam removal. This is the transformer installation. This is the draft tube repair. Like, literally, project by project, both on the generation and the power supply side, where we are cost to date, completion to date, estimated budget to conclude. Do we need to use the constituency? Is there contingency?

So I think that's literally the process you're describing.

MS. NAGARAJAH: Okay.

MR. PADDICK: And that has got – that will take place on Thursday this week.

MS. NAGARAJAH: Okay.

So, as far as you know, there's no other number final forecast cost?

MR. PADDICK: In reviewing my board package, between getting ready for this, it appears that we're still solid on 10.1, 12.7 with financing and other.

MS. NAGARAJAH: Okay. So from everything I've heard, it sounds like you feel confident that the board is receiving all of the information that it needs.

MR. PADDICK: Absolutely.

MS. NAGARAJAH: Okay. All right.

So, Dr. Guy Holburn, from the Ivey school of business, testified earlier in the Inquiry to talk a little bit about corporate best practices. So I'm just going to ask a couple of questions arising out of his testimony to see if the board uses any of those practices. So is there any mechanism to evaluate the performance of the board?

MR. PADDICK: Yes.

We – I believe in our – in one of the mandates of the committees, it might be governance, that we – it's stated we should evaluate the board's performance once a year. We didn't do it in 2017, and I might draw back to Stan's sort of comment that he thought the board gelled – took a year to gel or to function properly.

We just thought that in the first year we didn't even know each other. And I mean you can imagine – and I say this, like, sort of tongue-in-cheek – I would – someone would raise their hand and I'd have to peak at the minutes to remember who their – what their name was, right? You've got 11 board members and 20 members of management in the room and you're still trying to learn the organization.

In 2018 we did do a survey –

MS. NAGARAJAH: Mmm.

MR. PADDICK: – on a whole broad range of topics: effectiveness of the board, ability to make your points, quality of the materials, timeliness of the materials, you know, time to meet in camera, amount of time allocated to strategic versus operational items, like, things of this nature. And I think the board felt that every two years was probably a better time frame than almost every year.

MS. NAGARAJAH: Okay.

And what sort of gets done with those evaluations?

MR. PADDICK: So the – they were done by the Governance Committee. It was done on like an anonymous web portal-type third party site. The results were accumulated, complete with verbatim comments from some board members; if, you know, it was felt that one director hogs a lot of the conversation and the chair should put him in his place more often, you know, things of that nature. I'm paraphrasing, of course, because they were more polite to me than that.

But, you know, so that was presented by the chair of the Governance Committee, which is John Green, and discussed at a board meeting.

MS. NAGARAJAH: Okay.

MR. PADDICK: Some follow-up was requested, the committee took it under advisement, all normal sort of governance process.

MS. NAGARAJAH: Okay.

So we have in our package of exhibits here a mandate letter that was received by the board from the minister. (Inaudible.)

Do you recall that letter from 2016?

MR. PADDICK: In all honesty, I think the first time I ever saw that letter was last night.

MS. NAGARAJAH: Okay.

MR. PADDICK: I don't recall ever having received that letter.

MS. NAGARAJAH: Okay.

So it's at – it's P-04111 and it's at tab 27. So, I mean, from this correspondence it's not clear that it was ever sent to the board either. We haven't been able to find a signed copy.

MR. PADDICK: Yeah, I don't recall ever signing it either.

MS. NAGARAJAH: Okay.

MR. PADDICK: And I looked through my files last night and couldn't find any evidence of it.

MS. NAGARAJAH: Okay.

MR. PADDICK: That being said, I think in the vast majority of cases we – the board is operating under the exact direction that this letter would have contained.

MS. NAGARAJAH: Okay.

And I mean you haven't received any similar letters since?

MR. PADDICK: Not to my knowledge, no.

MS. NAGARAJAH: Not to your knowledge, okay.

Has the board had any strategic planning sessions?

MR. PADDICK: As a single board item, we have not.

MS. NAGARAJAH: Okay.

MR. PADDICK: It is something that's on our radar, for sure. But quite frankly, until this project is complete, it's probably something that's gonna have to take a bit of a back seat. And then there's other practical reasons why strategic planning might be difficult at this point, because there is the potential spinout of OilCo, for example. There's been discussion under the (inaudible) reference question of a different operating structure, perhaps in concert with another operator in the province.

So, you know, it's really hard to move forward with the strategic planning session. It's – I always say if you don't know where you're going anywhere will do and right now, I don't quite think we really, on a long, long-term horizon for Nalcor, know where we're going and it's just because we don't really know what the structure and the, sort of, component parts of Nalcor are going to be in the, you know, sort of mid-term.

MS. NAGARAJAH: Okay.

Do you have clear performance expectations of the CEO?

MR. PADDICK: Performance expectations?

MS. NAGARAJAH: Mm-hmm.

MR. PADDICK: I would say yeah, we have expectations. We're in a bit of a unique situation because – typically, 'cause I said before, boards wouldn't all come on at once and there'd be continuity to the board, there'd be skill sets, there'd be people that were there when certain events happened in the past, there'd be industry, you know, experts.

In our case, we were all new and Stan was the industry export – expert and in some sense, was – you know, he was the teacher of the tutorials to us. And not just on the science of, you know, moving electrons but on, you know, this is how the energy industry works, this is how you trade energy. This is how you, you know, generate energy. This is the various currents. You know, quite a learning curve. We do discuss Stan's performance in camera for – after virtually every meeting. The governance committee does the same thing.

I have had conversations with Stan – not necessarily what you would consider a typical performance review, but on issues that the board thought maybe need more attention or, you know, maybe you want to take your foot off the pedal on this one a little or, you know, or maybe you want to push harder on the pedal on this one, sort of thing.

MS. NAGARAJAH: Mm-hmm.

MR. PADDICK: But I can tell you that there is a strong, strong respect for Stan at the board table. Quite frankly, you know, in our view Stan came into a – pretty well a state of chaos. I mean, a large corporation with no board and no CEO is not an easy situation to come into. Was a sponge for the first while, to get up to speed on all the issues, and then very systematically went about recommending to the board how to structure the company, who to lead the various company, where the risks were, address the, you know, rank the risks on the critical path and then knock them off one by one, to basically put the company in the best position for success.

And I think if that's how you measure your CEO – and not only that, at the same time taking a pretty beat up and downtrodden management team and employee base, and, you know, putting a jump back in their step. Which is, you know, a true, you know, sign of a leader, quite frankly. So, I think overall the board would be – they would rank Stan's performance to be exemplary.

MS. NAGARAJAH: Okay. Those are all my questions Commissioner.

THE COMMISSIONER: All right. Thank you very much.

All right. Province of Newfoundland and Labrador.

MR. RALPH: Good morning Mr. Paddick. My name is Peter Ralph and I represent the Government of Newfoundland and Labrador.

MR. PADDICK: Good morning Mr. Ralph.

MR. RALPH: Nice to meet you. So the – this Inquiry is looking at what went wrong with the Muskrat Falls Project. So when you become the chair, do you have to go through a similar process or are you more reliant on Mr. Marshall to kind of, tell you what he thinks is wrong with the project?

MR. PADDICK: Amongst all the many documents that I got when I started were – there was this one file, that I forget what the title of it is, but it basically was all of the documentation leading up to sanction. And that is still an unopened, unread email in my inbox.

MR. RALPH: Yes.

MR. PADDICK: So I think me in particular, and our board, were very focused on understanding where we are and where we got to get. Not necessarily how we got there

MR. RALPH: Yes.

MR. PADDICK: And, you know, one thing that sort of came out of counsel's questioning on, you know, just how much time and effort is put in by the board is – that same time and effort and maybe some factors of it was put in by the previous board and they too were trying to do the best they could with the deck of cards they were dealt in difficult times and so, I think our board was quite respectful of the work that they had done and had no interest whatsoever in going back and, you know, second guessing or playing Monday-morning quarterback. It was very much – how do we move from here to get to a successful finish?

MR. RALPH: Right. So, some of the evidence that we've heard has suggested that the estimated costs of the project at sanction and at financial close – the federal loan guarantee – were low – that they were under-estimated. So would that be an issue for you when you become chair of the board?

MR. PADDICK: Well, as I said before, I mean, we were hyper-focused on making sure that when we're reviewed all the costs that we, essentially, put forward a number to the government and to the public that was our best-informed, best estimate at what it was going to cost in the end of the day.

And that's why we took from December 2016 'til June '17 to painstakingly go through that exercise and not, sort of come out with – as we discovered – perhaps, a cost increase here or there – come out with it. So, if you look at the whole series of changes or costs that went into going from 9.1 billion to 10.1 billion it was, you know, the Astaldi contract, it was the transmission – adjustment to the transmission contract – predominantly with Valard. It was trying to assess and measure the cost of the delays that previous October from the disruption on the site. Changes in the camp structure and making sure we had enough, basically, bedrooms to keep productivity up with the number of workers.

There was changes that we weren't expecting like the conductor issue that had – where we had to have so many hundred kilometres of cable taken down and put back up. There was the draft tube issue. There were numerous lawsuits and potential lawsuits swirling around and then there was the balance of plant contract that hadn't even been put out to tender. So, we didn't know how that was going to come in and I believe that came in at $60 or $70 million over what the budget estimate was.

So we had basically been provided with what I'll call a grocery list of potential changes, and we wanted to dig through each of them so that when we put forward a number we put forward the most – we put forward with, you know, the best of comfort that that was going to be the final change to the project cost.

MR. RALPH: So at the board level or perhaps your discussions with Mr. Marshall, I mean, were – was there a discussion regarding the accuracy of previous estimates?

MR. PADDICK: Not in the detail of the go-forward estimates. I mean, it would've been said: Look, you know, you can basically break this down into two or three buckets of where costs got out of hand. You know, one is Astaldi related, it's probably a third of the overrun. It's a billion-plus bucks. A third is just all actual bids came in far in excess of what the budget estimates were.

So it wasn't a productivity sort of issue, it was, you know, you budgeted $3 billion and the bids came in at 4.5 sort of thing. And then a whole host of, you know, a bucket of others, right, ranging from timing, to weather, to disruption, to – you know, at the site and that sort of thing. So we never got into sort of, you know, job cost bucket, by bucket, by bucket, where did this go wrong sort of thing.

MR. RALPH: Right.

MR. PADDICK: That wasn't the focus at all.

MR. RALPH: So how about the issue of contingency, because it seems to me the budgets that have been in place since Mr. Marshall took over have contained considerably more contingency than was the case beforehand. Was that a discussion at the board level?

MR. PADDICK: Yeah, probably, you know, there's a few people that have the scars of not having enough contingency built in on their backs – or have scars on their backs from not having enough contingency. We not only had the issue of traditional contingency; i.e., here's the bid – here's the budget on this component of the project but we need a contingency in case things go over. We also had the swirling around of potential litigation, you know, changes to the project costs that are based on actual versus forecasted conditions. Like, so there was a lot – like a lot – of grey area or a lot of areas where there was less certainty at this point, right?

So not only litigation that was commenced but, you know, threatened litigation floating around as well and then there was also – based on Stan's and other board members project management experience when delays happened for one contractor it has a trickle-on effect into others –

MR. RALPH: Yes.

MR. PADDICK: – so you got to factor claims of that nature as well.

MR. RALPH: So currently the budget is 10.1, 12.7.

MR. PADDICK: Right.

MR. RALPH: And I understand there are risks that have been quantified that aren't in that budget. For example, the risks associated with the Inquiry, the risks associated with the impoundment of the reservoir –

MR. PADDICK: Correct.

MR. RALPH: – or the IEAC recommendations.

MR. PADDICK: PUB you mean?

MR. RALPH: Pardon?

MR. PADDICK: IAC recommendations?

MR. RALPH: IEAC, the –

MR. PADDICK: Oh, the – okay, the methylmercury committee –

MR. RALPH: – Independent Expert Advisory Committee.

MR. PADDICK: – that's right. They're not in the budget whatsoever.

MR. RALPH: Yeah, and –

MR. PADDICK: I mean, most of those we, quite frankly, deem to be a policy decision.

MR. RALPH: Right.

MR. PADDICK: It's not something where – I think management and Stan are clearly on the record as, you know, we don't – the facts stand on their own with respect to methylmercury. We don't see any significant rise in those levels.

You know, the Upper Churchill reservoir is 60 times the size of this one.

The discussion about scraping the reservoir floor or doing extra clearing, you know, is unprecedented in – from a management perspective. And there's, you know, a lot of questions around what do you do with all of the soil that you scrape, and does that, in fact, create more methylmercury than is sitting on the reservoir floor? So those all come down to, you know, a government policy decision. So –

MR. RALPH: Yeah, but the issue of having those risks quantified and put into your current budget, that was discussed at the board level.

MR. PADDICK: Yeah, I would say, yes, we – I mean, people say what will it cost to scrape – you know, to remove soil from the reservoir and –

MR. RALPH: Yes.

MR. PADDICK: – you know, that's – the answer, you know, perhaps, at first, might be that's the same as asking: How much is a used car?

MR. RALPH: (Inaudible.)

MR. PADDICK: Because is it – you know, is it one foot? Is it one metre? Is it two metres? Where do you put it? You know, who does it? How long do you do it? You know, how long does it take? If it takes a year, that's $365 million of interest that's going to accrue on the debt that's borrowed. Like, you know, so do you come up with a cost? But it was definitely asked.

MR. RALPH: Yes.

I'd like to ask you a few questions now about the relationship between Nalcor and the government, and perhaps we can go to a couple of documents just briefly – I don't need you to get into the weeds of this – but Exhibit 02217.

THE COMMISSIONER: 02217, right, that will be on your screen.

MR. RALPH: This will be by way of example.

MR. PADDICK: Okay.

MR. RALPH: So this is a document that was given – this document is asking that a spreadsheet and a table be placed in a data room for the use of the independent engineer and the Government of Canada at the time of financial close of the federal loan guarantee.

And you wouldn't be familiar with this, I don't think?

MR. PADDICK: No.

MR. RALPH: Perhaps we can go to page 2, and just scroll down a bit.

And so in the right-hand column we see the Current FFC. Would you know what that means, the FFC?

MR. PADDICK: Maybe you can help me.

MR. RALPH: (Inaudible) final forecast cost.

MR. PADDICK: Okay.

MR. RALPH: (Inaudible.)

MR. PADDICK: The final forecast cost.

MR. RALPH: (Inaudible), yeah. You've heard that term, obviously, before?

MR. PADDICK: Yeah, we just call it the budget.

MR. RALPH: Okay.

And so we've got – it's 6.531.

MR. PADDICK: Right.

MR. RALPH: And that, basically, I think was the number that Canada and the independent engineer had and, perhaps, the Government of Newfoundland didn't have that particular number, but that's not a here nor there for my purposes.

And then we can go to Exhibit 02206, and we'll scroll down. So – actually, I'm sorry, 03779.

THE COMMISSIONER: On your screen.

MR. RALPH: So this is information that was provided by Nalcor to their law firm, McInnes Cooper – one of the law firms. And if we could go down to page 3, and we see the top here, there's an FFC of $6.8 billion. So this is a few weeks before financial close and it appears as though – you don't have to comment on this, but it appears as though there's a financial – a final forecast cost which is lower than one that ultimately got to the Government of Canada and the independent engineer.

Now in terms of, I guess, Nalcor management's relationship with government, would you be down in the weeds with regard to these types of issues? So you've got perhaps a discrepancy between what's being reported to government and what's known within Nalcor.

MR. PADDICK: I would have never seen a memo of this nature, nor would the board. And, I mean, this is basically back in 2013, or discussing numbers in 2013. I mean, we really focused on December 16 forward.

MR. RALPH: Yes.

But my point is, I just try to illustrate in terms of your role, would your role be, sort of, general direction to management to the CEO and to the management team in terms of what I want you to give – what you need to give the government in order to conduct oversight?

MR. PADDICK: Yeah, I mean, our overall directive would've been to be completely transparent with the shareholder, period.

MR. RALPH: Yes.

MR. PADDICK: So, not only would we not get into the weeds but we would have basically directed – just as we have with this Inquiry, just as we have with the PUB reference question – to completely co-operate and be open and transparent with the processes.

MR. RALPH: Yes.

And when you speak of the Inquiry, I understand that from hearing the testimony of employees of Nalcor that the Inquiry has been a challenge to the employees of Nalcor. You understand that, and I suspect that's been discussed at the board level.

MR. PADDICK: Absolutely.

MR. RALPH: So it's been very time-consuming to deal with the issues that arise.

MR. PADDICK: I mean, you know, the organizational stress on Nalcor, in my opinion, having run fairly large organizations, I mean, if you just think about what the management team and the employees have been through over the past few years: I mean, you've got the EY oversight process; you've got a Muskrat Falls Oversight Committee; you got a PUB reference question; you've got a Grant Thornton forensic audit; you've got the spin-out of a major subsidiary of (inaudible) Oil and Gas; you have discussions about selling a significant portion of the transmission assets; you've got – then you have this public Inquiry on top of that.

Like, these are the same people answering all the questions and all the – not to mention, you know, Newfoundland and Labrador Hydro GRA with 3,000 requests for information, 326 ATIPP requests over the last three years – like, any other organization literally on planet Earth would collapse. So, you know, the people at this company have done an amazing job keeping up with what's been requested on them, and all that aside they're gonna build a $12-billion, you know, hydro facility that hasn't been – not – they haven't built one in 50 years –

MR. RALPH: Yes.

MR. PADDICK: – right, so that's not their main business, building a megaproject. So, like, the stress on the organization and the people has been extreme and it's showing.

MR. RALPH: So has there been a similar impact on the board –

MR. PADDICK: Not –

MR. RALPH: – with –

MR. PADDICK: – this board.

MR. RALPH: – regard –

MR. PADDICK: Not this board, I don't think, but I – I mean, I'm sure –

MR. RALPH: So the Inquiry hasn't had the same impact on the board of directors?

MR. PADDICK: Well I'm the only one from the board that's had to appear –

MR. RALPH: Mmm.

MR. PADDICK: – so far.

MR. RALPH: Yes.

MR. PADDICK: So – and, you know, so my preparation was a week, all right? So it's a week out of my life.

MR. RALPH: Yes.

MR. PADDICK: This is years out of these people's lives.

MR. RALPH: Right.

MR. PADDICK: You know, not the Inquiry, but all of the other processes that the company's been put through, I mean, it's very, very taxing.

MR. RALPH: Now, I guess, you know, it's fair to say that commercial sensitivity of information that's before the Commission has been a significant issue for Nalcor.

MR. PADDICK: It hasn't been a significant issue for the board. I mean, basically the board took advice on what its obligations were and has basically stuck to that advice. If it's commercially sensitive, it must be withheld. It's not because we wanna withhold it; it's because that's – it's – essentially that's the law, you know, that's –

MR. RALPH: So you take your lead then from Mr. Marshall and other officials from Nalcor in terms of what information should be withheld because it's commercially sensitive?

MR. PADDICK: Well, if you take ATIPPA requests, for example, the process is that Stan can take a position as to whether or not he feels it's, or management feels that it's commercially sensitive, and if the ATIPPA requestor appeals, then it goes to the board –

MR. RALPH: Yes.

MR. PADDICK: – and Stan has to make his case as to why it's deemed to be commercially sensitive, or why we should redact certain portions of it, whatever the case might be. So that – at that point the board does get involved, and it has had several of those over the last couple of years.

MR. RALPH: Right.

But – so is it a similar process in terms of commercially sensitive information that comes to the Commission?

MR. PADDICK: Probably – oh, comes to the Commission, no. I mean –

MR. RALPH: Do you not –

MR. PADDICK: – literally we've –

MR. RALPH: Yeah.

MR. PADDICK: – had no say. I mean, you know, someone asks me for just one letter in the evidence about, you know, you're guiding the Commission. I mean, like, the only direction the board has ever given on the direction – or to management or any other board members on participation in this process is comply fully, be transparent, you know, co-operate.

MR. RALPH: Now these letters aren't before the Commission, but I understand there was correspondence between yourself and Minister Coady regarding a hearing that the Commissioner held on January 22, 2019, and she was asking regarding information about commercially sensitive data. Do you recall that?

MR. PADDICK: No, I mean, the only commercially sensitive one I recall is on the – around the embedded contractor issue and the percentage of the project management team that weren't employees of – like, full-time employees of Nalcor. I don't recall.

MR. RALPH: Fine.

So, again, they're not exhibits before the Commission, but she wrote you asking for information regarding what's potentially commercially sensitive. Do you recall that –

MR. PADDICK: I don't.

MR. RALPH: – in January 2019?

MR. PADDICK: I don't, actually, sorry.

MR. RALPH: That's fine. That's okay.

And then you wrote back to her. You don't recall writing back to her?

MR. PADDICK: I don't. Sorry.

MR. RALPH: Okay.

That letter, if indeed it exists –

MR. PADDICK: Yeah.

MR. RALPH: – would likely have been written by someone else, and you would have reviewed it and –

MR. PADDICK: Yeah.

MR. RALPH: – perhaps signed off on it.

MR. PADDICK: Yeah, that would probably be normal course, yep.

MR. RALPH: Right.

Thank you very much.

MR. PADDICK: Thank you.

THE COMMISSIONER: Thank you.

Concerned Citizens Coalition.

MR. BUDDEN: Morning, Mr. Paddick.

MR. PADDICK: Morning.

MR. BUDDEN: My name is Geoff Budden. I'm the lawyer for a group called the Concerned Citizens Coalition, and they are comprised of individuals who for many years now have been critics and observers of the Muskrat Falls Project. They're primarily former senior civil servants and other concerned citizens.

So, I'd like to start off by looking a little bit about the – I guess, the previous board and some of the issues that were there and explore with you how this board perhaps has addressed some of those shortfalls.

So perhaps, Madam Clerk, we could start with Exhibit 00401.

And this came up a lot in Phase 1. I doubt it very much –

THE COMMISSIONER: This will be on your screen.

MR. PADDICK: Okay. Thank you.

MR. BUDDEN: Okay.

I doubt very much you'll have it in front of you, but what this is – just to contextualize it for you – there was evidence – there has been evidence before this Commission that the previous board – Mr. Clift, in this instance, who was chair of governance, I believe – over a period of a number of years from at least 2008 and continuing well past 2012 wrote the minister of the day or at least the clerk and basically saying, look, we perceive certain deficiencies within our board and we ask government – almost – in some cases, almost implore government – to address them.

And there are other concerns you had as well: it was not a large board; it was an undersized board; they were working very long hours, having to call in from vacation at 4 in the morning to meet quorum and so on. So we heard all that.

But what I want to focus right now – if we can go to page 4, Madam Clerk – is the particular paragraph – yes, Madam Clerk – and perhaps you could – I'll just read it just so we all have it in front of us.

MR. PADDICK: Sure.

MR. BUDDEN: And I know some of this clearly has been addressed, such as the legal, but the stuff that hasn't been addressed or perhaps hasn't been addressed I'm going to focus on.

So this was noted in 2012, I believe, or – but, anyway, it's the concerns that had been expressed before: "The absence of Board level expertise in a number of specialized areas deemed to be 'of significance' to NL Hydro and the Energy Corporation of Newfoundland" – Nalcor. "Notable areas where board level expertise would be beneficial include: large-scale or mega-project project management; specialized hydro generation engineering; large-scale environmental project management; and legal affairs (including Labour Relations), all of which will increase in importance as a number of the large-scale … projects … come to fruition."

So, I guess my question for you is – and, again, I know – we know legal has been addressed. That's been commented on. And from your interview, I have some idea what you're going to say, but I'll just ask you to proceed. What – do you believe that these particular deficiencies noted here: "Large-scale or mega-project project management; specialized hydro generation engineering; large-scale environmental project management." Do you believe those areas of expertise are found on the present board?

MR. PADDICK: Components of them.

MR. BUDDEN: Okay.

MR. PADDICK: Perhaps not, you know, one individual person is an expert at a specific topic, but, you know, we can start with Chris Hickman. He's doing multi-million dollar projects all over Atlantic Canada. They wouldn't be, perhaps, megaprojects, but, you know, best practices in project management are best practices in project management. It's all a question of scale, I guess. Many of those projects would obviously have environmental components to them and engineering components to them.

I've managed projects over my career, you know, that include the word billion in them, a lot of environmental projects. I mean, we built a subsea fibre optic network that went from Florida to Mexico to Belize, Honduras, Nicaragua, Guatemala, all the way down to Colombia and then back up through the eastern Caribbean.

MR. BUDDEN: Sure.

MR. PADDICK: So –

MR. BUDDEN: Yeah.

MR. PADDICK: – as you can imagine all of that had both project management and environmental issues.

On the Hydro board, we've recently significantly increased the expertise in specialized hydro-related qualifications with the addition of several people who come from the industry and have an industry background. So I think, you know, Cabinet has done a good job in helping us bolster that board.

So, you know, maybe, like I said, maybe we don't have – there's not one person whose area of expertise it is. But I think through the combination of the skill sets, we at least know the questions to ask and – and as I also suggested in previous testimony are quite willing to and open to hiring outside help to help fill the gaps, so to speak.

MR. BUDDEN: Okay.

And again, just to preface that, we respect the fact that the present board is a quality board. We're not taking issue with that. However, I guess I'll just return to that. To put it this way: Is there anybody on the board who would've had, in their career, experience, say, in the power generation business, perhaps with Ontario Power Generation, Hydro-Québec, SNC-Lavalin? One of the companies that had built megaprojects, power generation, you know, hydro megaprojects.

MR. PADDICK: No, I think other than Stan, who's on the board, basically a career in power generation and involved with numerous projects. And I think from a megaproject perspective, we had the benefit of having Mark MacLeod as well from Chevron who worked on Hibernia, Hebron and others. As well as, Brian Maynard who actually worked at government I think when Hibernia was being sanctioned.

So I had experience in that regard. So I don't know if that's a yes or a no it's just, sort of, a continuation –

MR. BUDDEN: (Inaudible.)

MR. PADDICK: – onto the skill sets.

MR. BUDDEN: Sure.

Well, I'll ask you a direct question: Do you believe the board – leaving aside the question of cost, leaving aside the difficulty perhaps of identifying the right person, do you think the board's existing strengths would be complemented by the addition of a person or persons who has specific experience with a major megaproject generation, particularly in hydro?

MR. PADDICK: Yes.

MR. BUDDEN: Okay, thank you.

Is that something you've – and it something you've expressed to the minister?

MR. PADDICK: No.

MR. BUDDEN: Okay.

But you are saying here today you believe that would be a strength?

MR. PADDICK: I mean, we would welcome anyone that would have those skill sets. Why wouldn't we? It would only help us do our job.

MR. BUDDEN: Sure. Fair enough.

We've heard from Dr. Holburn earlier in this Inquiry. Dr. Holburn was qualified as an expert in the governance of Crown corporations basically as an expert on the compensation and the function of boards, such as the one you served on. And he had some, I would suggest, the fair interpretation of his evidence, he had some real concerns about the board as it existed prior to your time. Particularly – and the questions I asked him were really focused on the period leading up to sanction.

At that time, it was a very small board. At one point, he said he felt sorry for the board because there were so few people trying to cover off so much. I asked him at one point: Have you, in your studies, in your practice, in your research, come across a board of a major Crown corporation with so few board members receiving so little compensation for so many hours' work? And he said he had not – I have not.

And where we sort of finally ended, and this sort of is a long-winded way of getting to my question, when I asked him what concerns he had about, you know, taking all this together about this board as it was found at that time, he said, quote – and this is from page 71 of his evidence – "I think this would lead to some questions as to the ability of a board to effectively challenge management, and act in a capacity of providing informed expert oversight and providing that forum for sober second thought."

So I just read – I'll just read the key part again, and it was implicit now to think that he thought a board should be able to "challenge management, and act in a capacity of providing informed expert oversight and providing that forum for sober second thought."

Do you think the board, on which you presently chair which is – as it is presently constituted, has the ability to do those things: to challenge management, to provide informed expert oversight and provide that forum for sober second thought?

MR. PADDICK: So I would say not only do we have the skill sets to do that, but we do do that. And to be honest with you, I would have – I'd be shocked if the previous board didn't do that. I mean, I know several members from the previous board and these are very skilled, talented people.

And I said earlier in my testimony that, you know, I believe part of the board's job was to challenge management and to, you know, really break it down into the assumptions and understand what decisions are being made and why they're being made. But then once they're made, I think I used the term we got to put on the jersey and –

MR. BUDDEN: Mm-hmm.

MR. PADDICK: – help them execute against that and be successful. So it's – you know, it's a fine line between challenging – the board challenging management and supporting management and certainly my philosophy has always been it's far more important for management – or for the board to help management succeed than it is to just basically, you know, be the devil's advocate on every single issue –

MR. BUDDEN: Oh yeah, but –

MR. PADDICK: – sort of thing.

MR. BUDDEN: – you do recognize then – and you come here as a person who clearly has had a great success in life, who's been on both sides of the management governance equation. And I think it goes without saying, I would suggest, that there is such a thing as constructive criticism.

MR. PADDICK: Oh, absolutely. I mean, I think there was probably a perception that the new board was going to come in and basically limb the place of everybody that worked on the project. And, you know, if there's been one take-away, one surprise epiphany take-away from my involvement at Nalcor it has been the quality of the people. And it is a very difficult place to work. I mean we hear stories of employees being under great stress, we hear stories of kids being bullied at school because their parents work at Nalcor – that's just wrong.

You know, you hear stories of everybody thinks they're nine-to-five, you know, some stereotypical punch the clock and leave, and nothing could be further from the truth. And I made a suggestion earlier that, you know, when sometimes the board has this idea of a track, an avenue we should go down, or a track we should take, we inevitably find out that Nalcor management or executive have already thought of that, and have great work done on it.

And a, you know, it's been a real eye-opener as to the dedication and the professionalism and the preparedness of Nalcor staff, and they got a very bad rap. I mean, when I went to University and work terms came up, I mean the prime co-op work term was at Newfoundland and Labrador Hydro or Newfoundland Power; and sadly that's not the case today.

MR. BUDDEN: Mm-hmm.

MR. PADDICK: Kids don't want to go work at Nalcor. And it's part of the board's job, to work with management and the shareholder to change that. Like, we've got to change that.

MR. BUDDEN: Okay. I hear what you're saying but, of course, we are here at a public inquiry because Nalcor, I would suggest, represented to the public they could build this thing for a certain price, and a certain schedule, and manifestly failed in that.

We've heard all kinds of evidence that, I mean, again the Commissioner will write his report but we have heard evidence here that does not put Nalcor in a particularly good light, with regard to its dealings with government, its dealing with contractors, and so forth. So, I hear what you're saying; nobody should be bullied, certainly, nobody's kids should be bullied –

MR. PADDICK: Yup.

MR. BUDDEN: – but it's also true, isn't it, that that's the reality this board also has to respond to – the thing, this project, we are at a public inquiry – we're not at a public inquiry because this was such an impressive delivery.

MR. PADDICK: Yup. No, fair enough, I mean I read that report last night, when it was added to the evidence and quite –

MR. BUDDEN: Which report? Which report?

MR. PADDICK: – Mr. Holman's? Or –?

MR. BUDDEN: Holburn's.

MR. PADDICK: Mr. Holburn's. Yeah.

MR. BUDDEN: Yup.

MR. PADDICK: And I was actually quite pleased with his characterization of how a board should operate, you know, what's its obligations were, what it's fiduciary responsibilities were, because I felt at least in my experience with the current Nalcor Board, that we delivered on the vast majority of those, other than certain aspects where it's out of our hand, such as selection of the CEO, or compensation of the CEO, or compensation of the board, for that matter. But in terms of, you know, committee structure, timing of information, reporting, transparency, fairness – all the other characteristics that he had included in his report – I really felt that we were in very good shape from a corporate governance perspective.

MR. BUDDEN: Okay, I'm going to return to a little bit of that, but just on compensation since you just mentioned it, the – a further exchange I had with Dr. Holburn, he said: Ideally a board would be – and, again, I'm quoting here from page 70 into 71. And I'm quoting somewhat, grabbing bits here and there.

He said, "ideally, a board would be comprised of individuals with the expertise and capabilities that are needed by the corporation, given its project portfolio or particular needs at that point in time." And I say: In your opinion, and he – we talk a little more. Then I say: "In your opinion, would the difficulty in filling these specialized niches be exacerbated by the very low compensation scheme? Low as in zero, I think, which we all agree is low.

And he said that, "I think there are going to be a number of factors that are gonna make this challenging.

"It's a relatively small province; compensation is certainly going to be one factor that will build into that as well, and the expectations of the workload."

So I guess – and I've read your interview and this comes up a bit in the interview, so I'll ask you here, you know, under oath in this public Inquiry. Some of the parties here will be making submissions to the Commissioner that one of his recommendations should be that there should be appropriate compensation for board members, in line with what similar boards elsewhere in Canada pay, so that some of these initiatives can be filled and so that we're not relying on, I guess, the patriotism of people to step forward, that they also have some fair compensation, like we all hope to be fairly compensated. Is that a recommendation that you personally would welcome?

MR. PADDICK: I think based on the fact that that is something that I've asked for, I could do nothing except agree with you on that.

MR. BUDDEN: Thank you.

You made a comment there in my notes and something like, Stan – in your earlier evidence, I wrote it own. It's something like: Stan deals with government on some issues, I deal with government on the other issues. And I – it's in my notes over there, but do you remember – you remember saying that, I presume?

MR. PADDICK: Yeah.

MR. BUDDEN: I'd like to explore that a tiny bit more because you, after all, are the – you're the chair of the board, he is not an independent on the board, he's the CEO and properly is on the board. But I guess if one were to look at those roles, who would you see as the primary liaison with government, you or him?

MR. PADDICK: Stan.

MR. BUDDEN: Stan, okay. So you do not see your role as being the primary one, you see his.

MR. PADDICK: Well, I guess my role would be – most of my discussions would be around policy, as opposed to Stan is – a lot of his roles are around the operation of the company and the progress made on Muskrat Falls and all the related entities. So his are, you know – yes, he's got some strategy. Some – obviously, all operations has strategy behind it, but mostly it's operational in nature. Stan runs the company and I basically run the board.

And – so my conversations – although many of the meetings, I'm in it with Stan. If Stan – if we're getting an update on the project, for example, Stan gives the update. I don't.

MR. BUDDEN: Okay.

MR. PADDICK: Many of the questions that I might get asked are ones that I've been asked here this morning. You know, how do you – you know, how are the – how's the board functioning? Do you feel you have the right resources? Things of that nature, right?

So, it's – I mean, it's segregation of duties, I guess, but Stan would have far more day-to-day communications with government and different departments of government. And some of them the function of the various processes that are going on with the company than I or the board would have.

MR. BUDDEN: Okay and you –

MR. PADDICK: You know, quite frankly, Stan is the spokesperson for the company and I'm the spokesperson for the board.

MR. BUDDEN: Yeah and explain that distinction a little more to me because I don't entirely get it.

MR. PADDICK: Well, you know, if you go to the AGM, for example – which is, you know, sort of the annual occasion to address all stakeholders – I conduct the process of the meeting, whether that be, you know – if it was in the normal public company, that would usually include election of directors, appointment of the auditors, approval perhaps of some amendments to the articles, things of that nature.

Whereas Stan presents the update on the company from the financial perspective, from a manpower perspective, from a project update perspective and so on. I don't do that and that's pretty akin to the relationship between the board, Stan and government as well.

MR. BUDDEN: Okay.

So that's a good place to – leads to my next question. Concerns have been expressed by one of my client, among others, that the process of getting information out of Nalcor is a complex one; there's the ATIPPA process, there's writing directly. Sometimes when a response is received directly, the response isn't otherwise posted with Nalcor or something like that.

So what that suggests to me is that clearly there are policies around how Nalcor communicates with the public and there are operational aspects on how that is done. Would the policy around communication – would that be something that is a board issue, in your opinion?

MR. PADDICK: Yes and the policy of the board is that Stan is the spokesperson for the company.

MR. BUDDEN: Okay, but if an individual had concerns about how Nalcor communicates to the public –

MR. PADDICK: Yeah.

MR. BUDDEN: – is that a concern that should be – and that person were to stand up at the annual meeting and say, look, I have this concern, is that a question that you would – you feel you would appropriately take?

MR. PADDICK: Yeah. Yeah, I would. I think if you were at last – were you at the AGM this year?

MR. BUDDEN: I was not.

MR. PADDICK: No.

I mean, there were questions from the floor from concerned citizens that I fielded because I felt they were in the governance area.

MR. BUDDEN: Okay.

So, a policy – sorry, I interrupted you. I apologize.

MR. PADDICK: No, no. So, I mean, if one of your clients writes me, I write them back.

MR. BUDDEN: Okay.

MR. PADDICK: Like, I don't say, Stan, write them back and let me sign. I write –

MR. BUDDEN: Sure.

MR. PADDICK: – them back, so …

MR. BUDDEN: So if one of my clients says, I have a concern about the way in which Nalcor communicates to the public, you're the guy they should be writing.

MR. PADDICK: Yeah, I would think so. Yeah.

MR. BUDDEN: Okay, fair enough. It's – that's a good answer.

All –

MR. PADDICK: I got a feeling I'm gonna have something in my inbox.

MR. BUDDEN: Quite possible. Possibly within the hour.

The – and this sort of also leads into, like, this is the kind of question – I guess I'm wondering, is this a question for you or is it for Stan. And the question is, the revenue requirements changed quite dramatically between 2017 and 2018 – I won't haul up exhibits here, but if we were to go to P-00152, which is the 2017 numbers, the revenue requirements were $808 million. The following year they're $726 million, which is a decline of, you know, $80-odd million, 10 per cent.

Is that the kind of question – would you be able to answer that, or is that one best directed at Stan or Gilbert?

MR. PADDICK: Definitely best directed by Stan but I probably could answer it.

MR. BUDDEN: Well, why don't you just –

MR. PADDICK: I'm not sure what the question is, though. So, it's –

MR. BUDDEN: Okay, well –

MR. PADDICK: – a revenue decline from one year to the other.

MR. BUDDEN: Revenue requirements decline from one year to the other.

MR. PADDICK: Revenue – I'm not sure I even get the concept. What's the revenue requirements?

MR. BUDDEN: Okay. Well, the –

MR. PADDICK: Maybe it should be a better question for Stan.

MR. BUDDEN: Okay. Well, we'll save that one for Stan.

MR. PADDICK: Yeah.

MR. BUDDEN: Yeah.

I'd like to move along here; I realize there are other lawyers.

There's the compensation scheme that existed that has evolved, obviously, as compensation schemes do, particularly around bonuses and incentives.

MR. PADDICK: Yeah.

MR. BUDDEN: What changes has the new board implemented with respect to those? Because, again, there was controversy, as we all know.

MR. PADDICK: Yeah.

We made pretty extensive changes to the compensation plan, to be honest with you. The first thing we did was we hired Korn Ferry Hay to complete a compensation survey for us and compare Nalcor executive – I think we went down three layers within the organization – what you'd call the management salaries to the industry and to other benchmarks.

And then we looked at the resident components. Obviously, in most companies, compensation would be comprised of short term, which would be base salary – or base salary, short term which would be annual bonus and some form of long-term incentive program. Public companies, it might be stock options, something like that.

And I think to generalize the findings, it was basically that base salaries, for the most part, were in line with peers but that short-term incentive and long-term – short-term incentive was behind and long-term incentive was woefully or non-existently behind. So that when you put together total compensation, we were well behind the benchmarks.

And those benchmarks included all industrials, which would include oil and gas companies. So you can imagine we'd be behind that when you put that into the pool. As well as just all utilities, we were also well behind in that area. And that would include Newfoundland Power, Fortis, Emera, Nova Scotia Power, NB Power, et cetera.

So, we literally just took those findings under advisement and did not adjust base salaries and did not implement a long-term incentive program, but we looked quite carefully at the short-term incentive program which most people call your annual bonus. And if I – maybe I – just so I can – rather than go through all the layers of the organization, I'll use the most senior team.

The most senior team has a bonus plan that could see them earn up to 20 per cent of their base salary as a bonus. In my experience, that's super low for the senior team. I mean, some organizations target bonuses would easily be one times their salary. The CEO sometimes, another board I'm on, that his target bonus is five times his salary. So just 20 per cent sounds like a pretty decent bonus, but in the context of other large corporations it's very modest.

MR. BUDDEN: Sure.

MR. PADDICK: But the bigger thing of concern was that the band at this company is – in other words, 20 per cent is your target but what's the maximum bonus you can earn? At Nalcor it's 22 per cent. So you can earn 10 per cent more, but 10 per cent of 20 is 2, right? So, you're talking a very, very narrow band that you even have to work with here in terms of compensation.

So then we looked at the components of that compensation. And prior to us becoming a board, that 20 per cent was – could be earned 70 per cent based on your personal performance and 30 per cent based on corporate performance. So we thought that was wrong, an improper allocation. So we flipped it on its head and made it 30 per cent personal – you know, I showed up to work, I did a good job. I'm diligent, you know –

MR. BUDDEN: Based, presumably –

MR. PADDICK: Yeah, I'm –

MR. BUDDEN: – on –

MR. PADDICK: – a good manager –

MR. BUDDEN: – evaluations, yeah.

MR. PADDICK: – or that kind of thing. And then 70 per cent on the performance of Nalcor. And previously that component, based on corporate performance, was largely based on things like net income, safety stats, environmental performance and things of that nature. And we came to the conclusion that, yes, those are all very important things to measure, but what's the most important thing right now going on at Nalcor? Well, it's the time – the cost and schedule of power generation and power supply. It's availability and reliability of Newfoundland and Labrador Hydro based on DarkNL and other issues, and it's financial performance.

And then we had a bunch of – and we weighted them within that basket of the 70 per cent corporate. And, for example, we put 15 per cent on both time and schedule for both generation and power supply. So – and then we put 15 per cent for reliability of Newfoundland Power – or Newfoundland Hydro.

And then there were a number of things like diversity, obviously, safety and a whole bunch of other ones, but they were weighted less. Not because they were less important in the big scheme of things over, say, 20 years, but right now, what's the two most important things –

MR. BUDDEN: Mmm.

MR. PADDICK: – going on at Nalcor? And we think we – that was our effort to also change the corporate culture. This is what's important, finishing this project on time and on budget, and if you don't do it, it's going to impact you. And we think that we have done that the last couple of years, because we came to the conclusion that you could literally be over budget, say, by a billion dollars on Muskrat Falls in 2016 and literally not impact your performance pay, right?

MR. BUDDEN: Yes.

MR. PADDICK: That's wrong. That's wrong.

MR. BUDDEN: Yeah.

MR. PADDICK: So we corrected it.

MR. BUDDEN: Okay.

MR. PADDICK: And I'm not saying it's wrong because some previous board missed it, it's just – it was, basically, that's the way things were done and, perhaps, because there's not a whole lot of (inaudible) to work with, 20 to 22 per cent, you know, tweaking one, waiting for 5 per cent to 15 ends up being, like, 0.3 of a per cent of someone's salary. But we thought it was important to make this statement as to what's important right now and that's, basically, cost and schedule for the transmission and power generation and the reliability of Newfoundland –

MR. BUDDEN: Sure.

MR. PADDICK: – Hydro.

MR. BUDDEN: Yeah and I guess the final question on that: Are the evaluations done internally or externally?

MR. PADDICK: They are done – the evaluation is actually a 360 model, which basically means the employee rates their performance; they are direct reports. Report – we rate their performance and their direct report up the line reports. So your manager evaluates you, you evaluate yourself and your colleagues or –

MR. BUDDEN: Sure, but –

MR. PADDICK: – and it's an ongoing process all year.

MR. BUDDEN: I mis-phrased that question. What I was thinking was more the collective element of it, the performance bonus based on Nalcor's performance. Is that evaluated internally or is it external to Nalcor?

MR. PADDICK: No, it's done by the board; the setting –

MR. BUDDEN: Okay.

MR. PADDICK: – of all those parameters, yeah.

MR. BUDDEN: All right. So the board – a committee of the board –

MR. PADDICK: Yes.

MR. BUDDEN: – actually does it.

MR. PADDICK: Right.

MR. BUDDEN: Okay.

MR. PADDICK: And recommends up to the board then.

MR. BUDDEN: Sure. Who chairs that committee?

MR. PADDICK: Mark MacLeod.

MR. BUDDEN: Mark MacLeod.

MR. PADDICK: Right.

MR. BUDDEN: And, again, that committee is the …?

MR. PADDICK: The HR and Compensation Committee.

MR. BUDDEN: Okay, fair enough.

MR. PADDICK: It used to be just called the Compensation Committee but it –

MR. BUDDEN: Sure.

MR. PADDICK: – it looks at far more than just compensation.

MR. BUDDEN: Okay.

Just another question, I guess, a pure governance question. The – you know, Mr. Marshall, obviously, has a background in Fortis. There are now sort of general discussions as, you know, has been in the news lately about the future of power generation and distribution in Newfoundland and how all of that will play out in the years ahead.

What has the board done – or what has been done, I should say, to protect Mr. Marshall from allegations that because of his previous life and ongoing, presuming – presumably ongoing relationship as a shareholder with Fortis, to protect him from allegations of conflict of interest?

MR. PADDICK: Yeah. Well, I think Mr. Marshall has protected himself the most and has made it quite clear to the board and to government that should there be any discussion with Fortis or a related entity about sharing of assets, the sale of assets, the transfer of assets, he's not going to recuse himself from the conversation, he's going to resign.

MR. BUDDEN: Okay, so that's an absolute –

MR. PADDICK: Absolute, line in the sand, don't go there. I'm not going to have any part of it. Sort of very firm –

MR. BUDDEN: Okay.

MR. PADDICK: – reaction. And the board appreciated that and took that under advisement and discussed it with the government, as well as, you know, the topic came up and went away and came up again or – over –

MR. BUDDEN: Okay.

MR. PADDICK: – the course of time.

MR. BUDDEN: So that's where that is. Everybody is in agreement that should those discussions commence, Mr. Marshall will –

MR. PADDICK: Yeah, I'm sure if you ask him next week, he will be very adamant in –

MR. BUDDEN: Okay.

MR. PADDICK: – what his reply would be.

MR. BUDDEN: Very good.

Moving through – don't have a whole lot more but I do have a handful more questions. The – as you, I believe, would be aware, there is a Dr. Bernander, a couple of years ago, raised some concerns. He was a Swedish academic who raised some concerns about the stability of the North Spur. Nalcor, in turn, commissioned a peer review comprised of – a peer panel comprised of other geoscientists who responded to that.

Dr. Bernander and some of his colleagues in Sweden – who had not been – although they were the subject of the peer review, were not participants in it or really did not engage directly with the peer review – in turn, replied to the peer review report that has been, for almost a year now, filed with this Commission.

I guess my question is: To what degree has the board engaged with that process of being comfortable that the stability of the North Spur is not going to be a concern going forward and specifically how the peer review and the other experts have been appropriately considered?

MR. PADDICK: Yeah, so we have not communicated directly with any external parties on this. We would have been apprised of the work done by Stan and other members of the management team. Not that we're all scientists by any means, but we all did visit the site, which is a real eye-opener in terms of its scale and, you know, the challenge that was ahead sort of thing.

It's a – we had been advised that there is no risk with the failure of the North Spur and we've also been advised that, you know, there is virtually zero chance of the North Spur collapsing. There may be – you know, you would have signs that there was something wrong with the North Spur well before you'd be into a situation where, you know, there was some catastrophic event could happen and that the North Spur has been, you know, something that's been designed and redesigned and over-designed for decades – it's not a new concept – and that it has incorporated into its engineering a significant amount of intelligence-gathering – so seepage or things of that nature – so that you'd have all the signs well in advance of any compromise of that structure.

So from a board perspective, I think that's about as much diligence as we could do –

MR. BUDDEN: Okay.

MR. PADDICK: – and that's the comfort that we have.

MR. BUDDEN: Sure and I'll – we'll pursue this if – to the degree we're able to with other people, but I will ask I guess my final question: Who specifically has offered the board those assurances? Would it be Mr. Marshall and Mr. Bennett? Would it be other people? Can you tell us?

MR. PADDICK: Certainly the strongest assurances would have been from Stan Marshall and Gilbert Bennett, yes.

MR. BUDDEN: Okay, thank you. Well, we'll pursue it with them if necessary

Madam Clerk, Exhibit 04096, please. I just have a question or two about this one. And I believe you have that –

THE COMMISSIONER: Yes, that's in tab 20.

MR. BUDDEN: Yeah.

This is correspondence of 13 months ago to you from Minister Coady, who, I guess, we'll – again, we'll hear from in the days to come. And my question to you is quite simply – you're familiar with this, obviously, I would assume. A report – allegations were made which on their face appeared to be serious; a reply was requested within 60 – or rather "I request … a report be provided to me within 60 days." And she sets out the scope of the report and further recommendations.

Can you tell me to what degree was that actioned and if by – so by whom?

MR. PADDICK: I believe in this particular case we conducted an investigation both internally and externally and reported back to the minister. I believe the allegations were broken down into something like four buckets. Internal Audit, in conjunction with, sort of, Muskrat Falls management at the site, undertook the investigation.

If I recall, I think in the case of one or two contractors, they had already left the site and no longer worked there anymore. In the case of another, there was a dismissal. That was a subcontractor. And in the case of – sort of a respectful workplace allegation, that bucket, one or two people were put through some form of sensitivity training or education program to – so that they could better conduct themselves going forward in accordance with policies.

So I believe those were all – I mean, the board takes all of these seriously. You can imagine how many of them we get. And some of them – I would say the vast majority resulted in the accusations being unfounded but quite, you know – not – it's also not rare that there is some grounds for action to be taken or discipline to be –

MR. BUDDEN: Okay.

MR. PADDICK: – done, so …

MR. BUDDEN: All right.

So – I guess in the short: you received it, it was taken very seriously, responded to as requested. That would be your evidence?

MR. PADDICK: Yep.

MR. BUDDEN: Okay.

Madam Clerk, Exhibit 04096, please.

And this is a letter –

THE COMMISSIONER: Tab –

MR. BUDDEN: – over your pen addressed to Premier Ball in the fall of 2017.

THE COMMISSIONER: Okay, so that may be the wrong exhibit number.

MR. BUDDEN: Oh, yeah, I've given you the wrong one. Yes. It's 04094 that I meant to direct you to.

THE COMMISSIONER: Okay. Tab 17.

MR. BUDDEN: Yes.

And, again, if we – it's a longish letter and I think this is one you made a comment. It wasn't specifically referred to by exhibit number, but it was referred to as correspondence. You made the comment –

MR. PADDICK: Embedded contractor issue.

MR. BUDDEN: Pardon?

MR. PADDICK: Embedded contractor issue? Is this the one?

MR. BUDDEN: No – well, in part, yes.

MR. PADDICK: Well, that's –

MR. BUDDEN: (Inaudible.)

MR. PADDICK: – the one I have on the screen, so I'm just –

MR. BUDDEN: Yeah, it – yes, that's –

MR. PADDICK: Okay.

MR. BUDDEN: – a fair way of characterizing it. And I think you said that it's over your pen, but obviously you didn't write every word of it.

I am going to direct you, however, to a couple of points. I am interested in what you relied on. Page 2, Madam Clerk, and it's a paragraph that begins, "It is important."

And this is – this paragraph appears, if not word for word, then very close to word for word in a Nalcor document from the spring of 2018 that was filed with this Commission as, essentially, Nalcor's response to one of the reasons why there were overruns. So we've seen it before and I've brought it up before with other witnesses.

If you could take a moment – it's fairly long so unless the Commissioner wants me to I won't actually read it into the record, but I do have a couple of follow-up questions. So you can just indicate, Mr. Paddick, when you've had a chance to have read it.

MR. PADDICK: I'm done with that paragraph.

MR. BUDDEN: Okay.

About halfway through there's a sentence that begins: "In our view, this 90-10 split represents a typical and appropriate division between owner employees and contractors; it is in keeping with best practices for large construction projects."

And I guess my question for you – and, of course, in this case the contractors are embedded contractors and my question for you was: On what did you rely on in support of that assertion, or whom did you rely on? Or is this information that you already knew from your business (inaudible)?

MR. PADDICK: No, it isn't. We actually – I can't recall exactly the organization or the – I think it was actually in more of an industry association than a consultant who had published data on – both on a typical split of embedded versus full-time employees and on this 9 to 11 per cent total net – total cost of the project management team.

MR. BUDDEN: Okay.

MR. PADDICK: Now, I would not have known that, but the board would've been presented with that data. I'm pretty sure it was from an industry association. It wasn't like a, you know, it wasn't a KPMG or –

MR. BUDDEN: Okay, so my –

MR. PADDICK: – that kind of thing.

MR. BUDDEN: – if, for instance, my clients wish to challenge that, they would say no, no, this is not best practices. That is probably not a question that could be usefully directed to you. It, perhaps, should be saved for Mr. Marshall or Mr. Bennett, or what are your thoughts there?

MR. PADDICK: Yeah. I mean, if your client was directed to the board, they would receive a reply. We would obviously look for Mr. Bennett and Mr. Marshall's input, but I'm sure we could find that source document –

MR. BUDDEN: Okay.

MR. PADDICK: – that would've – that we would've relied on to say that we feel that we're within the bands of best practices.

MR. BUDDEN: Sure.

And – but in – essentially you're speaking for the board on this. This doesn't lie within your own knowledge; it's something you relied on others to –

MR. PADDICK: You know, I wouldn't be able to say a 90-10 split is typical. What I could tell you is that I've done lots of projects where we embedded contractors into our project management team –

MR. BUDDEN: Sure.

MR. PADDICK: – you know, especially on –

MR. BUDDEN: Oh yeah.

MR. PADDICK: – this new technology came online, this sort of thing.

MR. BUDDEN: Yeah.

MR. PADDICK: You know.

MR. BUDDEN: Yeah, I know. It's not the existence of embedded contractors, it's degree of reliance –

MR. PADDICK: Right.

MR. BUDDEN: – that I guess we are more concerned with.

The next sentence: "Based on information reported by international organizations with expertise in the management of large projects, it is our understanding that budgets for Project/Construction Management and the owner's team combined typically run between 9 to 11% of total costs."

And, again, that would be the same answer, I assume.

MR. PADDICK: It's the exact same report.

MR. BUDDEN: Okay.

And then the next sentence is what interests me a little bit: "The costs associated with these groups for the LCP are currently running at 9.5% of total costs, but are forecasted to decline to 7% by Project completion."

We're not yet at project completion, we're obviously getting close. Do you happen to know – has there been follow-up so you could say in that the 18 or 20 months since this letter was written whether that has, in fact, declined to 7 per cent or is on the way to 7 per cent.

MR. PADDICK: I don't.

MR. BUDDEN: Is that something within your knowledge?

MR. PADDICK: I don't.

MR. BUDDEN: Okay.

I'm also struck – this is the final question. If the normal range is nine to 11 – like is 7 per cent, perhaps, too lean? Is that something that the board – that you have turned your mind to?

MR. PADDICK: Now, I recall from the conversation that that was largely because a lot of the large contracts at the end would not have as many embedded contractors as some of the earlier components.

MR. BUDDEN: Sure.

MR. PADDICK: So, for example, building the final dam with Barnard-Pennecon wouldn't have as many embedded contractors in that process as would have been when they were doing the –

MR. BUDDEN: Okay.

MR. PADDICK: – initial powerhouse or the switchyard or things of that nature.

MR. BUDDEN: Sure.

MR. PADDICK: Transmission lines.

MR. BUDDEN: Can we go to the next page, Madam Clerk? And it's the very bottom of that page that I'm interested in. This will really be about the end of it for me, Sir.

The sentence there – I guess the whole thing – I'll read the whole paragraph: "With respect to the first question, there is no simple or straightforward way to measure the value which management structure brings to a project." And this is the key part for me: "However, we believe that the Internal Audit processes that are in place, as well as the continual review by senior Management, the Independent Engineer and outside agencies such as IPA, provide appropriate oversight of the project management function and help to ensure it provides good value to the" process.

It's oversight that concerns me here, Mr. Paddick. And the reason it concerns me is –this Inquiry has heard evidence which we'll be submitting, which suggests that individuals in senior positions at Nalcor, who are still in senior positions at Nalcor, seem to have played a very active role in interfering with such independent review. And we've heard evidence about the editing of reports; we've heard evidence about Nalcor not providing requested information to EY.

You wouldn't have known that in October 2017, fair enough, but I suggest you do know it now. And I would further suggest that – or, I guess, I'd ask this: Is the board still as sanguine about relying on outside oversight, knowing the degree to which your own Nalcor people have perhaps run interference on oversight in the past.

MR. PADDICK: I have no reason to believe that Nalcor employees have run interference. So I'm not sure I can even comment on that. I mean, the board's direction to everybody at Nalcor has been to co-operate with any process that has been laid – that it's become a party to and to as transparent as, essentially, the governing laws permit.

MR. BUDDEN: Okay.

You're unfamiliar with some of the evidence this Inquiry has heard about – just last week about EY and its attempt to get information about Nalcor, about Manitoba Hydro International and –

MR. PADDICK: I –

MR. BUDDEN: – reading this report?

MR. PADDICK: – I have literally not watched one second of this Inquiry.

MR. BUDDEN: Okay. And you haven't been briefed about any of those things?

MR. PADDICK: I haven't. First I heard of those. I've been briefed on what's in my binder before me.

MR. BUDDEN: Okay. Yeah.

Well, I was going to ask what the major impressions that the board has taken away from the Inquiry to date and what change has been implemented, but probably not much point in asking that question.

Okay, well, that's perhaps a concern, but I guess the last thing I'll ask – the very last thing – is we've heard a lot of evidence about commercial sensitivity and really being used as a justification for not revealing contingency figures, not revealing potential overruns to the public, or even in some cases, to as – an attempt to resist disclosure to outside oversight agencies.

And we're all aware that, yes, commercial sensitivity is real, but you've been involved in the business world for decades now and at quite a high level. What has been your experience? What is your observation about cost overruns, the revelation of those overruns, the revelation of contingency allowances and commercial sensitivity? Have you any thoughts or observations on that?

MR. PADDICK: Well, I guess in my business experience, I mean, cost overruns are, you know, I wouldn't say the norm, but they're – you know, they're frequent. It's not some anomaly.

With respect to disclosing contingencies, I can think of – I can probably maybe give you an analogy that would be similar from my world, which would be let's say there's some – you had a commercial dispute and there's potential litigation, and you have a discussion with your auditors as to what would be the appropriate accounting for that should we accrue –

MR. BUDDEN: Yeah.

MR. PADDICK: – something. Either a gain or a loss depending which side of the equation you're on. And a lot – you know, I can recall times where I would have an issue with recording that number or wanting that number in my financial statements or in other documents because it, basically, you know, if you – if, let's say, it was a $50 million dispute and you accrue 25, well at the very minimum they expect we're going to get 25, you know, that sort of thing. So publicly disclosing contingencies, especially if they relate to claims would be – you know, in my view, could be akin to a lightning rod to, you know, illicit claims.

MR. BUDDEN: Sure.

That's a very specific term: claim.

MR. PADDICK: Yeah.

MR. BUDDEN: Just as an insurance company is not going to tell you their reserve when you're trying to negotiate a settlement –

MR. PADDICK: Yeah.

MR. BUDDEN: – but if we're looking at it more collectively and you were to – you knew, you know, the information came to you in your position that, look, we're – we budgeted $6.5 billion for this project, we're now at $7.5 billion. Is that kind of information, this sort of general sense we're a billion dollars over budget –

MR. PADDICK: Yeah.

MR. BUDDEN: – is that something which –

MR. PADDICK: Well we've only had that come up on one occasion, and that's going from $9.1 billion to $10.1 billion in June 2017. And we wanted to be – we ensured we were as completely transparent as we could be absent breaking out the contingency as to what might be in that contingency (inaudible) –

MR. BUDDEN: Okay.

MR. PADDICK: – because there was a component of contingency.

MR. BUDDEN: The evidence – at least that my client will be submitting – that the evidence is that such transparency was lacking in the previous iteration of the board and of the CEO, and the justification we've heard here from some of those people is that commercial sensitivity would preclude the release of such information. And it's that I want you to comment on. Can you think of any reason, based on your business experience, why commercial sensitivity would preclude the disclosing that the budget has now gone from $6.5 to $7.5 billion?

MR. PADDICK: Well one example would be in a scenario where, let's say you had five bids on a component of a project, you picked the low bidder but they were a clear outlier from day one. Disclosing that commercially sensitive information would certainly lead to an argument from that low bidder, who now is trying to complete a job unprofitably that, hey, you should've known, you knew we were the outlier, this is not something new to you, et cetera, et cetera. So releasing that type of commercially sensitive information could certainly hurt the company.

And I think, you know, there's been – I can't recall the specifics, but it's been a pretty common theme from Stan and the management team that, you know, releasing that type of information is just setting us up for cost – more cost overruns. And how is that – you know, there's a trade off between being fully transparent and, you know, being a sitting duck, so to speak –

MR. BUDDEN: Sure.

MR. PADDICK: – with respect to cost overruns. And how's that in the public interest?

MR. BUDDEN: Yes, but yet the trade-off was made in the instance. You just said that the – two minutes ago – that in the interest of transparency, the current numbers were disclosed, and my –

MR. PADDICK: Yeah, but not the – what I said was we broke out, look, this much for Astaldi, this much for Valard, this much in disruption cost, this much in balance-of-plant overages, this – like, we laid that out. But then at the end, I believe, we had a figure that said contingencies and claims. We didn't break out, oh, this much for this contractor, this much for that contractor, this much for –

MR. BUDDEN: Oh, agreed.

MR. PADDICK: – this issue.

MR. BUDDEN: Yeah.

MR. PADDICK: Right?

MR. BUDDEN: But at the end of the day, when you did have a collective number – contingency and claims – you released that?

MR. PADDICK: Yes, but en masse, as a –

MR. BUDDEN: Yes.

MR. PADDICK: – single number.

MR. BUDDEN: And you saw no commercially sensitive reason not to release that mass number?

MR. PADDICK: No, because it's not something that you could – any one would-be claimant could, you know, pick through and say, hey, that's the amount allocated to me or that's the bucket that's available for me to go after. It was generic enough.

MR. BUDDEN: Gotcha.

That's it. Thank you.

MR. PADDICK: Thank you.

THE COMMISSIONER: All right, we're past our break time, so I'll take 10 minutes at this stage.

CLERK: All rise.

Recess

CLERK: Please be seated.

THE COMMISSIONER: All right. Edmund Martin.

MR. SMITH: Good morning, Sir.

MR. PADDICK: Morning.

MR. SMITH: Harold Smith for Edmund Martin. I am – only a few questions, just to see how I can sort of piecework all the things together that you've talked about this morning so far.

Did the Energy Plan 2007 enter into the boards thinking regarding how the project was conceived and the benefits expected from the project?

MR. PADDICK: I think in some respects, yes, but probably in guiding our analysis initially as – if you recall, there was one point a movement to analyze whether the project should just be stopped. And in looking at the facts at the time, the Energy Plan would have come up, specifically as it relates to Holyrood, you know, reaching its end of life. So a need for power, so to speak. Projections on potential economic growth in Newfoundland and future needs.

As well – I mean, we would've thought – we would've looked at, aside from the sort of age of the assets or the state of the assets, you know, how much was spent to date? Four and half billion, I think, at the time. How much was committed? Six and a half billion. Five-billion dollar loan already in place, or about to be in place, the second portion. What impact stopping would have on the credit rating of the province? You know, all those sort of factors.

You know, the commitment to Emera to deliver a third of the power. They've already, you know, committed to investing a billion and a half or whatever. So, potential litigation for sure, et cetera.

So only in that context I would say, yes, we, you know, considered it.

MR. SMITH: And did the board do a argue analysis, I guess, or – of the project management team, its strengths, weaknesses, et cetera?

MR. PADDICK: Well, once you're – one thing we did try to make sure was that we didn't just hear from Stan, and this wasn't something that we had to ask Stan to facilitate, it was more of his style. So, literally, every board meeting since we've become a board, the senior team presents and layers below the senior team presents.

So, we had very good and open access to all the management team and, essentially, assess them on that basis. We didn't have some third party come in and do an assessment of the team.

MR. SMITH: Now, I notice that not very many of them have been – as you've said, there was expectation that once you come in as a board that they'd be leaving in droves, whether forced or voluntarily, but neither of those things happened.

MR. PADDICK: No, they didn't.

MR. SMITH: I take it from that – or should I take it from that, that the board had confidence and has confidence in the project management team?

MR. PADDICK: I think you can be safe to say that if we didn't have confidence in a particular person or group of people that we would've made changes, and we didn't.

MR. SMITH: Now, in relation to information that comes to the board, particularly when it looks like a cost increase is coming, would you be able to tell us whether the nature of the information that you get is – well, it could be this at worst-case scenario, best-case scenario, where we think it might be and let you guys work it out as to what you decide it is? Is that –?

MR. PADDICK: Yeah, there would be, you know, most likely case, best case, worst case type scenarios bantered around. I should say that we only – we, meaning the board – since December 16, only had one of those sort of changes to the cost estimate. So it's not something we've been through numerous times.

But, as I said, I think we had five or six board meetings between sort of the first meeting, which was kind of orientation, and then Astaldi orientated through to the updated cost estimate in June '17. There certainly would've been, you know, some form of – not necessarily a waiting but, you know, the scenarios that I described were as, you know, best case, the most likely case, upside case sort of thing.

MR. SMITH: Where are the resources inside the board to be able to analyse worst, best case and recommend?

MR. PADDICK: They probably wouldn't get as grandeur or that, nor would any board. I can tell you, though, that – I mean, the board was hyper, hypersensitive to any changes in the cost budget. Given just the history and, you know, the public nature of it and, you know, the previous board resigning en masse. Mr. Martin leaving.

Like it was something that, you know, we were very adamant that we did not – we wanted to get a good handle on it and we wanted to put our best foot forward and do everything in our power to stick to that number.

MR. SMITH: With respect to – you mentioned that the board at one point in time was interested in rate mitigation but found themselves behind the wave that had already started. But has the board discussed rate mitigation?

MR. PADDICK: Yeah, I think – maybe I'll characterize it differently, is that it was – I mean, government had made it quite clear that rate mitigation should be high on our agenda. And there was some sort of, I wouldn't say confusion but discussion as to who should lead that. Should government lead that, should Nalcor lead that, should our board lead that?

And at Christmastime, December 2017, Chris Hickman, Mark MacLeod, Brian Maynard and myself met on Tibb's Eve, actually, and said: Look, we got to take the bull by the horn here and not rely on someone else to do this. And we sort of got together at Chris's office, did a strawman of what a committee mandate might be, what would our objectives be, who might we try to enlist to help us; identified Jim Meaney and Robert Hull as two resources at Nalcor that we'd like to get involved. We'd been impressed with them in presentations to the board around FLG and other issues, financial issues.

And we identified, you know, five or six or seven buckets of potential rate mitigation, whether that was recall power or, you know, as simple as, you know, buying low and selling high. So buying power from – importing power when it's cheap and selling it at a higher price when it – there was – demand was up, that sort of thing. And we went to Stan and said the board has decided to form a special committee on rate mitigation and we'd like to second a couple members of your management team to that committee. And so they were the people I just named. And what we had – what we found, was with the first time we had our rate mitigation committee, is they came with a very well-developed list of potential areas that could help in rate mitigation.

MR. SMITH: What were those, if I can …?

MR. PADDICK: Oh, they were things like I just mentioned –

MR. SMITH: Yeah.

MR. PADDICK: – like let's bring in recall power over the LTA, since it's gonna be in service. Let's go monopole versus bipole, so we can use it for that purpose. Let's import power on the Maritime Link when it's cheap; (inaudible), perhaps store power and sell it to outside markets when it's more expensive, and there are a whole bunch of other things like, you know, could we use dividends from the oil business to go to rate mitigation. That's a policy, you know, decision really, do you want to – you know, do you want ratepayers to pay or do you want taxpayers to pay, type of scenario.

But at least getting them all down on paper, and analyzing them and then trying to work through the impact. So for example FLG2 and the favourable interest rate we got, and that reducing the amount of equity that the province had to put in effectively reduced rates by a cent and a half. So, we're trying to find point ones of cents everywhere we can.

And we wanted to make it, you know, a concentrated focus of the corporation, so – but what the surprise was, was the extent that Nalcor was already on top of it, had also engaged with Natural Resources and Finance and put together a rate mitigation team, and were well down the road of where we thought we needed to be. So we were in better shape than we thought, essentially.

MR. SMITH: Were these revelations, and – with the new board, or are these some of the things that were, you know, in the hopper for some period of time?

MR. PADDICK: In that case, that committee had been struck four or five months prior to us feeling we needed to form a committee. But – I mean, I said something earlier on today, I can repeat it again that, you know, we, of course, came in – I can't speak for every board member, but I can sort of speak for myself – with, you know, a feeling that we're probably going to have to make some pretty significant changes at Nalcor, on the people side.

And as experience or history has now proven, we didn't do that, and it is because we didn't need to do that. And one of the biggest surprises of being a director in this corporation has been, as I said before, is the quality of the people. It's good solid professional people who are very committed to the organization and to this project. And it's a shame quite frankly that Nalcor now equals Muskrat Falls, in both internally in the company and externally as how people view it.

MR. SMITH: Thank you so much.

MR. PADDICK: No problem.

THE COMMISSIONER: All right. Kathy Dunderdale is not present.

Former Provincial Government Officials '03-'15.

MR. T. WILLIAMS: Good afternoon, Mr. Paddick. Tom Williams. I represent a group known as Former Elected Government Officials for the period of 2003 to 2015, with the exception of former premier Dunderdale. My questions, basically – you spoke of some change when you just finished up in your last question.

I wanted to speak where you started off this morning – we were speaking about the composition of the board and remuneration for the board and you spoke in your introduction about your background. Well, obviously, you've had a fairly extensive background in terms of private corporations and serving on boards.

I'd like to get your opinion with respect to the issue of compensation. Obviously, the Commissioner has to make decisions with respect to recommendations on a go-forward basis. And we've heard from previous board members who served as a panel here and they spoke of the workload and the issues of compensation. We also heard from a former board member and acting chair – Cathy Bennett – who spoke to the issue as well.

How important do you see the issue of remuneration? And the reason I ask is that, you know, we have individuals who said that the time was just phenomenal. And then previous board members, and you've said that there's been a lot of workload here. But I kind of got a sense, and I am paraphrasing from Ms. Bennett's evidence, that, you know, the somewhat of a patriotic duty, you know, for the local people –I take yourself – I know you're not a full-time resident here in the province, you travel a great deal to come back for meetings. You know, and I nearly got the impression that – well, boy, if you're going to serve on the Nalcor board it's your patriotic duty to do it and you can't expect to get compensation.

I wonder how that balances against the necessity of having real expertise on the board. And I'm not suggesting that there's –

MR. PADDICK: Mm-hmm.

MR. T. WILLIAMS: – not expertise there now, nor in the past, but one of the issues that has come up – and excuse me for the long preamble – but maybe you can address it – one of the issues is – should we have somebody with mega hydro project experience on the board? And you've alluded to – we can retain that. Is that the answer or do you think we need it, and in order to get that expertise, do we got to pay people to do it?

MR. PADDICK: Let me try and break it up into a couple of parts. So, you know, on the patriotic duty – and I'm not trying to pat myself on the back – that's the only reason I'm doing it. I mean, I moved away in 2000 and I saw this as an opportunity to keep a connection to Newfoundland and contribute in a meaningful way. And, you know, those 180 meetings or whatever the hell number it is right now in – and obviously the prep time and all the meetings in between and discussions, I mean, I haven't been paid a cent. So – and that's – but that's what I signed up for.

That's not reasonable though, right? So when I stepped down, whenever that is, I can't imagine you're getting a chair to come in here and put in that type of hours and effort for nothing. I don't know if you want a chairman to come in and do it for nothing. I mean, there's – I mean, you're taking on personal liability in doing this, as all directors of corporations do. There's – you know, there's got to be some – it's got to be more balanced.

I don't think it was an issue, as I said, I think, before, in attracting the current slate of directors because a lot of them put their hand up in the same manner. Albeit, many of the directors, I understand only from looking at the documents last night, didn't just apply to be a director of Nalcor, they put down any ABC, liquor corporation, Hydro, you know, so they were more selective. So there was an expectation. I can tell you from some directors that they were paid. In fact, in your orientation package, I believe, it asks you for – can you give your current banking information so that direct deposits can be done, things of that nature.

I also think in the mandate letter that came from the government and IEAC around the appointment, it basically says that directors, you know, must be compensated. Like, it's literally right in there: must be compensated. And we're in a peculiar position where if you're a member of Newfoundland Hydro's board, you get a retainer and I think a meeting fee – I've chosen not to take them. And if you're – (inaudible) is sort of odd a situation. If you a member of the Bull Arm board, you get paid not a retainer, but a half-day rate of like $120 and a full- day rate of $240. So that's like 30 bucks an hour.

MR. T. WILLIAMS: Yeah.

MR. PADDICK: Right? So 30 bucks an hour is a good wage, but I don't think it's competitive for a corporate director and the responsibilities and fiduciary obligations that a corporate director has. So I don't think it was such a challenge in recruiting this board because there were enough people in Newfoundland and I'm sure, like, the 20 that the IEAC put forward was a fraction of the people who put up their hand to try to help. But it's going to be an issue moving forward – I can't imagine it wouldn't be an issue moving forward.

With respect to having someone with megaproject, specifically in hydroelectricity, on the board, I'm not so sure it's a requirement right now because we're basically 96 or 5 per cent complete. I can't imagine it wouldn't have helped over the course of the whole project. I'm sure it would have. And I also can't imagine that the previous board, you know, wouldn't have done anything other than look for help.

MR. T. WILLIAMS: So –

MR. PADDICK: And there certainly seems to be a lot of evidence that they asked for help.

MR. T. WILLIAMS: Okay, so I trust the current board is operating in a similar fashion than the last board, I mean, that you make reference to Mr. MacLeod who I know has oil and gas experience and Mr. Hickman's construction. But when you needed specific expertise in a particular area that wasn't sitting on your board –

MR. PADDICK: Yeah.

MR. T. WILLIAMS: – either the board or Nalcor themselves retained the expertise in order to do so.

MR. PADDICK: Correct. And will continue to do that.

MR. T. WILLIAMS: And that continues. So is the board operating today in a very similar fashion than it has since the creation of Nalcor, albeit it has obviously a full complement, there was concerns of not having a full complement of members, but, you know, the operations of the board – is there any significant changes in the day-to-day operations of the board now than there would have been, you know, five years ago or –

MR. PADDICK: It's –

MR. T. WILLIAMS: – (inaudible).

MR. PADDICK: I mean, obviously I never sat in on any of those meetings and not really privy to how they operated. But I can infer some changes. I mean, if you have a full complement of 11 directors, you can have fully functional, separate committees for one, so the whole board is not the committee, so the workload is shared, they can dig dive – dive deeper into issues, you can report up to the board, that sort of thing.

We made sure that David Oake, who has done an inordinate amount of work since coming on the board – he's the chair of the Audit Committee of Nalcor but was in the precarious and almost awkward position of not being the Audit chair at Newfoundland and Labrador Hydro, which was 80 per cent of the financial statements, wasn't the Audit Committee chair at Churchill Falls (Labrador) Corporation and any of the subsidiaries. So you were in a situation where the Nalcor Audit Committee was basically opining on statements that were already approved by subsidiaries or, worse, you were approving statements and then going back to the subsidiaries and getting them to approve the statements that were already approved.

So I think from a governance perspective in that, it's – we've made some significant improvements. I don't know how the previous board operated but we try to bring in not just the executive team, but much more members of the senior management teams. So we have the Internal Auditor come to both Audit Committee meetings and board meetings. We have Finance people come. We have risk people come. We have insurance people come. Like, we really try to ensure that literally we're executing in our duties to mitigate risk within the organization.

MR. T. WILLIAMS: With respect to the new board that would have come in place and, again, obviously, they would – they all came in at the same time. Does Nalcor have a formal program in place for board orientation training, fiduciary duties, governance responsibilities? So you get appointed to the Nalcor board tomorrow, do you spend two days or a week –

MR. PADDICK: Yeah.

MR. T. WILLIAMS: – in terms of an orientation program?

MR. PADDICK: We did a group orientation, but that was just because 10 of us joined at once. It was very thorough. I can't imagine it was developed just for us, so I would assume that a vast majority of it existed to onboard new directors or, you know, processes to follow. So, you know, I thought the orientation process was pretty thorough considering, you know, trying to do 10 people at once.

And we were also all afforded the opportunity: Do you want to go to Soldiers Pond? Out to Bull Arm? Up to the site? So, you know, basically get out and understand the assets. And had full access to literally anybody within Nalcor that you had a question of. Do you want to sit with Derrick Sturge and go over the finances? You'd sit down with Derrick. You want to talk about how the federal loan guarantee works? Sit down with Jim Meaney. You know, do you want to talk about Newfoundland Hydro? Sit down with Jim Haynes or Jennifer Williams. It was full open access to anybody.

MR. T. WILLIAMS: Is there a formal board policy binder? Many boards I know have binders with respect to polices, with respect to communications, the responsibilities and –

MR. PADDICK: We –

MR. T. WILLIAMS: – committees –

MR. PADDICK: We were provided with a binder of that nature that also had the mandates of all – the mandate of the board, mandate of committees, right down to how you fill out your expense account. So, you know, pretty – from high level to granular. So yes, there was that.

MR. T. WILLIAMS: Has there been any structured formal changes with respect to the communication practices of the board chair or the board CEO? We had evidence with respect to that, you know, the CEO would have an open line, basically, to government if there was issues that arose. As well as there would be some communications and meetings, and you've alluded to meetings with the Premier –

MR. PADDICK: Yeah.

MR. T. WILLIAMS: – that, you know, the current CEO –

MR. PADDICK: Yeah, I don't think it's – Mr. Williams, I don't think it's formally documented what that communication policy, so to speak, is. But, you know, as I said before, Stan speaks for the company and I speak for the board. So that was kind of the – the guideline I guess. And obviously there's far more operational issues that involve government on a day-to-day basis that Stan would communicate with government at various levels and various departments than the board chair would. So –

MR. T. WILLIAMS: But that's an ad hoc practice to trust –

MR. PADDICK: Yeah, I think you're not going to find anywhere – I don't think you are – anywhere in a binder that says, you know, this is the things that the CEO talks to government on and these are the things that the chair talks to government –

MR. T. WILLIAMS: No, and that's – and I don't suggest that –

MR. PADDICK: Yeah.

MR. T. WILLIAMS: – has changed, but that has been the practice in the past –

MR. PADDICK: Yeah, I think so. Yeah.

MR. T. WILLIAMS: – and I just want to see if that's maintained.

Given your experience and your comments with respect to the level of expertise at Nalcor and the fact that, you know, a new board came in and there were not as many changes as people had expected, do you feel that Nalcor has and has had the competencies of senior – everybody from the – you know, the senior leadership team to the boots on the ground in Muskrat Falls, to construct and operate this project?

MR. PADDICK: Tough for me to comment on the job site, so to speak. You know, I've been there twice, and obviously it seemed like, you know, a very well-organized, safe work site. But I think the biggest change that Stan and the board made was in the structure of the project, not in the people; people and the extent of what their area of expertise or responsibility was. But breaking the project into power generation and power supply was a real watershed moment in improving the chances of success.

So, you know, as – I think if one thing probably proves out throughout the course of this is that, you know, to – I believe prior to that, literally all roads ran through Gilbert Bennett and that was just not fair to Gilbert Bennett to put that level of responsibility on him. And breaking the project in two – and they're very, two very distinct parts of the project with different skill sets and different contractors, different engineering standards, the whole bit – proved to be a great recommendation by Stan that was accepted by the board and pursued. It wasn't the people, it was basically the structure.

MR. T. WILLIAMS: So I guess you're saying that the big change being project plan and how it – how there was an –

MR. PADDICK: Execution, yeah, the execution.

MR. T. WILLIAMS: – (inaudible).

But in terms of the competency of the individuals who were responsible for filling the tasks that they were hired to do, you have no issues with –

MR. PADDICK: We literally made no major changes; we reallocated responsibilities amongst the team, again, to basically improve the chances of success, but there was no wholesale change of the senior team.

MR. T. WILLIAMS: And what's your outlook for the project, both short and long term?

MR. PADDICK: I mean I think we're going to finish strong and, you know, if there was one sort of take-away in this it's – you know, it's what I'll call a self-fulfilling prophecy. And, you know, I'm a firm believer that people get up in the morning and when they're driving to work they think about what they got to do today, what's my timeline to do it, how much money do I have to spend to do it and I've got to do it diligently. They don't do the opposite. People don't get up in the morning, get a Starbucks and get in the car and go how can I screw up today? That's not human nature, right? Human nature is I'm going to do a good job.

But, you know, if you're – if it gets to a point where, you know, a transport truck blows over in Wreckhouse and that's Nalcor's fault, or it's raining on May 24th weekend, that's Nalcor's fault, and nobody wants Nalcor to succeed for whatever reason –political reasons or special interest groups or whatever – guess what? It's not going to succeed. And it's really – if anything comes out of this Commission, hopefully it's just – it's a chance to start over and everybody put the jersey on and want Nalcor to get back to what it used to be, which was a very respected part of the community and a very important part of the community.

So I think if we can get there, so that everybody actually is cheering for you instead of trying to cut the legs out from under you, and people can go to work again and people will put on their résumé that they worked at Nalcor because right now they're wondering whether it's better to have a two-year holiday in my résumé than put I worked at Nalcor – like, that's where we've got to get, right?

And I think once we're all on the same bus, cheering for the same outcome, we'll – we can turn this around and it'll prove to be a project that – you know, you look at the Upper Churchill, however many years in we are now, 50 or 60 million – 50 or 60 years and we've put in place an asset management program to ensure that's got a long life.

Yes, there's all kinds of naysayers or people with opinions on whether it was a good deal or a bad deal and rewriting history as to how it came about, but hopefully the history on this one can be that we built an asset to be very proud of, that made us self-sufficient for centuries to come, that positioned us to be in a position to export power, control our own destiny. We've had billions of dollars of economic benefit flow to the province and it should continue to flow to the province, but we all got to make – we all want – we all got to want it to work. And if – you know, that's the main message. Like, you know, we – if nobody wants this thing to succeed, it hasn't got a chance to succeed.

MR. T. WILLIAMS: Nice to hear.

Thank you very much. That's all the questions.

THE COMMISSIONER: Thank you.

All right, Robert Thompson.

MR. COFFEY: Thank you.

Thank you, Commissioner.

Mr. Paddick, my name is Bernard Coffey. I represent Robert Thompson, who used to be the clerk of the Executive Council and, before that, a deputy minister of Natural Resources. I have some questions about corporate boards.

Mr. Paddick, have you ever served on the board of a Crown corporation other than Nalcor?

MR. PADDICK: No.

MR. COFFEY: So this was your introduction to that world.

MR. PADDICK: Baptism by fire, I guess.

MR. COFFEY: Your experience, I take it, is in either privately held companies or publicly traded companies.

MR. PADDICK: Correct.

MR. COFFEY: That's –

MR. PADDICK: Correct.

MR. COFFEY: That's your background.

MR. PADDICK: Yeah.

MR. COFFEY: And, you also, in – when you were testifying, when you said – earlier on in your testimony today you pointed out or you noted for the Commissioner that – and although it may be self-evident, if one thinks about it, you noted, look, Nalcor is a billion-dollar company, hundreds of millions in, I take it net revenue, $19 billion in assets, working in many different areas and building a complex asset.

Correct?

MR. PADDICK: Correct.

MR. COFFEY: Now, Sir, in publicly traded companies, generally they're widely held, aren't they? That's –

MR. PADDICK: Usually.

MR. COFFEY: Yeah.

MR. PADDICK: Might have a controlling shareholder but, yes.

MR. COFFEY: Exactly. And I'm going to ask you about that, because there's been a lot said in this Inquiry about the shareholder, namely, the government, which of course is a single shareholder or sole shareholder. And that might be somewhat akin to a publicly traded company that has a controlling shareholder.

MR. PADDICK: Rogers, Shaw, Cogeco, lots of them.

MR. COFFEY: Anyway, that's some with the equivalent though, isn't it?

MR. PADDICK: Similar.

MR. COFFEY: There's not a minority shareholder in this context but, generally; otherwise, there is a controlling shareholder and it's –

MR. PADDICK: Yeah.

MR. COFFEY: – and he, she or it is readily recognized.

MR. PADDICK: Sure. Correct.

MR. COFFEY: Okay.

Now, and I gather from what you described, you personally have experience in – well, in fact, I think you said at various times in describing for Commission counsel you said, in fact, you've been involved with companies taking them private –

MR. PADDICK: Correct. Yeah.

MR. COFFEY: – from public companies and so on. I'm not going to ask you about, of course, any of the details involving that, but my point being this: That you have experience in that world, in widely held, not widely held; private, public.

MR. PADDICK: I actually sit on the board of a public company where the majority shareholder owns 64 per cent of the investment.

MR. COFFEY: Yeah and that would be the controlling shareholder then.

MR. PADDICK: Yes.

MR. COFFEY: Now, Sir, you know, in relation to that, like, a company that has, for example, $19 billion in assets, has revenues, those revenues north of a billion dollars a year – well, over a billion dollars a year and profit in the hundreds of millions a year – how much would a person get paid generally to sit on a board like that? What kind of magnitude of money are we talking about?

And, I'm not asking you – of course, this has nothing to do with you personally, but you know, you live in that world. You have experience in that world.

MR. PADDICK: Yeah. It varies greatly and there's many a trends afoot.

MR. COFFEY: Sure.

MR. PADDICK: You know, just like separating the CEO and the chairman's role was a big movement maybe 10 years ago and, now, I think somewhere around 10 or 15 per cent of public companies have that joint role.

MR. COFFEY: Yes.

MR. PADDICK: There's a movement between getting away from per diems and meeting fees to a fixed retainer.

MR. COFFEY: Yeah.

MR. PADDICK: Obviously, that retainer is higher than previous ones.

I mean I know that the board and, actually, the company has had surveys done for them on this –

MR. COFFEY: Sure.

MR. PADDICK: – not under our watch, but previously. I mean I can speak from my own personal experience. I sit on the board of Liberty Global, a NASDAQ listed company. I receive, I believe it's $85,000 US retainer and $125,000 in stock grants a year. That's a pretty lucrative board. That would certainly be at the high end of my experience. That would be somewhere akin to like what BCE might be or Scotiabank, something like that.

MR. COFFEY: So if I could then – so if I could put it in context for the Commissioner, generally, you'd be talking about anywhere from $100,000 to $200,000 a year.

MR. PADDICK: Easily.

MR. COFFEY: Easily.

MR. PADDICK: And for, quite honestly, one-fifth of the hours.

MR. COFFEY: And that was where I was going with this, okay, in terms –

MR. PADDICK: Yeah.

MR. COFFEY: – yeah, you know, I was going to go – because it's not only the – so much the amount, the quantum, as the comparative workloads, and you've just referred to it. So you say, for example, in your case and right now, of course, you are the board chair, but on these other companies, are you the board chair or are you a board member?

MR. PADDICK: No, I've only – I've been the chair of one public company.

MR. COFFEY: Okay.

MR. PADDICK: But I'm not currently the chair of any public company.

MR. COFFEY: Right, so –

MR. PADDICK: Typically, there'd be – you know, there's – there would be a retainer for directors and there'd be a much higher, in most cases, retainer for the chairman, or chairperson.

MR. COFFEY: Okay, so the figures you've described are for the board members –

MR. PADDICK: Yeah, board members.

MR. COFFEY: – not for the chair. The chair would be even – you know, would be a – maybe even an order of magnitude more.

MR. PADDICK: Three times, maybe, four times.

MR. COFFEY: Three or four times that, okay. And when you say about a fifth the amount of time, are you comparing that to the amount of time you're spending – you've been spending at Nalcor's business or what?

MR. PADDICK: Yeah, so, you know, I'm sitting on the board at Clearwater Seafoods. We have four quarterly board meetings on financial statements, we usually have one strategy-only board meeting and we have one budget board meeting, our annual operating plan.

There'd be some ad hocs that might come up.

MR. COFFEY: Yeah.

MR. PADDICK: You're doing a financing, you're doing an acquisition, you're selling an asset, that sort of thing, but they'd be mostly by conference call. For committees of the board, very similar to this, they meet the day before the board meeting usually so that the chairs can report at the boards, so a very condensed two days. A typical week for our board is we're here for a week.

MR. COFFEY: Yes.

MR. PADDICK: And it is literally 8 or 9 a.m. 'til 5 p.m. for five straight days. There's 13 or 14 companies that have boards that are populated, plus committees of those boards – unwieldly.

MR. COFFEY: And you're doing – well, to use the Latin phrase, you're doing it pro bono.

MR. PADDICK: Correct.

MR. COFFEY: Now, Sir, in relation to – and you've been asked about this, you know, the idea of having – and I think Mr. Williams just asked you questions about – or put it to you, the idea of having someone on the board with hydro – megaproject or hydroelectric megaproject experience. And as you pointed out that, in your view, it perhaps would've been much more possibly useful a decade ago – or beginning a decade ago than it might be now, because you're finishing the project.

MR. PADDICK: And I'd say I think –

MR. COFFEY: (Inaudible.)

MR. PADDICK: – we have components of that –

MR. COFFEY: Yes, and I understood –

MR. PADDICK: – (inaudible) on the board.

MR. COFFEY: – that, yeah.

MR. PADDICK: And especially with – like, we're fortunate to have someone as experienced as Stan as the CEO –

MR. COFFEY: Yes.

MR. PADDICK: – because he brings just, you know, 30, 40 years of –

MR. COFFEY: Yeah.

MR. PADDICK: – experience in the industry – specifically this industry – to the board table.

MR. COFFEY: And am I – and I agree, but I think the – I suspect the question was asked in – not so much in relation to who the CEO – but he happens to sit on the board – as is any other board member.

But in relation to that – and maybe this is self-evident, but I'm going to canvass it anyway, if I may, Commissioner.

In this country, certainly in the past 30 to 40 years, hydroelectric megaproject – hydroelectric experience would be centered in British Columbia, Manitoba, or Quebec.

You'd agree?

MR. PADDICK: Some big ones in Ontario, too.

MR. COFFEY: And Ontario. A big electric –

MR. PADDICK: No, transmission line projects.

MR. COFFEY: Transmission lines, but a combination of hydro-generation site along with a multi-billion dollar transmission line. That wouldn't –

MR. PADDICK: It's a pretty rare beast.

MR. COFFEY: Yes.

So, it – and I'll ask you this: to your knowledge, would there be many such – over the past 30 years, be many – or have been many – such projects in the United States?

MR. PADDICK: Not really aware. I mean, I think most of them are probably nuclear –

MR. COFFEY: (Inaudible.)

MR. PADDICK: – not hydroelectricity –

MR. COFFEY: Not hydro.

MR. PADDICK: – just environmental issues and the like.

MR. COFFEY: So, the – you know, generally, in terms of the pool of people – at least within Canada – who would have 25 to 30 years or more of practical experience in building hydroelectric megaprojects – a combination of dam and generation station and transmission lines – would be a very small pool of people, wouldn't it?

MR. PADDICK: Very –

MR. COFFEY: With progress of (inaudible).

MR. PADDICK: – very finite, I would think, and even more finite, those that went well.

MR. COFFEY: Yes. And that's exactly – but, although, one can learn from one's mistakes –

MR. PADDICK: Sure.

MR. COFFEY: – or the mistakes one experiences, but the combination of ones that went well – as you say, as you point out – would be a very narrow pool of people.

MR. PADDICK: Yeah.

MR. COFFEY: You know, if there are such people, okay? But, presumably, there might be.

Now, Sir, bearing that in mind, and most people, I'm going to suggest to you, who might have lived in that world and gained such experience would be engineering sorts – engineers who progressed up through the system, took on responsibility, more and more of it, and eventually were running the projects. Correct?

MR. PADDICK: Running the projects?

MR. COFFEY: Running in the sense of being the superintendent, you know –

MR. PADDICK: Yeah.

MR. COFFEY: – the project director or whatever.

MR. PADDICK: I don't – I mean, I know lots of chief financial officers who aren't accountants. So I've – like, I don't know.

MR. COFFEY: Okay.

MR. PADDICK: I mean, I know lots of –

MR. COFFEY: It was –

MR. PADDICK: – CEOs who are lawyers, so it's (inaudible).

MR. COFFEY: Okay, if they're not engineers (inaudible).

MR. PADDICK: But it's an engineering-dominated environment, for sure.

MR. COFFEY: Okay.

My point being this: that four people who would fall into that category – again, other than inherited wealth, okay, or wealth acquired through, you know, buying and selling companies, that kind of concentration of wealth – most such people, after 30 or 35 years of working, would have whatever they had put away for their retirement. And, you know, my point being this: that to attract them here, to St. John's, Newfoundland, to have sat on the board of Nalcor for nothing, unless they happen to be from here, would be an almost impossible task, wouldn't it?

MR. PADDICK: It would be an uphill battle. That's for sure.

MR. COFFEY: Even to identify people, not to mention even getting them here.

MR. PADDICK: I would assume it's a very small pool of people.

MR. COFFEY: In relation to the matter of widely held corporations versus those with a controlling shareholder, can you tell the Commissioner what it is your experience – is there any difference in practice generally between, you know, the relationship between the board and the man – the CEO and the owner, depending upon whether or not a company is widely held or solely controlled?

MR. PADDICK: I think, Commissioner, the biggest difference from what you're describing and my experience is that – and why Nalcor is a bit of an analogy is –

MR. COFFEY: An analogy or an anomaly?

MR. PADDICK: An anomaly.

MR. COFFEY: Anomaly.

MR. PADDICK: Anomaly, sorry – yes. Is – in most companies, that would have – that would be public but have a controlling shareholder – that shareholder would have significant representation on the board of directors, so that when a board made a decision, that was it. That's the decision. Let's go, right? Let's close that deal. Let's pursue that avenue. Let's get into this new business line. Let's exit this business line, et cetera.

MR. COFFEY: Mm-hmm.

MR. PADDICK: In our case, we don't have the shareholder at the table. So we basically, as a board, make sure we put in place processes that allow for the best decision to be made and then articulate our decision, which really is our advice –

MR. COFFEY: Yes.

MR. PADDICK: – to the shareholder. And, as I think I said earlier, they can choose to accept it, ignore it, amend it –

MR. COFFEY: Yes.

MR. PADDICK: – some hybrid or whatever.

So I think that's the biggest difference – is that it's very unusual for the largest shareholder not to have board representation. And it's – and it often – that's, I guess, part of the unique characteristic of Nalcor, is that the ultimate shareholder is not at the table.

MR. COFFEY: Thank you, Commissioner.

Thank you, Mr. Paddick.

THE COMMISSIONER: All right.

I see it's about 12:30.

Mr. Hogan, I'm not going to call on you now because I know you're probably going to have more than five minutes of questions.

MR. HOGAN: (Inaudible.)

THE COMMISSIONER: Yeah, okay.

So we'll take our break and come back.

Just to sort of give everybody a bit of an update. So my expectation here today was that we would start with the next witness, who was a witness that has been retained by the Commission with regards to project management. And my hope is – or my hope today was at least to get – one of the things that I've asked Commission counsel to do is to allow that individual to provide about an hour and a half, at most, of a presentation on project management to sort of set the stage and then allow for questions from the parties. And the plan, of course, was to get that done today and then to finish him tomorrow morning.

There are some things that we need to do for our Phase 3 that I'm not having time to do, because every time I leave here it's at 5 o'clock or 5:30 at night and I can't seem to have time to get a hold of anybody. So my plan tomorrow afternoon is to take a break so I can do that.

So we'll come back – we'll finish with Mr. Paddick and then move right into Mr. Jergeas at that stage of the game and hopefully proceed as I had hoped.

Anyway, we're adjourned until 2 o'clock.

CLERK: All rise.

Recess

[Fifteen seconds of audio recording lost due to technical issue.]

MR. PADDICK: Afternoon.

MR. HOGAN: Just want to follow up on a few questions – a few answers you gave about rates and rate mitigation?

Is the board currently undertaking any analysis of where rates are going to end up?

MR. PADDICK: It has done some, and it's ongoing.

MR. HOGAN: It's ongoing.

MR. PADDICK: Yes.

MR. HOGAN: So what's the current status of it?

MR. PADDICK: I mean, essentially a lot of the concepts that you saw in the PUB reference question preliminary report are consistent with the board's views and areas where we think rate mitigation opportunities might exist. Obviously it's an ongoing process in terms of where rates might end up. And I think the government came out with a, you know, a fairly firm position on it, but even that position had quite a bit of subjectivity, I guess, to it, in terms of – there's obviously savings to be found or funding to be sourced in order to meet their objectives of reducing rates back down to what they deem to be acceptable.

MR. HOGAN: So are you able to provide the Commissioner with a number now where rates would be without any mitigation?

MR. PADDICK: No.

MR. HOGAN: You don't know that.

MR. PADDICK: No.

MR. HOGAN: Has it been discussed with the board?

MR. PADDICK: Ranges –

MR. HOGAN: What are the ranges then?

MR. PADDICK: Yeah, the ranges are anywhere from, I believe, 18 to 22, 23 cents. In that range.

MR. HOGAN: Thank you. And you've talked about some options for rate mitigation; is there a target that the board has in mind?

MR. PADDICK: Well, I mean –

MR. HOGAN: (Inaudible) rates end up?

MR. PADDICK: I mean, the overall target is to get them as low as we can, and to obviously develop as many rate mitigation or rate management strategies as we can and execute against them. Some of the challenges have been actually in how you technically implement such strategies as some of them are currently not considered under the various forms of legislation, or are things that would have to be opined upon by the PUB, so none of them are quick fixes.

But I think there's good co-operation between Nalcor and the government in pursuing all of these opportunities.

MR. HOGAN: Is there any concern or discussions at the board level about if rates remain high, that people will leave the system for cheaper alternatives?

MR. PADDICK: Rate shock, as I think it's generally referred to, has definitely been a topic we've discussed for sure.

MR. HOGAN: Okay, and any options about addressing that discussed at the board?

MR. PADDICK: Well, one of the options, or I guess maybe one of the frustrations that we've had as a board is that we've – have felt that we've identified some readily available savings today, that we had proposed or we would like to propose that we essentially put into some form of an account so that we can draw upon those later so that we can minimize the shock from today's prices and, inevitably, what the final price is going to be.

And part of that frustration is that would need either legislative change, a directive from government or PUB blessing. And, of course, the PUB seems to be leaning towards I believe what the position of the Consumer Advocate is, is that those savings our consumers today – give it to them today and they should not be used to defer or reduce rates going into the future.

So that's a bit frustrating 'cause, you know, we're trying to find pools of capital, essentially, to help mitigate rates down the road and we'd like – you know, we don't see much benefit to reducing rates now only so that the rate shock is greater in the future. But I guess that's a difference of opinion amongst the parties.

MR. HOGAN: Okay.

So it's my understanding that there has been a report – it's called an elasticity report – filed at the PUB by Dr. Feehan, which would say – or which says that people will leave the system once the rates get to 14 or 15 cents, which is obviously much less than the 22, 23 cents which –

MR. PADDICK: Right.

MR. HOGAN: – is a range that the board has predicated or has analysed.

Has that number been talked about at the board?

MR. PADDICK: Never seen that report.

MR. HOGAN: Never seen that report.

MR. PADDICK: I haven't, no.

MR. HOGAN: Never heard that number in terms of the rate shock where people could leave the system?

MR. PADDICK: We've had numerous analysis presented to the board that's – that demonstrates where – various levels of where we think rate shock will kick in, and it certainly did suggest that it's at much lower rates than the 22, for sure.

MR. HOGAN: Would it be – what would it be? Was it 14 or 15, or was it (inaudible)?

MR. PADDICK: I think it was actually demonstrated in graphs so that it was a true-elasticity type of model. So to say exactly where it would be at certain points really wasn't the objective; it was to suggest that, you know, as rates increase people will drop off. And then if you assume that those left have to cover the costs of –

MR. HOGAN: Yes.

MR. PADDICK: – Muskrat Falls, it only –

MR. HOGAN: (Inaudible.)

MR. PADDICK: – it snowballs, right? So –

MR. HOGAN: Yeah.

MR. PADDICK: – that was sort of the gist of –

MR. HOGAN: Spirals I think –

MR. PADDICK: – the presentation.

MR. HOGAN: – is the term.

Were these graphs or analysis presented to you – were they internal Nalcor analysis or was –

MR. PADDICK: Yes, they were, yeah.

MR. HOGAN: They were. Okay.

So the mitigation options or possibilities that you discussed earlier this morning, do you know if you or – well, you would know if you did – have you or do you know if the board or anyone from Nalcor has met with the PUB to discuss the board's suggestions or findings, recommendations –

MR. PADDICK: Nobody from the board has – well, Stan may have, perhaps, but it would be in his role as the CEO as opposed to a board member.

MR. HOGAN: Okay.

And you don't know if he's taken the board's recommendations or options?

MR. PADDICK: I'm – our – they wouldn't really be recommendations; they'd be areas that would be – that we believe require additional investigation. Those have been delivered to government.

I believe the concept of ponding was presented to the PUB. It may have actually – I think what's tended to happen is that through the Newfoundland and Labrador Hydro GRA process, other rate mitigation initiatives have kind of muddied the water and managed to find their way into the discussion. So I think our – some – many of our ideas are known at the PUB –

MR. HOGAN: Yeah, I –

MR. PADDICK: – whether they were formally presented or not is another thing.

MR. HOGAN: – used the word recommendations; that's not fair.

MR. PADDICK: Yeah.

MR. HOGAN: That should've been the – your options.

MR. PADDICK: Right.

MR. HOGAN: What about meeting with the PUB reference consultants Synapse and Liberty?

MR. PADDICK: I personally, and no one from the board personally has, but I know they have met with Nalcor because obviously many of the inputs that go into their models had to come from Nalcor.

MR. HOGAN: Okay, thank you.

And I assume you're kept up to date on these issues, are you – on an ongoing basis, the board is?

MR. PADDICK: Yeah, it's pretty well a standing agenda item, certainly rate mitigation, you know. We – not only was – did the board take it upon itself that it is an important issue but we were directed by government to pay particular attention to the matter.

MR. HOGAN: Thank you.

I just want to turn to power certainty, particularly in the winter. So you would agree that that – the delivery of power does need to be certain, correct?

MR. PADDICK: I would agree, especially when we go to a single source or, for the most part, a single source.

MR. HOGAN: Okay, so that's what I want to talk about. When you say we go to a single source, what do you mean by that?

MR. PADDICK: Well essentially, I mean, it's a few years down the road but when Muskrat Falls becomes the primary generation point of power and Holyrood is shut down, the reliability of both the power plant and the transmission network is going to be of paramount importance.

MR. HOGAN: So you used two different words, you said primary and single source. I would interpret primary to be there's a secondary source.

MR. PADDICK: Well, there are other generation facilities around the province but obviously not of the size, you know, to back up Muskrat Falls –

MR. HOGAN: Back up Muskrat –

MR. PADDICK: – especially when you consider in the obligations to Emera and others.

MR. HOGAN: So you acknowledge then when we do turn to Muskrat Falls as the primary source, there is a risk that there could be issues in the winter?

MR. PADDICK: As there are now, yes.

MR. HOGAN: As there are now, correct.

MR. PADDICK: Yeah.

MR. HOGAN: So what is the backup plan if there's issues with the Labrador-Island Link in the winter?

MR. PADDICK: Well, first of all, my understanding is that the system has been designed to a number of nines, you know, as far – many – 99.99 to infinity almost of reliability, and that's obviously reflected in the cost of the project because, you know, it's been designed as being the primary source of power. The network – the Maritime Link does give us the option for the first time to import power and, of course, we have the recall power availability from the Upper Churchill.

So there's a number of other sources and I also understand that there's potential, you know, enhancement of some of the generating facilities that exist in the province but, you know, the simple answer is if it goes down, it's not a happy day, right?

MR. HOGAN: And it sounds like the maybe not so simple answer is there's no set backup plan as of (inaudible).

MR. PADDICK: No, I mean, I wouldn't be involved in what's the backup plan. I mean – right?

MR. HOGAN: Now you did mention that the Maritime Link can be used. Do you know if there's any certainty for the winter months in terms of getting power over the Maritime Link? And I guess by that, I mean are there any guaranteed contracts signed to ensure that we do have the available power if we need it?

MR. PADDICK: I wouldn't have knowledge of that.

MR. HOGAN: Okay.

Has it been raised at the board level, that issue?

MR. PADDICK: The technology attributes of the system have been raised, you know, can we import power, can we export power, can you do both at the same time, you know, what are the limits, how energy is marketed in the third-party markets, that sort of thing.

Certainly, importing power on the Maritime Link and transporting recall power from the Upper Churchill have been heavily discussed in a rate mitigation context, and from a technically possible context, and in fact we've done both so we know that, you know, technically it's possible.

MR. HOGAN: Just one more question or maybe a couple of more questions on the Labrador-Island Link.

Were you aware of any issues with transmission, and specifically getting 300 megawatts to the Avalon?

MR. PADDICK: I mean, I'm aware that there had been issues as we onboard the system, so to speak, none of which were overly – or were that big of a surprise. I do know that there's been some software issues with GE's platform that are causing concern, but I also know that, you know, over a period of time last year we had 45 megawatts or so transport over the Link, very stable, and then it was brought back down, they do, you know, more transitioning and the like and testing, so it's an ongoing process.

MR. HOGAN: It's an ongoing process.

MR. PADDICK: Yes.

MR. HOGAN: We're not at 300 megawatts yet –

MR. PADDICK: No.

MR. HOGAN: – in terms of –

MR. PADDICK: Definitely not.

MR. HOGAN: And on the GE issue which you raised, can you give the Commission an update on where that is?

MR. PADDICK: In layman's term, essentially GE's software has not performed as marketed, let's call it. We formed joint committees of GE and Nalcor and third-party experts to document and address the issues. We've embedded employees in GE's lab. Stan Marshall and others from the team have visited with GE on numerous occasions to address the issues, far more technical than the board would review.

But, you know, GE issues were identified as critical to the critical path, or key to the critical path, and have gotten the appropriate attention; in other words, very high on the to-do list or the issues list.

MR. HOGAN: Okay.

Now you mentioned the plan to shut Holyrood down.

MR. PADDICK: Right.

MR. HOGAN: Do you have timing on that?

MR. PADDICK: I'm not quite exactly sure, but I don't think it's 'til late 2022 or '23.

MR. HOGAN: Okay.

MR. PADDICK: It's not like at first power.

MR. HOGAN: So first power was –

MR. PADDICK: Well it's not at full power, I should say.

MR. HOGAN: The original schedule first power date has come and gone, agree?

MR. PADDICK: Agreed.

MR. HOGAN: And we've been through, I guess, the winter of 2017-2018 without the Muskrat Falls power, we've been through 2018-2019 without Muskrat Falls power, and now – well, I guess we don't know how many more winters we're going to go through.

Do you know how much money is spent on burning oil in the winter in Holyrood, or has been in the past couple of winters?

MR. PADDICK: No, I don't offhand. No.

MR. HOGAN: Do you know if this is built into the project costs?

MR. PADDICK: I'm not sure. I don't think it would be.

MR. HOGAN: You don't think it would be?

MR. PADDICK: I don't think it would be, but it may be.

MR. HOGAN: You were asked a lot about, I guess, expertise on the board. Do you think, perhaps, a representative for the consumer would be an asset for the board?

MR. PADDICK: You know, I don't want to leave the sense that somehow Nalcor and the board are operating in some vacuum where the consumers' interests are not first and foremost.

And I can tell you, perhaps, an anecdotal story of a message I've been trying to deliver and it seems to be getting some legs to it. And that's when I ran Columbus we used to have a policy where whenever we had a meeting – whether it was a committee meeting, two people, a hundred people – we always, before the meeting started, pulled over an empty chair, and we said: That's for the customer.

Because nobody in that meeting was the typical customer, right? I had two cellphones, I probably had every cable TV channel on my lineup, I had the fastest broadband speed and I never got a bill, right? That's not a normal consumer. A normal consumer was someone who got their bill, it was $30. They made a conscious decision; did we earn their repeat business? And what's my family going to do (inaudible) if I've paid that bill, right?

So I've encouraged people at Newfoundland and Labrador Hydro and Nalcor to do that same thing, pull over a chair before each meeting starts for the ratepayer. And it might only be a symbolic thing, but you would be amazed how many times people point at that chair. And, although that's just symbolic, I think it's – it does speak to the fact that the management and the board get that, you know, ultimately this whole project comes down to the consumer.

And, you know, I can recall when some board members – early on I think it was Jack Hillyard maybe – when we were looking at the budget going from $9 billion to $10 billion or thereabouts, the numbers were expressed to 0.1, right? But that 0.1 was $10 million, and he made the point that, you know, he took exception to the fact that we would report it as 0.1, because it just looks like a rounding error. And $10 million is not a rounding error. $10 million has a direct impact on the ratepayer and the consumers in the province. So I think we've conducted our business, to a large extent, with the ratepayer in mind.

THE COMMISSIONER: So does – just to take that a little further: Notwithstanding that, is there room for an actual consumer advocate or consumer representative on the board?

MR. PADDICK: Yeah, sorry, I never answered that part.

Yeah, I mean, I personally would have no problem with that. You know, if you go back, I don't know if it would've been as invaluable as a megaproject, hydro-specific asset in terms of a board member. But, you know, at the same time, the 11 people on the board are all consumers; albeit, maybe not the typical customer. But, I mean, I don't think there would be any objection to such a suggestion.

MR. HOGAN: Okay. I mean, there are people who have expertise in this area; not just because they get electricity bills. But I guess that's the point –

MR. PADDICK: Oh, sure, sure.

MR. HOGAN: You mentioned this morning that you looked at the Energy Plan to determine if the project should be stopped.

MR. PADDICK: No, what I said was the only time that I would've even seen the Energy Plan would have been in the context of we put to Stan and the management team – you know, one of our first questions was – we should look at all options including stopping the project.

MR. HOGAN: Okay.

MR. PADDICK: So, in the context of that, we would have seen some data on future demands and what the assumptions were that went into the model, that sort of thing.

MR. HOGAN: So did you look at and are you familiar with the Electrical Power Control Act?

MR. PADDICK: I'm not. No.

MR. HOGAN: So that speaks to policy of this – the government – to deliver power at the lowest possible cost. That's the mandate. So you're not familiar with it, which I guess I'm a bit surprised that you don't know that that exists.

MR. PADDICK: Well, I mean, if you – are – if you had to ask me: Are you familiar with the concept that –

MR. HOGAN: Okay.

MR. PADDICK: – it's our, you know, obligation –

MR. HOGAN: Lowest possible –

MR. PADDICK: – to lowest possible cost? I would have said yes.

MR. HOGAN: Okay. So was that discussed at the same time you were looking at all options on the table? And I guess the follow-up is whether or not this was the project that delivered the lowest possible cost.

MR. PADDICK: Yeah. So I also said that we never really looked back. So we looked forward. So our goal was to deliver the project from December 17, 2017, at the lowest cost possible.

I honestly don't know what all the other options were. I'm not aware of the analysis. I mean, you know, we were very much: Here we are at a point in time and how can we manage our way to the best possible outcome given where we are?

MR. HOGAN: Do you have something to say?

THE COMMISSIONER: No.

MR. HOGAN: So, Mr. Paddick, this is the last sort of topic I want to just go over with you.

You made a comment – maybe a couple of times this morning – about getting Nalcor back to a good place where people are proud to work.

MR. PADDICK: Correct.

MR. HOGAN: I understand that and the bullying and that kind of stuff you mentioned with the kids. I mean, that's, obviously, over the top and unacceptable.

But the Inquiry was called for a reason and you acknowledge that, yes?

MR. PADDICK: Sure. The project is over budget and way past its time schedule.

MR. HOGAN: Mistakes were made, do you acknowledge that?

MR. PADDICK: I'm sure there have been.

MR. HOGAN: Okay. Do you acknowledge your CEO called the project a boondoggle?

MR. PADDICK: I believe that's the Wikipedia page now.

MR. HOGAN: And that the – he said the project never should have been done.

MR. PADDICK: I'm aware of that.

MR. HOGAN: Okay.

So given those facts, I just wonder if you have any further comment on what you said this morning about bringing Nalcor back to where you think it should be.

MR. PADDICK: Well, you know, I – what I – part of what I was trying to say too was that, you know, Nalcor is now, you know, if you could draw it up on it – if you were to scribble something down, you'd go Nalcor with an equal sign equals a busted Muskrat Falls Project.

MR. HOGAN: I guess my point is there's a reason for that, isn't there?

MR. PADDICK: Yeah, sure. I mean it – we got a project that's, depending on what your definition of the sanction is, it's $5 or $6 billion over budget. You've gone from, you know, a projected low cost per kilowatt to, you know, from one of the lowest in Canada to the highest. Yeah, that's not a good project.

But, you know, I go back to my point that, you know, people inherently don't get up everyday and go to work and, you know, try to figure out how can they screw up today. That's just not how people are geared. And there's many, many people at Nalcor – who work at Nalcor who have a business card that's Nalcor, who have nothing to do with Muskrat Falls – never did, never will – who are wearing this, and that's not fair in my opinion.

And the vast, vast majority of people that we have been subjected to at the board have been very, very articulate, professional, dedicated, skilled employees who perhaps were sent off on a mission that there was no good outcome to. Not their fault, not their collective fault. And we – our board never really set out to judge the past. We basically said, look, let's go in with an open mind and evaluate these people as we – as they present to us, or we work with them on a regular basis and make our, sort of, call from there.

So I'm just saying, you know, back to the self-fulfilling prophecy, if nobody want's Nalcor to succeed, Nalcor is guaranteed – it's guaranteed Nalcor is not going to succeed. So if we want to get the best outcome out of this over the long run, at some point we have to turn all of our attention to helping Nalcor succeed, and wanting Nalcor to succeed. And to putting in place policies and changing legislation and whatever to set it up to succeed.

MR. HOGAN: Okay.

So I guess the bit more troubling part about what you said this morning was you did use the word naysayer in terms of, I guess, people who are criticising or being critical of Nalcor. And you haven't followed the Inquiry. I think you said you haven't watched a minute of it, but if you had to have been following it, you would've known that that word would've been used in the past for people who were opponents of the project.

And I would suggest that they were called things to quell public opinion. I'm sure they didn't feel very good about it either. And I'm wondering if you think words like that is a place where we should go back to? Because there's evidence clearly that these people were onto something. There was evidence at the Inquiry that PUB didn't think it should go ahead at the point in time when it had a review.

There was certainly evidence in the Joint Review Panel that there were issues with the project and maybe it shouldn't proceed as structured at that point in time. And these people probably felt the wrath that the Nalcor people are feeling today. And I'm not saying it's tit-for-tat or anything like that, but using words like naysayer, I suggest, is going back to somewhere where we were – it was probably not a great place.

So given that, and you recognizing that there are issues with the project, people are worried about their rates. I'm wondering if the board has ever discussed or talked about, or have you ever thought about, perhaps, publicly acknowledging the mistakes and even going so far as to maybe make a public apology?

MR. PADDICK: You're asking me if we considered that. I would say no. Not because we don't think that's not necessarily appropriate or justified, it's just we haven't considered that. That hasn't entered the dialogue, to my knowledge.

MR. HOGAN: Perhaps, maybe, you can bring it up with the board, but that's up to you.

MR. PADDICK: I'll take down your advisement, for sure.

MR. HOGAN: Thank you very much.

That's all the questions I have.

MR. PADDICK: Thank you.

THE COMMISSIONER: All right, thank you very much.

Nalcor board – Former Nalcor Board Members.

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

THE COMMISSIONER: Okay.

Dwight Ball, Siobhan Coady, not here.

Nalcor Energy.

MR. SIMMONS: Thank you, Commissioner.

Mr. Paddick, I just want to bring your attention to one document. You had been asked a question, I think by Mr. Ralph, concerning a letter that had come from Minister Coady in May of 2018 – and we don't need to go to it, but it's exhibit 04096 – and that was the one where she had asked if an investigation would be carried out into some allegations that were made in an anonymous letter that was received. I think –

MR. PADDICK: Right.

MR. SIMMONS: – you recall that. And I just want to bring up, please, P-04192.

THE COMMISSIONER: 04192. That one's going to be on tab 29.

MR. SIMMONS: So this is a letter from June 4, 2018. It's about three weeks after the letter from Ms. Coady. And can you just confirm that this is the reply to Ms. Coady's letter and it does report on the actions that had been taken in response to the request to conduct the investigation?

MR. PADDICK: Yes, it is. And there was also, I believe, attached to it – yeah – a copy of an internal memo from Internal Audit that –

MR. SIMMONS: Right.

MR. PADDICK: – talked about exactly how the investigation was undertaken.

MR. SIMMONS: Yeah. And the memo from Internal Audit was actually reporting on work that had already been carried out because a similar investigation and similar complaints had been made to Nalcor directly.

MR. PADDICK: Correct.

MR. SIMMONS: Correct. Okay.

Thank you very much.

No further questions, Commissioner.

THE COMMISSIONER: Okay.

I don't want to keep you, Mr. Paddick, but I do have one question for you and I'm – over lunchtime I was trying to think about how I was going to put this question to you and – in a way that it made it sound like it's part of my business as the Commissioner of the Muskrat Falls Inquiry to ask the question, so I'll do my best.

You spoke about the reputation of Nalcor, and you've talked about the need to sort of put on the jersey, to use your words. I'm not so sure that based upon what I've heard and based upon the media and the notoriety of this particular project, perhaps even – certainly throughout North America and even further abroad than that – I'm not so sure that it's enough for Newfoundlanders to get behind Nalcor.

So, I'm wondering, you know – and I also recognize at this stage that you are in a bit of a transition because the government is deciding how you are going to be structured. But I'm wondering if there's been any thought to developing a plan, because no matter what happens we still have, you know, certain resources that are available that we want to profit from, as a province. I'm wondering whether any thought has been given to a plan – to looking at a plan for not so much rebranding but at least looking towards the future with regards to getting beyond where we are right at the moment, as far as the outside world is concerned?

MR. PADDICK: Commissioner, yes, there has. In fact, the Communications Department at Nalcor had commissioned a couple of studies – at least one that I've had a chance to read, which was basically a market research study on public opinion. You know, some of these – some were sort of statistical in nature others were qualitative. I believe they did some focus groups and the like. All with the goal of – I guess you'd call it – changing the narrative when the time was right.

And Stan's – and to a lesser extent the board's – focus has really been about getting the project under control, 'cause it's very hard to start to change that narrative to a positive without milestones and some successes. And I think looking back now Stan has – particularly when he's giving his quarterly updates or any public updates, like the AGM – has tried to focus now on accomplishments as opposed to challenges, whether that's the completion of the transmission assets, the flowing of first power, the energization of Soldiers Pond and et cetera. And also focused on, you know, what's a pretty stellar safety record over, you know, a pretty lengthy project where – in, you know, dangerous conditions.

We're in a bit of a bind, in terms as a board, as to what the next steps are because we really don't, as you suggested, know what we're gonna look like. There's a very high probability that oil and gas will not be under the purview or the watch of Nalcor, depending on the ultimate structure decided. There's discussions about rationalizing the distribution and the transmission assets in the province. There's been discussions about breaking up Nalcor altogether and bringing it back as a department, perhaps under the Department of Natural Resources, so it's really difficult for the board to really move beyond the project focus into sort of what would be typically board strategic planning. We have tried to schedule a strategic planning session or two, and it seems to always get consumed by the operations of the day or the challenge of the day, largely with respect to this project and more recently with the spin-out of OilCo.

So, I mean, I'm not suggesting that everybody should forget what happened and just miraculously get up tomorrow morning and say, you know, way to go Nalcor, you know, good job. I'm just saying that if we continue to criticize at every level, regardless of whether it's related to a project that didn't go well or not, it's kind of a self-fulfilling prophecy.

It's like standing up – you know, to use the jersey, I guess, analogy – it's like standing up to take the free throw to win the game while in your mind you know you have no chance of making it. You're not gonna make it, right? If you get up there with confidence, you're gonna make it. And right now I think there's an awful lot employees at Nalcor whose confidence has been shattered, and it's gonna take a lot of coaching and encouragement and a few wins before they can get sort of that step – you know, that bounce back in their step.

It's a downtrodden organization. You know, that's been very taxing on people, and we're likely, when this project is finished, going to go through a pretty significant overturn of the senior team. So, the board would be very focused on making sure we fill those roles properly and making sure that we have – we select new leaders who understand that high on their agenda is to rebuild the brand of Nalcor, whether it's called Nalcor or not, but to basically rebuild the pride of going to work and the pride of delivering reliable energy to the people of the province and have pride in the fact that we could play a positive economic impact for a long time to come.

THE COMMISSIONER: So that leads me to my second question, which is again looking forward and dealing with a bit of this in phase three of the Inquiry, because not only do I see my role here as being a fact-finder with regards to the Muskrat Falls project but I also think that incumbent in my role is to try to assist looking forward.

So we have now what you have described as a downtrodden organization about to lose senior people, and yet we're entering into an extremely important phase with regards to the whole energy profile in the sense that Churchill Falls is about 21 years away. And I don't see whatever is going to happen with Churchill Falls happening on the last day of the Hydro-Quebec contract.

So how do you as a board chair and how does the board look at planning for the future about discussing and looking at the options with regard to what will happen in 2041? What – you know, I recognize your focus is on successfully completing this project, but I think there's much more to it than that, and I think you do, too.

MR. PADDICK: Yeah.

THE COMMISSIONER: And I just wonder, if it hasn't already begun, when is it going to start that Nalcor is going to put its mind to looking at the options for 2041, preparing for 2041, preparing the province for 2041.

MR. PADDICK: I think, I may need to take it in two parts. The first part about a new management team or a management team sort of rolling over, none of those will be exits because the board initiates it or –

THE COMMISSIONER: Right.

MR. PADDICK: – management will initiate it. They will basically be people who are likely eligible for retirement –

THE COMMISSIONER: Right.

MR. PADDICK: – and who are staying on through thick and thin to this finish largely as a – either as a matter of duty or as a matter of pride.

THE COMMISSIONER: Right.

MR. PADDICK: You know I got to finish what I started. That's a huge opportunity to basically assess the skillsets that we need for the next chapter and to go out and hire and put in place a management team that, you know, executes against whatever that strategy is, which is really part two of your question.

And I guess from a personal perspective looking at 2041, you know, every day it's – it kind of sounds silly to repeat it but, you know, every day that goes by is closer, as you say, to that day, and if the Upper Churchill is 53 or 54 or 5,500 megawatts and Muskrat Falls is 800 and some odd, well that means that Hydro-Quebec needs to replace or build six or seven Muskrat Falls in the next 23 years.

I would suggest that's almost impossible if they were to start today, first of all, just identifying and getting the environmental, you know, just think about the process to go through to get six or seven Muskrat Falls approved in the next 23 years. That's a pretty daunting task when there's 5,500 megawatts being generated up the road, connected into your grid already, into your back-office IT systems and everything else.

So I think every day that goes by puts Newfoundland in a better position and puts our friends in Quebec in a position where, you know, they have one less day to assess their options. And I'm not saying that, sort of, you know, pounding my chest, saying, hey, you know, we got the upper hand on you.

But what I think it does is, inevitably, there's a transaction to be done because it just makes such great sense for both parties. And if you're sitting down planning to essentially develop five or six Muskrat Falls and you're after seeing what Nalcor has gone through and you look at other large generation sites and transmission sites in Canada and see what they've gone through, I think you'd be pretty hesitant to say – to pull the trigger on, yeah, let's go build 500 – or 5,000 megawatts of power somewhere – generation.

So I honestly think it's – it was too critical to finish the current project the best we could, to look beyond it, but that once this project is on, we're going to have a new CEO, we're going to have pretty well a new management team. We may or may not have a new government. But it's going to behoove us all to sit down and really start working on a true strategic plan that addresses, you know, the next 50 years, really.

THE COMMISSIONER: To your knowledge, is the government involved in doing anything like that right at the moment?

MR. PADDICK: Not to my knowledge.

THE COMMISSIONER: Okay.

All right, good.

Thank you, Mr. Paddick, for your time. I appreciate it.

MR. PADDICK: Thank you.

THE COMMISSIONER: Step down.

So we'll take five minutes and –

MS. NAGARAJAH: (Inaudible), Commissioner.

THE COMMISSIONER: Oh, I'm sorry. Oh, I forgot you had redirect. I apologize.

MS. NAGARAJAH: (Inaudible).

I just have a couple questions, Mr. Paddick.

You mentioned during Mr. Budden and Mr. Coffey's cross-examination that Mr. Marshall is the board expert on megaprojects and power supply. Can you comment on how reliance on Mr. Marshall's expertise may or may not impact the board's role as an oversight mechanism?

MR. PADDICK: Yeah, I – if I had said he was an expert on megaprojects, I misspoke. I – he was definitely an industry expert. I'm not even sure Fortis has ever undertaken certainly a project of this size or any project that would qualify as whatever the definition of a megaproject is.

What I can say is that Stan showed great patience in trying to bring the board up to speed on the industry aspects that surround Nalcor. None of us came from, for the most part, from the energy background, from an electricity background. There were some oil and gas experts for sure. And, you know, there were various expertise, like, you know, Jack Hillyard in banking or several of the members with public policy development and things of that nature.

So I don't think Stan's, sort of, level of knowledge of the industry compared to the board was a big deterrent, and I think he was quite generous in his time and his patience to try and bring us up to speed. And I know there was some comment that it usually takes two years and Stan thought we gelled in one year. Well, you know, he deserves a lot of the credit for that because he took the time to bring us up to speed.

MS. NAGARAJAH: Okay. But you don't – but in terms of how reliance on his expertise might impact – him being a CEO and also on the board and the board relying on his expertise, how that might impact your ability to act as an oversight mechanism?

MR. PADDICK: Yeah, I don't think it proved to be some prohibitive factor in us still questioning a challenging and probing and wanting third party validation or how did you come to that conclusion. And I don't think Stan took it that way either, so, I mean, Stan's – you know, has been CEO of a large company before. He's very familiar with board dynamics and managing boards, and, you know, I think he handled it well.

MS. NAGARAJAH: Okay.

And my last question is, going back the letter with respect to the embedded contractors, which Mr. Budden had brought up – had gone into a bit of detail about. That last sentence there: "The costs associated with these groups for the LCP are currently running at 9.5% of total costs, but are forecasted to decline to 7% by Project completion." Can you clarify whether that's total project costs inclusive of financing or if it's the 10.1?

MR. PADDICK: I honestly don't know. My guess is it's probably exclusive of the financing costs, but can't be sure.

MS. NAGARAJAH: Thank you. Those are all my questions.

THE COMMISSIONER: All right. Thank you, Mr. Paddick.

MR. PADDICK: Thank you.

THE COMMISSIONER: You can step down.

And we'll just take a couple of minutes now to set up, and we'll bring on our next witness at this stage.

CLERK: All rise.

Recess

CLERK: All rise.

Please be seated.

THE COMMISSIONER: All right, Mr. Learmonth?

MR. LEARMONTH: Yes, the next witness is Dr. George F. Jergeas.

THE COMMISSIONER: Okay.

MR. LEARMONTH: Could Dr. Jergeas please be sworn?

THE COMMISSIONER: Okay, if you could stand, Sir, and place your – take the Bible in your hand and …

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

DR. JERGEAS: I do.

CLERK: Please state your name.

DR. JERGEAS: George Jergeas.

THE COMMISSIONER: Could you –

CLERK: Thank you.

THE COMMISSIONER: – spell your last name, please, Sir, for the record?

DR. JERGEAS: J-E-R-G-E-A-S, another way of saying George. So I am George George.

THE COMMISSIONER: Okay, you can be seated there, Sir.

So, just before you start, Mr. Learmonth, I just wanted to make mention of the fact that this witness is a witness who has been retained by the Commission, and in the circumstances, the way that I've asked that this witness be presented is that he – subject to his being qualified to provide opinion evidence, he would then basically give a presentation of an hour and half or less, and I'm gonna be very strict on that, and then we would be moving to questions from Commission counsel as well as other counsel.

So, Mr. Learmonth, you can begin.

MR. LEARMONTH: Thank you.

I'd first like to enter exhibits P-04101 to P-04104.

THE COMMISSIONER: All right, those exhibits will be entered as numbered.

MR. LEARMONTH: Yes.

And first I'm going to ask that Dr. Jergeas be accepted as an expert in the field of project management and that he be allowed to give opinion evidence on that subject during his evidence.

THE COMMISSIONER: All right.

MR. LEARMONTH: I'll first – that's what I'll be requesting after we get through this stage.

I'll first take Dr. Jergeas through relevant parts of his curriculum vitae, and that is Exhibit P-04101.

Dr. Jergeas, could you turn that up? That's in tab 1 –

DR. JERGEAS: Right, yeah.

MR. LEARMONTH: – of your book.

Could you state your present occupation and also the fields of work that you are involved in in addition to your academic duties?

DR. JERGEAS: Yeah. Thank you.

I'm professor of project management and the director of the Project Management program at the University of Calgary. I've been with the university for the last 25 years. Prior to that, I was claims and disputes consultant, worked for five years with a Canadian company called Revay and Associates Limited.

Prior to that, I was doing my studies in the UK. I did my M.Sc. and Ph.D. in construction management in the UK. And prior to that, I worked for a construction contracting company, so I have experience in construction and also in claims and disputes and at the university in research, cost overruns problems, delays, labour productivity – this kind of discussion. Team and team building, I have done some work.

Additionally, I do a lot of training in product management to organization and association. Like, we call The Association of Professional Engineers in Alberta, APEGA, and in BC, EGBC. These are associations of professional engineers and geoscientists. So I regularly teach them project management classes – different kind of classes – on regular basis.

MR. LEARMONTH: Yes.

And just turn to page 2 of the exhibit.

Could you provide some information on your education? You are a Ph.D., are you?

DR. JERGEAS: Yes.

MR. LEARMONTH: Okay. Just take us through your education, please, after high school.

DR. JERGEAS: After high school.

I finished Bachelor of Civil Engineering from University of Baghdad in Iraq in 1975. In 1983, I finished my master's degree in construction management at Loughborough University of Technology, and then I went back to work. And in 1989, I finished my Ph.D. at the same university – Loughborough University of Technology – and decided to immigrate to Canada, so I landed here on August 15, 1989, as a Canadian citizen here.

MR. LEARMONTH: Yes.

And your academic appointments are stated on page 2. Is that correct? Is that an accurate statement of your academic appointments?

DR. JERGEAS: Yes.

MR. LEARMONTH: Starting from 1986 to '89 when you were "Research Associate, Construction Engineering and Management Program, Department of Civil Engineering, University of Technology, Loughborough, England." And then you –

DR. JERGEAS: Yes.

MR. LEARMONTH: – you were also – just selecting one of them: "Adjunct" associate – "Adjunct Professor, University of Technology, Sydney, March 2003-February 2006." Is that Australia?

DR. JERGEAS: Yes.

MR. LEARMONTH: Okay. And then you came to Canada in 1996 and then you've ended up in your present position –

DR. JERGEAS: Yeah.

MR. LEARMONTH: – following a number of promotions at the university. Is that correct?

DR. JERGEAS: Yeah. Just a minor correction here. So I started at the University of Calgary in 1994. So, 25 years ago.

MR. LEARMONTH: It says 1996, that's a typographical, is it? "Associate Professor" –

DR. JERGEAS: No. These are the ranking.

MR. LEARMONTH: Okay.

DR. JERGEAS: So when I started assistant professor in 1994, this is day one, I started but as an assistant professor. I stayed assistant until 1996.

MR. LEARMONTH: Oh, I see.

DR. JERGEAS: Yes.

MR. LEARMONTH: Yeah.

DR. JERGEAS: And the adjunct professor, I need to correct that one. This is – I'm still with the University of Calgary, so I did not go and work in Sydney. But they call it adjunct professor.

MR. LEARMONTH: Okay.

DR. JERGEAS: Yeah.

MR. LEARMONTH: Now, just turning to page 6. There's – that's where the – your statements of your research contributions are stated. If you could just – and then carrying on page 7, 8, 9 –

DR. JERGEAS: Yeah.

MR. LEARMONTH: – 10, 11 there's – well, to the end of page 11, there's 53 references to participation in conferences and in writing scholarly papers. Is that correct?

DR. JERGEAS: Yes.

MR. LEARMONTH: Yeah. Are many – are some of these scholarly papers peer-reviewed?

DR. JERGEAS: Absolutely.

MR. LEARMONTH: They're all peer-reviewed?

DR. JERGEAS: Yes. Most of them, yes.

MR. LEARMONTH: Yeah.

DR. JERGEAS: In either journal or conferences, yes. And, by the way, this is not the complete list because I did not update the résumé. You see it stopped at the 2015 –

MR. LEARMONTH: Yes.

DR. JERGEAS: – the last one.

MR. LEARMONTH: Yeah. And you, I understand, regularly present papers and lead discussion at conferences –

DR. JERGEAS: Yes.

MR. LEARMONTH: – throughout Canada and in the United States as well.

DR. JERGEAS: Absolutely.

MR. LEARMONTH: Yeah.

DR. JERGEAS: And I get invited to speak – actually, I am supposedly in Florida – Louisiana, sorry, a conference that's AACE conference. It's happening as we speak. This week, I cancelled it because of that. I regularly go. An example, last September, I was in Chicago International Conference of Construction Lawyers. We met in Chicago, I was a keynote speaker there. In addition to conferences, I get invitation to owner organization, engineering organization; they ask me to come to their offices and I teach them and train them there.

MR. LEARMONTH: Okay.

In addition to the scholarly publications that I referred to, you've also written textbooks, have you?

DR. JERGEAS: I have written three books so far, and one chapter in a book will be published in the next month or two.

MR. LEARMONTH: Okay.

DR. JERGEAS: And this time it's collaboration with the University of Sydney.

MR. LEARMONTH: All right.

Okay, well we've got your – I'm not gonna take you through every word of your CV, it speaks for itself, but I'm gonna ask that Dr. Jergeas be qualified to give opinion – expert evidence – opinion evidence on the subject of project management. But before I do so, I just wanted to give other counsel an opportunity to question Dr. Jergeas, and I will point out that the – we have circulated to all counsel a list of your prior involvements with other parties to this proceeding. You got a copy of that, have you?

DR. JERGEAS: Yes.

MR. LEARMONTH: So you may be questioned on that –

DR. JERGEAS: Yeah.

MR. LEARMONTH: Or you may be questioned by other counsel on that or your qualifications. At that point, I'll leave it to other counsel to see whether there are any questions.

THE COMMISSIONER: Right.

So just before we do that, I think it's incumbent upon me to make a comment here. Obviously when we had – our purpose in getting a person to speak about project management was to provide evidence for the purposes of the Commission. And in doing so, as a normal course would be – we would be ensuring that we would be getting a person that would've had no involvement in the – or with those engaged in the Muskrat Falls Project.

And I'm satisfied based upon what I've been told, that in the circumstances, while Mr. Jergeas has had some involvement with some parties to this particular proceeding, it does not take away from his level of objectivity with regards to commenting on the issue of project management for the purposes of the committee – of the Commission, rather.

And it's also my understanding that when we learned of things that there has been complete disclosure given to all counsel with standing with regards to what we did learn with regards to any involvement that Mr. Jergeas might have had with any party, or alternatively with the Muskrat Falls Project in general. Is that correct?

MR. LEARMONTH: That is correct. On Monday of this week I arranged to – for all counsel to receive a letter with 12 attachments showing the prior involvement that Mister – Dr. Jergeas has had, so that if there are any concerns, they can be addressed at this point.

THE COMMISSIONER: And you've also advised me that, notwithstanding any of that, that you're quite satisfied that Mr. Jergeas can provide objective evidence –

MR. LEARMONTH: Yes, I believe that we now have full disclosure and I am fully satisfied and have confidence that Dr. Jergeas can speak completely free of any biases or preconceived ideas about the Muskrat Falls Project, or about project management I should say.

THE COMMISSIONER: Okay, fine.

Are there any questions from counsel present with regards to the expertise of Dr. Jergeas, or alternatively his ability to provide expert evidence to the – or opinion evidence rather, to the Commission? No?

All right, then in the circumstances, based upon my review of his transcript and what I've heard, I'm satisfied that Dr. Jergeas can provide opinion evidence to the Commission, related to the issue of project management.

MR. LEARMONTH: Thank you.

Now, just a couple of preliminary matters, Dr. Jergeas, the – can you advise how the mandate or scope of the work changed from the time that you were retained by the Commission in late February, up to the date there was a change in the scope and can you state your understanding of the reasons for this change in scope?

DR. JERGEAS: Yeah.

MR. LEARMONTH: Okay.

DR. JERGEAS: Yeah –

MR. LEARMONTH: Go ahead.

DR. JERGEAS: – thank you. Thank you very much.

The first question I received and I received a limited number of documents, and few question to look at. But very limited number of documents, this is a huge project, megaproject, and I have a list of the documents that I have received. And I stared reviewing it, but then we realized and Mr. Learmonth: realized that this is not enough, like, limited number of document to give a proper opinion about what happened to the project.

So he suggested and I agreed that we should change the mandate, and instead, I will look at and provide you with analysis of industry best practices of megaproject environment, and what happened on other projects. And despite that, I have reviewed some of the documents, and I have listed them, and I have – I can – if you have a question, I can respond to those as well.

MR. LEARMONTH: Okay. So – and there was a time concern, wasn't there? That you –

DR. JERGEAS: Yeah.

MR. LEARMONTH: – you wouldn't have time, so we agreed that we would change the scope so that your report would not deal specifically with Muskrat Falls –

DR. JERGEAS: Absolutely.

MR. LEARMONTH: – but more in general terms and –

DR. JERGEAS: Yeah.

MR. LEARMONTH: Yeah.

And –

DR. JERGEAS: Because I think you came and asked me in March, so this is the busiest time for any university professor –

MR. LEARMONTH: Right.

DR. JERGEAS: – and so I had to juggle in between, so time wise was not enough, even if you provide me with access to all document to review. So we agreed two things: Limited access is not enough, and then time to finish that, that entire document, would've needed another few months.

MR. LEARMONTH: Okay, thank you.

And I understand that you prepared some early drafts of this – of the slide deck presentations that you'll make today and there were some changes. Were these changes made completely on your own initiative or were they in response to suggestions from the Commission or anyone else?

DR. JERGEAS: No, no. No, you did not suggest anything. I usually, when I give a presentation, I draft the first one and change later the title, remove slides, add slide.

MR. LEARMONTH: Yeah.

DR. JERGEAS: So for example this, what's the difference between this version and the previous version, I took lots of material and put it in as an appendix, or appendices, now, instead of boring you with too much detail for the time being, but I can go to detail if needed.

So no, I made minor changes, like I changed the title differently now. That's it, I think.

MR. LEARMONTH: Okay, I just wanted to point that out.

Now, let's turn, please, to your presentation, which is Exhibit P-04102, and I'd like you to – this is not exactly like a lecture but it has some features of a lecture, so I'd like you to take us through the – your report, P-04102, and keep in mind that we've, you know, we've got about an hour and a half or –

DR. JERGEAS: Yes.

MR. LEARMONTH: So, we're not going to ring a bell at 90 minutes but –

DR. JERGEAS: I will try my best –

MR. LEARMONTH: Okay, do your best –

DR. JERGEAS: I have a –

MR. LEARMONTH: Then you can take questions from counsel, which I'm sure will take more than 90 minutes or it may – so let's start now.

DR. JERGEAS: Yeah, thank you very much, and I took note of the time and I will stick to my time.

So I thought I will show you what happens in industry on megaproject, what happened before, all documented, all referenced, and so I called Analysis of Industry Best Practices. So I'm going to provide you with this analysis.

MR. LEARMONTH: Okay, go ahead, please.

DR. JERGEAS: Yeah, thank you.

And this is my agenda, and I will not bore you with the detail; we'll see how we go there. This is my brief description: Who is George? And, as you can see, governance, cost overrun, construction productivity, team building, contract administration, dispute, and training and coaching, this is what I do.

So far, I have developed – co-authored three books. The first one you see – look at the title *Beyond the Myth of Predictability*. Myself, Dick Westney and two Norwegians – one a professor and one from industry, those Norwegians – we worked together and we thought it is a myth to predict the outcome of megaproject – it's a myth – with accuracy. You can't anticipate what's going to happen. No matter who we are. And that's book.

In the second book *Benevolent Dictatorship for Major Capital Projects*, this is the only book – and feel free to google – written for executives and leaders and managers of major project – and thin, tiny little book, written in simple English, short and crisp and to the point, and talking to the leaders. What do they need to do to manage megaprojects? If you go to any MBA program on the planet Earth, I don't think they teach executives how to manage megaproject, how to handle megaproject. Not all of them will come from engineering and construction background and, most of them, they do not come from engineering and construction background. And they are the VPs and CEOs of the companies.

So this is written for them. Why I called it dictatorship and benevolent; somebody who makes decision on behalf of the organization but has a good heart, complies with law and ethics and moral obligation so they can deliver project and empower the team to finish a project with good decision in a timely manner.

The third project we just published in April. This is a collaboration with colleagues from Norway, specialized in risk analysis and I will – you see – I will quote some of those later. And this is a little bit – paragraph – talking about my naming some of those companies and I bet I missed a few of them. So, get out of it.

But before I start my presentation, and I have involved in investigating mega oil sand projects in arbitration cases, worked with teams trying to figure out what happened. So I investigated those. Although I am a civil engineer, I'm not in the industrial sector but I looked at document – complete set of document from contracts, drawings, specification, correspondence, then I had the shock of my life what I saw.

So – but I saw one thing and let me – and this might – most likely applicable to the Nalcor project as well. "No major problem re quality, safety, and regulatory." These big project, they are hard-working people, try their best to do – to comply with regulatory, safety, quality.

"Projects running in excess of design capacity." Like in Alberta, if you go, most of these projects are producing more than their capacity. They are making lots of money now. So now after all this cost overrun, are they successful projects or failed project?

I did not find any unskilled or unprofessional conduct. And I am very proud of industry achievement, but cases like this one, the cost overrun made – makes me sad as well. The hard-working people and now we are questioning: Did they do a good job or not? And that – I have mixed feeling inside me: one I am proud of them and one of them I am so sad – a little bit. Why is this happening?

Hopefully today I will share with you a few things that it will provide a clarity for all of us here in this room and maybe provide solutions for future because the past, on this project, already gone, whatever is done. We can't change anything. But what we can change, and you have a great opportunity, what we can change is document lessons learned, a recommendation for future project so that this case will not be repeated. Unfortunately, it will be repeated and I will show you why I mean that.

So "I acknowledge the effort by project participants from all organizations involved in the Muskrat Falls project. These people had to deal with challenges in project planning and execution such as geography, climate, investment, fast completion, and other factors, both internal and external to the project."

So these people, and any other megaproject, they will deal with big issues, big risk, different risk. They can't anticipate all of them no matter who they are. They can't anticipate it, but some of it within our control, some of it outside our control. We have tools, this is why we have the contingency discussion that I'm going to work with you on it. And – but still, geographically removed, cold, thousands of workers need to accommodate them, need to transport them, need to feed them, need to give them the right information at the right time so they will be productive. Proven not easy; a big challenge. So I really want to acknowledge that.

Another thing, my guiding principle today and every time is try to simplify. You being – I feel

– for you becoming expert in megaproject yourself since I think, I understand, since September you started. You've seen a lot – this is mega. You are in the megaproject environment, too many silos, too many explanation, too many people. We need to simplify it. We need to simplify the message.

What is it that happened? If I am proud of those people and they have done the best they can do and they – by the way, and let me finish this one – they applied industry best practices. So if you ask me – one of you ask me a question: Did they apply industry best practices? Based on the limited document I have seen, yeah, I saw the project charter, I saw project execution and plan – two version of it – and process and procedure – they applied it. So somebody will ask me: So what went wrong? And I hope I will give you an answer to this one. So please simplify. If you read this one, except the last bullet – don't read that one.

So my mandate – my current mandate is (inaudible): "Provide an analysis of industry best practices in delivering mega capital projects based on my research, teaching and work experience.

"My presentation is NOT an analysis of the performance of the Muskrat Falls Project."

What is my objective? To "Present the big picture and explain the complexity of mega projects." So I have a few slide – I know it's afternoon and I will go easy and I am happy to go in any detail you want to go with me. I will go there. But I will try to simplify. But it is complex and I will show you the contractual complexity, the silos, all of that together.

I'm going to "Challenge some long-held ideas and best practices." Today I am challenging the best practices. I've been doing this for many years and if we – as industry and community, if we do not do something differently, we're going to repeat the same thing. We're going to repeat the same thing on the next project. And I'm going to "Focus on lessons to be learned." I could not say lessons learned, because we – based on industry practice, lessons learned are not learned. Lessons learned – lessons learned, they are repeated. So let's call them lessons to be repeated. (Inaudible) this Commission and this recommendation of the Commission is going to focus on this and people will take it and implement it. And this is my hope.

I definitely look forward to the findings of this because I'm going to teach it in my classes. I'm going to ask even, maybe one of my Ph.D. student to work on this one. It's – great lessons should not be lost.

So, very quickly, the characteristics of megaproject, and you've been exposed to too many people so I feel for you. Now I'm (inaudible) – repeat. So I will do my best to go as quickly as possible, Mr. Learmonth, as quickly as possible, so I will not be boring everybody with similar information.

You know megaprojects are complex and difficult to handle despite best effort. They – we have seen big disasters on megaproject across the globe, and cost overrun and delays. The variation between what they approve and what they actually deliver on what's there. And I am not surprised. The next megaproject will cost – will have cost overrun between 50 to 100 per cent. Unfortunately, I say this.

Even I had a challenge in Alberta. I went to a new – brand new project and said take me – let's play a practical joke on your team and say this is George, going to I tell us – going to talk about lessons learned. I say, good morning, everyone, I'm going to talk about lessons learned. And the project team will say – stop me and say we haven't started yet. Yes, you haven't started because you're going to learn the same lessons that we learned earlier before. So this Commission has the best opportunity to have an impact across Canada and the globe. Honestly, and I mean it. It's not a Newfoundland and Labrador issue. And this is why I said I'm not surprised. We're going to benefit from it.

So characteristic: billions of – in capital project investment. Thousands of workers: engineers, suppliers, contractors, owners. Let's give you an example of thousands of workers. In Fort McMurray – okay, where's Fort McMurray? Remote in Alberta. On megaproject, you would have, let's say, about 6,000 workers. Six thousand workers, think about transporting them from wherever they come from, including Newfoundland. Planes, airports, hotels, accommodation, camp, feeding them, transporting them every day back and forth from work to – from accommodation to work and all of that thing. Just the transportation logistic is a project. They were on a project; they were running buses bigger than – more buses than the city of Calgary busing system on one project.

I didn't talk about engineering, bad engineering, good engineering. I didn't talk about scope. I didn't talk about missing pieces and bad decision or wrong decision yet. Just think of – you bring the worker – I talk to workers. I did a study in 2002 on labour productivity. And I have the report and I will leave it here with you when I leave. And it is – you need to provide the workers with the right equipment, right tools, right machines so they can be productive. And so it is – this is the complexity, is – the size is the biggest complexity. Once it goes big, too many moving part, too many players, too many silos, making decision on one silo, affecting the other silos. It is complex. Somebody needs to be aware of it; somebody needs to be careful.

Extreme complexity, lack of predictability and increased risk. There is no predictability in these big animals. Some risk outside the control of the project management team, and even the executive level. We'll talk about that in detail, but I highlight it in red. There are environmental and regulatory and community impacts and consultation. We need to do a great job in consulting with the community, with the regulatory, government, different organization, and it's not easy again. Interface management issues between the many players I talked about. Labour availability and labour management issues, I call it. I don't call it labour productivity; it is labour management issues. High visibility, and in most cases, cost overrun that exceed the approved budget. It is high – like, this project in question, high visibility. And it costs more than what we approved.

This is a picture, a photo of a project, a successful project – financially, now, successful because they were lucky oil prices went up. And – but look at the complexity, how many pieces of equipment, different sizes of equipment, how many crane you see. Each one of them is a contract and contractor and subcontractor and thousands of workers. And some of it's fabricated, prefabricated, this unit somewhere in Edmonton, and somewhere else and maybe outside the country. As well, designed by engineering houses, US, American companies, firms, subcontracting in India and all of that. So this is the complexity. Please, when it is this complex, expect what I just said: the cost overrun between 50 to 100 per cent. Nobody should be surprised by it. This is a picture or two, just look at this. Four hundred ton, empty; 400 ton load. Look at the scale. It is huge.

We systematically do not deliver on time and on budget. There is no – not a single actor. We need somebody in charge, a benevolent dictator in charge, who is highly qualified, a good leader, who knows what to do. It is delivered, this project, by a network of private and public entities and stakeholders. Look at this project, how many hands in it?
Difficult compromise is needed to achieve consensus between stakeholders.

The scope keeps evolving. That's the problem, another one, and I will explain what I mean – keeps evolving. We start with something; we don't know what. We start with – we don't know what. We start with an idea. But with the idea comes a number, and then we – this idea evolves and evolves and we stuck with the number. I will get back to it.

But we tend to be fixated on the original budget and expecting cost won't increase. Please anybody – and hear me in the future, as well. Please expect the scope will change. I'm talking into a microphone now. Expect the scope will change on any project: build – develop your basement, build a new house. The scope will change. So professionals should expect the scope to change, to be added. Some of the changes – oh, okay – are needed, and new technology just appeared in the market. Actually in my third book, we called it risk and opportunity. Risk is a bad, the negative side: what could go wrong? There is a positive side of it. A new technology just appeared in the market that improved something, enhances something. That's good, include it. But we are scared to do it, to do anything now. So, expect change.

It's not easy when people are judged based on the estimate, the AFE budget, versus the actual. The difference is always looked at as cost overrun. So it's difficult for people to explain it as if it's not incompetence. Some of it is incompetence; some of it is not. Some of it may be underestimation, maybe unforeseen event that happen, didn't happen, didn't anticipate. There are lots of things. But next time we plan a project, we need to anticipate all of this; we need to account for all of these and we go and inform everybody that we are in living in unpredictable environment.

Take a plane from Calgary to Norway and see what could happen? And it happened to me. I knew I will not worry. They do this plane thing: Calgary, Toronto and – I don't know what – Copenhagen, Stavanger, okay? One day, anything could go wrong happened to me, both ways. Yes, you can – you still – and most of the time it won't happen; it does. Unfortunately, we need to account for this. If we do not account for it, and Murphy's Law applies here, we are going to have difficulty explain it. We can't explain it.

Success is usually just on the gap between initial budget and actual performance. Success has been difficult to achieve despite industry best effort and this provide greater challenge to executive.

I did a study. I went to executives: Executive, how confident are you? And everything, I said, report and I have the reports with me, if anybody interested. And I said: How confident are you in your organizational ability to deliver your next megaproject? They are not confident – they are not confident.

Now, we have a problem, if you look at it. Canadian economy and professionals, we need more of these project. The livelihood of lots of people, engineers, contractors, owners depends on just how efficient we are. So we need to go to the root causes of the problem and resolve them; otherwise, you're going to repeat the same thing and then another commission for another project.

Investor lost confidence, nobody is investing here. So they go – instead of investing in Canada or Alberta, oh, let's go to India and somewhere else. Blame each other. That's the trend. We blame each other and you'll find we're not – we need to find a scapegoat and litigation between all these players – what happened and we blame each other, while we can help each other work collaboratively with each other by focusing on: What can we do to help each other.

And we are a nation loves hockey and hockey is a team play and we need to start playing hockey. What does it mean to play hockey? We have a team, different roles for each one of us. Number one, once you drop that puck, nobody knows where the puck is going to go. Only Crosby knows, the rest of us don't know. So what we need, we chase the puck, we modify the plan. This is – please, I'm happy it's recorded. I'm happy it's recorded.

By the way, one of the question Mr. Learmonth asked me one day: Is there any difference between privately and publicly funded organizations, if you remember that question. And there's no difference. We – on megaproject, we are the same, IE cost overruns still happening on private sector project as well. Private sector project are not more efficient than government sector. Just go and see those private sector organization deliver megaproject.

Literature is flowing with papers about repeated global cost overruns and delay. And I have an appendix where we looked at what's other people saying so I don't need to rely on myself. What happens? Well, we have documented papers saying causes, causes, causes and I have references, references for all of it. All of it's here for you.

You don't need to go to causes anymore. You don't need to investigate. And then we asked another thing: What do you suggest to improve? And we have suggestions and improvement. And these causes and factors extend across all phases of project, from development through to execution and completion.

So, for example, this is a paper I published in 2008. And, Mr. Commissioner, this is a paper I wrote and published and – with a journal called PMI journal, Project Management Institute, and only me on that one. It was based on big investigation of oil sand project in Alberta. And I did the analysis and to my surprise, I got shocked to see what happened. So, today, I summarized it in appendix, as well, for you.

So, if you go, I will now take you to that one. I'm happy to go there, Appendix 1 and exactly what are the causes. I usually – if I click on my computer, it will go there. Let's see if happens. Yeah, I think it did.

You see, I took you now to Appendix 1. This is Appendix 1. And just quickly and realistic and overly optimistic original AFE, the AFE number that – what's AFE? Approval for expenditure – it's wrong, always wrong.

MR. LEARMONTH: You're talking about the initial AFE, right?

DR. JERGEAS: Absolutely.

MR. LEARMONTH: At the time the project was sanctioned?

DR. JERGEAS: That's what – approval.

MR. LEARMONTH: Yeah.

DR. JERGEAS: They call it approval or appropriation for expenditure.

MR. LEARMONTH: Right.

DR. JERGEAS: And some company call it final investment decision – final. Okay, final. That's the budget. Okay. If I am surprising any one of you, it's wrong. We'll be wrong every time – please.

Now, why it's wrong? All of it and realistic and overly optimistic AFE, and I give a lot of reason – I'm clicking through them: Incomplete scope definition – which I'm going to (inaudible) back again – incomplete scope definition or inadequate front-end loading and poorly completed front-end deliverables, including milestone schedule slippage. I will talk about those as well. Strategies chosen and selected, which is fast track – and I will talk about that one and so on.

And I'm going to – if you don't mind, I'm going to talk – take you back to the original where I start. Oh, sorry, I can go –

THE COMMISSIONER: Page 19.

DR. JERGEAS: Yeah. Page what, sorry?

THE COMMISSIONER: Page 19.

DR. JERGEAS: Page 19, yeah.

THE COMMISSIONER: Can I –

DR. JERGEAS: Sorry (inaudible).

THE COMMISSIONER: We can actually get the Clerk to take it back to page 19.

CLERK: I can (inaudible).

DR. JERGEAS: Page 19? Yes, please. Thank you.

And so, like this slide, if you see it in front of you, all these numbers are references of publications of other people said similar thing. So – and this is why I say no surprise.

Okay. Thank you very much.

Now, let me take you to the Gated process and I go – take you into the problems. What are the problems? I picked Chevron Gated process. And, by the way, these are the references that I rely on this section and Chevron define it as: "A process that facilitates the optimal use of resources (dollars, people and technology) over the life of an asset or project to maximize value."

Somebody will ask: George, why did you pick Chevron methodology? This is the methodology that was used on this project. The Gated process typically used in the oil and gas industry, you name them, I – one of my version, Mr. Learmonth – one of my version, I picked Husky as one and Chevron one and Suncor one and Penn West one – all look the same. Phases – phase 1, 2, 3, like, they look like this. What's the difference? Names. Phase 1, they might name it differently than the other, so – and this project used this one. So this is industry best practice.

So let me explain it very quickly because I know now you are familiar with it. In phase 1, people and the owner organization – in this case, Nalcor team and government or whoever – they will discuss the feasibility and assess the opportunity: Do we need this project, why do we need it, why this project is important? And by the way, they developed – Nalcor team – an excellent document called project charter. Have a look at the project charter, please.

It has the big vision of the organization, what the organization is looking for or where they are going – the vision. And so somebody said, yeah, I think we need this project. You open – you see this number 1, 2, 3 – Gates. You open the Gate and satisfy yourself – there is Gatekeeper, people who ask right questions supposedly. And then you say, yes, I think we have a good project, let's go to phase 2.

What is phase 2? Simply say: How would we implement this process, this idea? It started with an idea. What alternatives do we have? Alternative one, two, three – generate as many – as much alternative you have.

At the end of phase 2, we pick an alternative and it becomes the solution. Are you with me so far, please? So phase 2, we pick an alternative. Every time they do a little bit of guesstimating – estimating – it's guessing. This is where they stuck, my colleagues in industry. They have a number now. But we should not have a number; you should have a wide range, but there is a guess estimate.

Then they go to phase 2 – another estimate. Now we approved the project – sorry, we selected the alternative in phase 2. This why they call it phase 2 select. Then open Gate 2 and go to phase 3 and develop the preferred alternative. The one you selected – develop it more, more engineering. In this case, they call it front-end engineering and design. This is the acronym FEED, front-end engineering and design, which as some of us will call it, conceptual design, which is, according to many organizations like Chevron, about 25 per cent, Mr. Learmonth, engineering done – 25 per cent engineering done at this phase.

And they will order long leads. Like, if I am going to fabricate something, buy some equipment, they are not ready-made that I go to RONA shop and buy it. I need to order it in advance but based on 25 per cent engineering. I want you to keep this number in your mind, 25 per cent, because I'm going to tackle that one in a minute.

And they get the regulatory approval. They have to get the regulatory approval. And if they don't get the regulatory approval, the project cannot proceed into execution. So if you are watching the news, maybe the Trans Mountain pipeline will get the approval today – probably it did, I don't know. So without that approval, we cannot start construction. It doesn't matter what number is regulatory approval here.

Then, that's the AFE, now we approve the project. So phase 1, 2, 3 is the front-end planning. Front-end planning 1 – FEL 1, FEL 2, FEL 3 relating to phase 1, 2, 3. After the AFE in (inaudible) Gate 3 is implementation. Phase 4 is execute, which is detailed engineering, procurement, construction.

So now, we approve the project and we announced it to the public. It is whatever number is – $3 billion, let's say. As soon as they say $3 billion, I say, oh my God, it will be 6-plus. Why I'm saying this – watch this and I'm going to hone this. I'm going to ask you a question – what is the percentage of engineering done based on this; 25 per cent? Quarter-based engineering will never be enough to give you the predictability at the end. I said it many times, I'm saying it now, it's recorded. If you check my YouTube, go Google my name, you see a presentation in Edmonton similar to this one and I say exactly the same thing, but there I was funnier.

Okay and we do detailed engineering after approving the project. We approve the project and say this is the number, and, by the way, let's do more engineering. So for this project, check what happened to the quantities between the approval and after they finish detailed engineering when I have the contractor. If there is a sharp change in quantities, I rest my case; 25 and 40 per cent of engineering not enough – absolutely not enough to give us that predictability. That is one of the root causes of the problem on megaproject. If we do not tackle this one, we're going to have a problem. Let's see what happen.

Madam Clerk, did you lose – I lose – I lost my control. Yes, thank you. This is another slide of the same thing – give you more detail. But it shows you that 25 per cent of engineering and they have – they give themselves accuracy of 10 minus – plus-minus 10 per cent. So, according to Chevron, if their team comes within 10 per cent above or below the budget, that's okay, they anticipate that. But on major project, the best of those people could not achieve that, they go beyond. Many things going to happen, I will talk about them: scope change, risk and anticipated risk not included in the contingencies. They forgot about it, all of that, so that number.

Okay, probably people refer to this AACE process industry estimate classification, so you'll see it twice here in my presentation. If you look at Gate 3, AACE Class – estimate Class column, stage 3, which is Gate 3, they show level of project definition between 10 to 40 per cent. So that's what they recommend. And if you go way further, typical contingency, they say put 5 to 15 per cent.

Okay. First, this is bunch of good estimators based on their experience. They put this, so it's not gospel, it's not the Bible that I just put my hand on. It is – this is a human being trying to figure out how much we put. So these are good estimators and I respect them, but I don't think it works on megaproject. It didn't. It did not work.

Level of the schedule, what – again, Mr. Learmonth ask me: What tools did they use and is that consistent with industry best practices? Yes, this is industry best practice. So do we have a CPM schedule, do we have detailed schedule? Probably they have done that, but this the industry-recommended schedules.

So the first phase 1, 2, 3 – these are the three phases. The first of three phases, they call it front-end loading or FEL. That's my definition. And I have seen on my – in my investigation from industry practice, considerable amount of work to scope the project, select technologies to be used and present a business case; lots of work done, including this project, lots of consultant, contractor, subcontractor. The best of brains in North America been used – and in Canada. And lots of time spent on what the owner wanted to do, how much it would cost, what's the economics and investment would be, what are the risk: all of that thing. I bet they have done a good job and they did. Did they miss anything? That's the issue.

Project document; good project document, we have, in any good project, two major document I will alert you to. The project charter, the high-level strategic document – and I touched on it a little bit – it's a guiding principle for this. What are we doing? What's our goals, objective? Why are we doing it? I would've included in the project charter of Nalcor, success criteria. How do we – how are we going to measure success? How are we going to measure success? If you measure success – if you don't have it, your success will be measured on cost overrun, in the absence of criteria. Did we deliver the business objective?

Project execution plan, the other – this is the most important document. We, the team, if we approve the project, this is how we going to implement. And we will have discussion on estimate, on schedule, on risk, risk analysis, benchmarking, there are lots of consultants helping – will help, estimate – I said that – contractual strategies, procurement strategies, construction, labour: all – a big list. And I have seen the project execution plan and I am impressed what the content and – the table of content of it. Now, what I am talking about – this sub-bullet, let's talk about the sub-bullet. "To achieve a level of accuracy of the estimate of (+/-10%) at the end of the project, industry needs more than AACE's 10% to 40% or Chevron's 25% engineering completion."

That, if I am recommending something, this is one of them. Please, that's not enough. Now, people will ask me maybe: How come they don't do that? Why then they do – they – why don't they wait until detailed engineering is done and then approve the project? Owner organization reluctant to spend the money on more engineering and the project could be rejected, not approved.

So that's a dilemma industry has. Industry, our community – when I say community, it's not these just professional project management people and engineers and consultant and contractor and sub-contractor; it's us – all of us – community shareholders, stakeholders, politicians, community. We really need to say: We need to have a better design, better scope definition.

We know – we need to know: What are you building? And that will not happen without detailed engineering, which unfortunately in this case is done before – after the AFE, after we approved the project. And I hope I delivered the message clearly now. My recommendation: “Strive to have ~80% engineering design completed before mobilizing to site and 100% engineering design completed after site clearing and mobilization is completed but before the start of construction.

“If possible,” then “issue final approval of the project budget after the completion of detailed engineering.” So I’m going say this: You can start with an AFE and say, guys, there are many things could happen here, but this is a preliminary AFE and we’ll come back after we do detailed engineering and we’ll tell you the full number – exact number or give them a big range – big, huge range.

Industry will need to play a little bit more careful, stay more careful. “The AFE amount should be changed/adjusted; otherwise it will be seen as cost overrun.” Why do I say this? Why 80 per cent? Okay, without boring you, we’ve done a study in – and published in 2014, June. And COAA, C-O-A-A, is the Construction Owners Association of Alberta. My team at the University of Calgary and CII, another great organization, called Construction Industry Institute – so we did a bench marking study of American and Alberta project. One of the product is that if you get to 80 per cent to 90 per cent engineering, it is the least-cost overrun of cost increase, around zero almost – construction cost to growth, if you look at that. So, that’s one – one study.

We repeated this in another study with the same players, and we just published it in May 2019. And I have, by the way, the reports with me. Anybody want it, you will save me the weight of taking it back. And you see, I put, stuck the two lines together and the red line is the new study, Report 3; the blue or black line is Report 2, the trend. And both are saying look, George, between 80 to 90 per cent is the best for us to control scope change.

And there are a third study, I will not refer you to it how I got the 80 per cent. If you buy a house, what do they say? Have a look at these advertisements, what do you see in common? Let’s look at this one, the $299,000. The house is not $299,000; it is single-family home starting at $299,000. They are better than us, starting. And they say okay, what do you need, carpet or marble; what type of kitchen cabinet; and this $300,000-plus will be $400,000 like that. We haven’t started yet. But when they advertise, that’s the minimum.

If I have time, I will give you another analogy which is the SUV analogy. You want an SUV, okay, much is it going to cost, if I ask – I own – I need an SUV, how much is it going to cost? There is a wide range. Start with RAV and GM and Ford, all the way to the luxury cars. Okay, which price I play, pick a range 30 to 150, then phase – this is phase 1; phase 2: alternatives.

Pick them all and they say you know what; I’m going to pick Mazda. Oh Mazda, then $30,000 to $40,000, another range. What kind of Mazda and then a GPS and stuff like that. This is what we need to communicate with our people. If we don’t do that, we are going to fall in that trap, when we give a single number. Single number, please, industry, if you are hearing me, do not ever give a single at the early stages. It’s wrong, nobody knows.

So another section, Mr. Learmonth, if you want, I will talk about the tunnelling concept and decision planes.

MR. LEARMONTH: Yes.

DR. JERGEAS: Thank you.

MR. LEARMONTH: You’re welcome.

DR. JERGEAS: This is in my second book, with the Norwegian guys and Dick Westney; we sat together and we said: What is happening here? We realized that when we go through the life cycle of project – now you see this: Feasibility; Pre-FEED; FEED; Execution – different way of naming phases. Don’t worry about it.

And at the start – uncertain. And what happen is we’re going to go through a tunnel – tunnelling vision almost, and we neglect the source of uncertainty outside the plan itself; we are so focused on the plan, on concrete and excavation and we don't see the outside world and what's going to hit us. And that – we look at the project risk or operational risk and we don't see the contextual risk and strategic risk that could hit the project.

Okay, George, explain this more. These are explained better here in this graph and you see these black ducks – Black Swans; we call them: strategic and contextual risk are considered outliers. Considered outliers but they could hit our project. If the project is unlucky and hit by one of these Black Swans, that's it, you're done. If you don't account for them they're outside your scope of work; your scope of work is the tunnel but you did not include the outside. You see, I bet this project team made lots of assumptions, this is not included, this is not included – okay, somebody should have asked: What if they happen? They're extra. Okay, where do you get the extra from?

That's the problem with the budgeting system we have. We need to go and say I have budgeted for everything I can figure out based on Black Swan, white swan, any swan; all of them included and then let stakeholder to decide to go ahead, not to go ahead.

So what are these – this is one. The other one – we – the brain of the owner organization – think about it, open the brain and you will see four planes. I will call them decision planes. The first two: Financial and Commercial and the second Technical and Execution. Let's call the first two the business side, let me simplify it, and the other one is the technical and execution side. And we could make decisions in one plane and affecting the project team on the other planes. Where is the project team? It's actually the execution, the last one. And the commercial and financial is the biggest influencer of this project cost. Like, for financial reason, we decide on one completion date, for example. Let's talk about this one. I'll give you an example: decision to fabricate in Korea.

We had a project – megaproject, and senior management said we will fabricate in South Korea. Great, South Korea's a great country, good construction and fabrication experience, and these modules will be delivered to Fort McMurray. Okay, where is Fort McMurray and where is Korea? There is a big pond in between, okay? But somebody made decision. What is the decision? Financial. It's cheaper to fabricate in Korea than fabricating in Edmonton. Great. Good decision. If you are the project manager, I will say: Congratulation, you are the project manager of this project in Fort McMurray, and by the way, you're gonna receive the modules from Korea. What do you do? It's already done, that decision is done. Guess what happened. They send the modules to – by ships to a port in the US. They unloaded the modules and what happened? One or two states in the United States – Idaho and Montana, I don't know which one – and they said: No way you can take these monstrous big modules on our highway! What? Already delivered, multi-billion dollar project equipment. They had to cut them into pieces, put them on smaller trucks, drove them all the way to Edmonton, welded them in Edmonton, then took them to assemble them in Fort McMurray. If you are the project manager, already cost overrun done for you, before even you started.

Company accepts unrealistic completion date. Like, the owner says, can you do it by December 15? Which is, probably unreasonable, whatever the project, think of any project. They give you unreasonable – from a practical, unreasonable deadline from a practical point of view. Practical is not reasonable, but from business point of view, it's needed. I need to do the Olympics. The Olympics gonna start in 2020. The deadline is then. I want to send my iPhone before Huawei, okay – to the market. There are good business reasons. Now, how – these good business reasons – or bad reasons as well, could be for political reasons, why we need this project to finish quickly. And so, once it's decided, you become the project manager and say, what? I – how do I deliver this? So I need to overlap construction and engineering. So you're gonna fast track.

When you fast track, you fall in the same trap of percentage of engineering. You have no time to finish engineering, because you want to speed. Then to speed, you're gonna fall into this trap, because they shortened the duration. That's another one.

So I hope that when we have discussion, we will – I can further elaborate on it.

And the picture I have seen is silos. I put silos here – four of them – each one of could be a phase. Open one silo and you will see – let's open the execution silo. There is detailed engineering in it, there is procurement in it, there is construction in it. Under construction, how many contractor, how many subcontractor – my God – and who breaks these? Who looks at the big picture? Who sees the big picture? Think about it. This is what happening – what's happening on megaproject – we get lost.

One more – what I notice in my investigation of other megaproject: warning signals that were ignored, early warning signs. It did happen throughout the life cycle. Somebody should have realized there is something wrong here and we need to stop, we need to do something about it.

"Delays in engineering and early milestones." What happens – we start one project, we notice – can you imagine and visualize a start point and completion date. So we started here. And the completion date is that curtain over there. And what's gonna happen – there's milestone here, milestone there, engineering milestone, other milestones, approval, this approval, that approval, you promise, I promise – lots of it. Think about it.

What's gonna happen to these milestone, they're gonna shift that way, to the left, delayed. I bet on major project, at the very beginning, nobody worries about the final completion date. Nobody dares even to adjust the final completion date, and I say it. Nobody goes to the CEO and say, by the way, we experience this delay, this delay, this delay and we need six months delay. Delay to first oil, we call it in Alberta, meaning loss of production. Nobody goes.

So what are we doing? We delay, delay. We started with a fast-track project, already construction's squeezed. This is where we spend our money in construction – squeezed a lot, to the maximum. Now all these delays, we are squeezing more into construction.

Do you see what's happening? We are adding more people on top of each other. We are fast-tracking, we are speeding, we are accelerating. It costs money, including loss of productivity. What is loss of productivity? Labour productivity will not be efficient when we have people on top of each other, okay?

This is one: "Huge number of scope changes and project re-estimates." What's going to happen on a megaproject is scope will change because we cut the 25 per cent engineering I talked about. As soon as we approved the project, start changing and changing and adding and adding and instead of Mazda, now we want a Jaguar. Well, now it's different – completely different scope, different animal and those project management team, they have no clue what hit them.

This is what hit them. Contingencies and allowances consumed it quickly. So we have contingency number – whatever that number. Somebody needs to look at only contingency. If I have a dashboard on the next megaproject, I say: This is the curve for contingency, adjust it like this, TV stations. And I look, what's happening to contingency? Are we consuming it quickly? What does it mean if we are consuming it quickly?

Contingency should last you the entire duration, Mr. Learmonth. This is what we need to deliver. Contingency is that allowance that will have us – give us the flexibility just in case, and I will define those contingency in a minute. And if you consume it quickly, quickly, there's something wrong, somebody needs to do it.

So, "Delays do not seem to be reflected on the final project completion date. Fast tracking the fast-track!" And I hope I am so clear on this one. So, for example, you see this red – green line? This is a good project management team and I – probably they have it on Nalcor team as well, I am not sure, as they would have something like this and this is the plan.

We'll say if you look at the time percentage of project schedule at the bottom, the X axis, it will last us hundred per cent of the time, hopefully. This is our plan how the contingency will be expended. And the red line that you see now, if this is what's happening, my God, we are spending very quickly. We are losing – we're going to lose our shirt, we have a problem, do something about it. Early warning sign – there are always, on project, early warning sign.

Did we do something about them? Were we aware of them? Who was aware of them? Who was driving the bus? In Appendix 2, which I will not even attempt to go through it, but I will share with you, now, what I meant by that. So we did a survey in Alberta and we asked about the challenges facing megaproject. And I have the report with me, as well and we –but before we do that – we did that, what we did is we said: What does literature say?

So we went: What are the problems raised by other people, listed them. What can we do about them? What do you suggest? Other people, they have lots of good suggestions – great. Then we went and we questioned people: What are the challenges? What can be done? And it has good recommendation as well, similar to the point I am making now, because I always learn from industry people. I am in debt to industry people for everything I am sharing with you today.

Another problem with industry is we are doing the same thing over and over again and expecting different result. It's time we change the mindset, we change our process and procedures to start playing hockey when we built megaproject. We need to change their mindset. Doing the same thing over and over again, you will get the same result.

This is why I was not surprised by this project to go overrun – to overrun by 50 to 100 per cent. I said it years before that it's going to happen. Pick any future project that we don't know about, they going to build it 50 to 100 per cent if they're going to follow the same process. So we need to learn from that. Basically, do not repeat lessons learned.

Now, I'm going to talk – and this is important to me as well – about risk and estimate and contingencies, and hopefully I will help. I hope some of you today say, oh God, after I leave. I got it, you say – I got it now, I have some explanation. Hard-working people did a great job, hard workers and now this is the explanation.

If I leave and on the plane if – Mr. Learmonth, this will make me so happy. And when I see the report, the Commissioner's report, that will contribute to the better ways of delivering our project, better recommendation, better understanding of our roles, all of us, I am a happy man.

Let's talk about risk. Sorry, "No project goes exactly as planned" – Myth of Predictability. If we expect one plus one equals two, on megaproject it could equal three, four, five – unexpected. Accept that, please. Not sufficient just to look at operational risk or project risk. I will explain that in a minute.

Strategic risk and contextual risk are also important – strategic and contextual, okay. And let me explain what I mean. So the project team were sitting in this red area in the centre, in the core and they are subjected to three types of categories of risk; One, it's a project management risk, the one at the bottom. What's a project management risk? Like weather condition. Project risk; we know where we're building; we know it's cold – hot. If you go to Saudi Arabia or Middle East it's hot. Welcome, that's the weather condition, accounted for.

This is the workforce that we are using. That's their productivity, how you manage them. That is project risk. The estimator made minor mistakes (inaudible) carpets. This is carpet. I look at this one, this room, big room, carpet. The estimator said hundred metre. What if it's wrong, 110, they forgot that corner. Okay, that is a risk. That is operational or project risk. Please stay with me, so we will punch this.

Then the on the top, corporate management is a risk on the project. What? Yeah, the corporation. The corporation could come as a change. Remember my Mazda? Then, my wife say: George why you buy a Mazda? Okay, what? Buy a Mercedes. That's a big scope change. That's a scope change. That is within the organization's control, outside the project control.

Like this room, carpet is a scope of work. And somebody here said: Why do we need carpet? I don't like carpet. Let's do Italian marble. Why? The CEO want Italian marble for whatever the reason. And that's a scope change. That is a strategic risk, a risk outside the control of the project management team, but within the control of the organization. Enterprise risk, the company itself is a risk on the project.

Like, if I am in the business of oil and gas – oil prices went up – I say: What are we building; 10,000 barrels a day, oil prices just went up. What do we do? Make it 20,000. Can I do that? Yeah. Business objective, capture this opportunity. Great, let's do it.

The third one is the problem, contextual risk or global risk. These are the risks outside of the control of project management team and the organization. Like, what happened to the Canadian dollar? Inflation – big inflation, or war-and-peace event that oil prices went up; Canadian dollar went down; United States slaps another 20 per cent on our aluminium, okay? That is outside our control completely. If you are in Alberta, and these oil and gas pipeline project – what's stopping all these project? This is the one – the contextual risk, community issues. These are the big issues – regulatory issues that we can get – political issues we can get out of it. They are spending millions and millions and achieving nothing and can't pass Gate 3.

Now, these are the three types of risk. Which one is included in the contingency? And I looked at what industry practice. Industry is – practice is confusing. Confusing and lack of clarity. And hopefully we'll provide this clarity in a minute. And next time ask somebody from industry – what's included in contingency? And see what they tell you. What is it for? Only some few specialized people know about it. And, then, contingency only including the operational risk, by the way. Let me try again.

So, we have three types: operational risk or project, strategic risk or enterprise, contextual risk or global. And operational or project risk: availability of resources; efficiency; timeliness; operability; health and safety, security, environment issues. Great. Strategic or enterprise risk: maturity at project sanction. Remember the 25 per cent engineering? If I go to my boss and say, boss, George said 80 per cent. Boss said: who cares about George? We have to open the stadium, open the highway, open the bridge by Canada Day. What you're talking about? The prime minister attending, so we have to do it. Okay. Great. Maturity as project sanction, i.e., we send the project prematurely to execution. That is an enterprise risk. A proper project management team will add another bucket of contingency to this.

Project execution strategy. Let's build in Korea. That's a project execution strategy picked up by executive in Houston for this company in Calgary to accept it. And unfortunately happened. It makes sense. Please, if it's not, please come back at this one. Contextual risk: market condition, cultural, geopolitics. Just remember the pipeline project and the struggle to build a pipeline across Canada.

Now, I looked at what is cost estimate. And, basically, I won't bore you with this one. It's really – you compile the cost of all the elements of a project or effort included within an agreed upon scope; i.e., you estimate the original scope of work. That's what they say. The original scope of work. You don't estimate outside scope of work. Only the scope, only capital.

And to the contractor, really, it's different story. They forecast a project – to complete the project in accordance with whatever the contract plan and specification. But they still – they also forecast or estimate the scope of work – the original scope of work. Contractor will not put anything for a future they don't know about. That will be extra. They are dealing with that as a change order, and so that's clear here. But the owner would add administration of the contract, contractor charges, consultant, suppliers, price of land.

Now, realistic representation – another way of defining it is the "Realistic representation of final project cost at any stage of" the "project development to meet a specific project objective." This is one of my friends – very well-known and expert in his field, as well. And, basically, he says, basics of – a component – the basic component of an estimate: the base estimate plus contingency and accuracy around it. And that is the total cost. And you will see my recommendation in a minute.

So, what do we do? And this is Lavingia again. So, basically, if you look at the green area in this column: Identified Scope. You see there, very clear. Identified scope – whatever the scope is. They put some allowances: how much additional capital I need, waste, things like that.

Then they add contingency. I think it's common now. Fifty – P50 – 50/50 includes contingency, okay? P50. And what's P50? For us, it's equal chance of cost exceeding or being lower – equal chance. Equal chance to fail. Equal chance to succeed. Then the upper level, the 90, is 90 per cent chance that the cost will not be exceeded. Hmm. That I will come back to this one – what I think we should do in the future.

This slide you saw earlier, but I am bringing it back to show you what AACE again – and for estimate class 3, they suggest 5 to 15 per cent, and I am saying even careful, for megaproject, might not be acceptable.

Another person – this one a Norwegian guy, and we refer to him in our third book – basically he says conceptual and the planning, which is – this is equivalent to Gate 3. If it's well-known and mature project, pick 15. Significantly uncertain, pick 25 contingency, only contingency. Once you do detailed engineering, i.e., past Gate 3 – you do detailed engineering – then between 10 to 15 per cent.

Now, what do I suggest? I think we need to have three buckets or two buckets. Three buckets or two buckets. Bucket one called contingency to cover the unknowns within the scope of work and within the control of project management team. I'm going to repeat this one, please. The contingency is only for the unknowns within the original scope of work and within the control of project management team. Then I need scope contingency, another one, scope will change.

I came from Babylon. We built the tower of Babylon. Since Babylon until today, every project has changed. The next project will change. I guarantee that. So, project professionals, please put a number for scope contingency. Guess what? On this project, they have a brilliant, absolutely nice, good document called change management. Okay. So they have they a process to change the scope and to deal with scope changes, so they knew about it. It's going to change. They knew about it. I say put something in the – another contingency. And, by the way, it will be – somebody will be responsible, different level of responsibility, I'll come back to it. Who will deal with what?

Then I do management reserve to cover the contextual risk, as I described it, outside the control of the project team and the executive and the enterprise. The second one, the scope allowance, was for the unknowns outside the scope of work and outside the control of the project management team. I hope this is clear.

So the contingency outside the control of the – within the scope of work and within the control of the project management team.

Scope contingency, to deal with the unknowns outside the scope of work and outside the control of the project management team but within the control of the enterprise.

Management reserve is for the unknowns outside the control of the project management team and the enterprise and outside the control of the – and outside the scope of work.

MR. LEARMONTH: And all those should be in the budget, is that right?

DR. JERGEAS: Absolutely.

MR. LEARMONTH: Okay.

DR. JERGEAS: I would go and do all the cost estimate – concrete, excavation, all of that, add whatever you want to do. At the bottom, I will put three buckets. Even my recommendation to industry in my classes, and I said: Put the three buckets, please; have a template, has a three bucket and let management remove them –

MR. LEARMONTH: Okay.

DR. JERGEAS: – if they don't accept them. So if I would like to go – if somebody asked me, what's the next project? If I have none, I say I don't know. Then I go and I wait and I say $10 billion. What? $10 billion. How do you calculate $10 billion? Dial-up cost and data cost, $5 billion; contingency, $2 billion; scope allowance, $2 billion; management reserve, $1 billion. Add them all, $10 billion.

If you let me go more into detail engineering, I might adjust this a little bit, but this is how we should be starting communicating. Otherwise, we're all upset. It's all about communication.

MR. LEARMONTH: Okay.

DR. JERGEAS: So – to help here, I put it – so I think I did that, roughly speaking. So some of organization – if you look at some of organization, including Nalcor in this case, they combined the two and called it management reserve.

So the management reserve is still the same outside the control of project management team. So what I'm suggesting now: If you pick two buckets, then contingency plus management reserve. If you pick three buckets, it's contingency, it is scope contingency, and management reserve.

Now, I will give the project manager the responsibility of the contingency. Say: Project manager, you go build the project; anything within the scope of work, your responsibility and this is your contingency for it. Anything out of scope of work, come to me, I will use my contingency. And so, I will give the scope contingency to the project director, or I call him project executive officer, I will come back to that one.

Then management reserve, I will give it to under the control of the sponsor or the CEO. The sponsor could be, Mr. Learmonth, it could be a VP, a senior executive, a vice president of the organization, and in charge of this. And on megaproject, I want a dedicated sponsor – dedicated, fully dedicated for the project. Not a regular VP who is busy doing a lot of things, and now we say: By the way, you are the sponsor of this megaproject. It will not – never happen.

So what I found: lack of clarity in industry practice and application, and documents as well. Lack of it.

I hope I explained it and if there is any question about it after that, I'm more than happy to respond to.

MR. LEARMONTH: Okay.

DR. JERGEAS: So my recommendation is this. This is what we declare, all of it.

MR. LEARMONTH: Okay.

DR. JERGEAS: Again, look at the red sentence; watch for assumptions, exclusions and duplication. Might be duplication between escalation and management reserve – fine, we will deal with that. Watch for assumptions like estimator, risk analysis people, contractors will say: My price is this subject to these exclusions. Somebody needs to watch for that. Where are they included then, in which bucket? Have we accounted for it? If everybody exclude, great, I've done – you've done a great job, but somebody says exclusion – all these exclusions, some of them could come back at haunt us. So please, watch for that one.

The – in my – in our third book with my Norwegian colleagues, we recommend the following, is: If you look at it, A, this is the probable value; B, expected cost. This is when you add the 50 per cent – 50/50 of P50 – that is with the contingency you give the project manager. And then C, if you go – you see X Xs – X per cent, sorry, probability. And we could debate that; is it 80, is it 50, is it 75, is it 90? That is management decision. What is our tolerance to taking risk? Management decision. In the book, we say 85 per cent.

So, Mr. Learmonth, if I answer your question again –

MR. LEARMONTH: Yeah.

DR. JERGEAS: – what we advertise and we announce is that X per cent number, the total number. What we give the project management team, the P50 with the contingency. And senior managers and executive reserve, that difference, keep it somewhere to deal with any one of these black swans.

MR. LEARMONTH: What's the P-factor for that?

DR. JERGEAS: We are suggesting 85 now.

MR. LEARMONTH: Yeah. So it's – for the tactical risks it's –

DR. JERGEAS: P50.

MR. LEARMONTH: – 50, and then, what is it for the next level?

DR. JERGEAS: For –

MR. LEARMONTH: Eighty –

DR. JERGEAS: So for the tactical – you called it tactical, which is – I called it operational.

MR. LEARMONTH: Operational, yeah.

DR. JERGEAS: That's fine.

MR. LEARMONTH: Okay.

DR. JERGEAS: P50.

MR. LEARMONTH: Okay, and then the next one?

DR. JERGEAS: The next one is 85 to include the two buckets.

MR. LEARMONTH: Eighty-five – P85.

DR. JERGEAS: Yes.

MR. LEARMONTH: Okay, thank you.

DR. JERGEAS: Yeah.

MR. LEARMONTH: Now we can move to the next topic, I guess.

DR. JERGEAS: Thank you.

MR. LEARMONTH: Yeah.

DR. JERGEAS: Thank you very much.

MR. LEARMONTH: Thank you.

DR. JERGEAS: So this, basically, answering this interaction now, what should be the probability point for a cost estimate presented to management for funding? I say that P85, at least if you know a number, but still we need to issue – especially the early phases, lots of warning should be given to the media, to politicians, because life is uncertain – uncertain despite everything we do. So that, I think I covered this.

MR. LEARMONTH: Okay.

DR. JERGEAS: There's only one thing certain about cost estimate: It will be wrong. And this is a caricature by somebody and I will – I'll let you read it. It reflects, unfortunately, what we do and we need to do – we need to look at our self in the mirror and reconsider everything –

MR. LEARMONTH: Yeah.

DR. JERGEAS: – to deliver project better. Okay?

MR. LEARMONTH: Okay, now we're on reshaping government system – governance system.

DR. JERGEAS: Yes.

MR. LEARMONTH: Yeah?

DR. JERGEAS: Yes, and I'll go faster.

Strategic system: A strategic systems problem, not a fix-the-broken-parts problem. We have a big strategic system. It's not recalculate estimate or labour productivity, it is a big thing and we can do something about it.

Our Future is at Stake. We can easily fix the problem if we have the mind to. We must attack the real sources of performance – of poor performance. No single actor in control. We need people to lead, and I call them benevolent dictatorship or dictator. We need to apply benevolent dictatorship.

It's all about leadership, governance and communication. We need to improve that. And this is what I – how I define those guys: "A Leader exercises absolute authority over the delivery of a project but does so for the benefit of all members of the project in full compliance with legal, ethical and moral requirements and values."

And, basically, what I suggest in my book, the Benevolent Dictatorship, is I do these things. But in this, today, the remaining minutes, I will focus on the three items: Number 4, number 5 and 7.

Number 4; if you look at the org structure of an organization, the owner at the very top, the CEO, and he has – she has VPs and we need a project sponsor. That is dictator number one. And for the project level, we need a director level who is project executive officer or director. We call them in the book, project executive officer. It's like the CEO. I am in charge of the organization. This person will say: I'm in charge of the project. Everybody reports to this person;

the project management team and functional manager, project manager report to him.

What's happened in industry, you send your project team into the project side, but they have no control on the people they lead, actually. The people they lead, actually, they report to other people outside the org structure. So you could see on the project side, here at the bottom, somebody repeat – report to VP one, another one report to VP two, another on report to VP three, and that's not good. So we need to look at the org structure, the reporting structure.

My conclusion on this one: You need to empower the people on the job site so they have everybody report to them and they make decision in a timely manner and quick decision with no-blame culture if they are in power. If they are not in power, nobody make decision. And this what –

MR. LEARMONTH: Do you –?

DR. JERGEAS: Yeah?

MR. LEARMONTH: What is the importance, if there is any, in having someone with full decision-making power representing the owner on the construction site, physically on the site?

DR. JERGEAS: Absolutely, because we need a quick decision rather than waiting. So, if I am in power, that's number one, I can make decision. If somebody on the job site representing me and send me a memo, note, phone, I say: Do it. Or if I am on the site, I'm already there, I make decision and I'm not worried about what the manager – my manager going to say because I am (inaudible), he going to protect me.

It's like a hockey game. You don't expect the player – and, manager, what should I do? Should I shoot? Okay, come on. By the time you say this, Crosby already scored the goal. And that's what we need; a quick reaction. It is too many moving parts. That's what we need. So if you are alert on the site or not, that's a matter – you need quick decision-making on the site, obviously, better.

MR. LEARMONTH: Okay.

DR. JERGEAS: And, so, by the way, here, these are for you, what is the role because Mr. Learmonth ask me: What is the role and responsibilities. So I describe what the role and responsibilities of an in-power people, and this is an appendix for, if you want, more detail about their role.

The governance; I will stick to this slide only. This is the Gated process. This, if you can see, stage Gates, G is Decision Gate. And you will see responsibility and oversight of the leader which is the CEO, and the sponsor, what is their responsibility? The leader and the CEO is very – need responsible – is this a good project? Is it feasible or not? Good.

But the CEO also has an oversight role throughout the life cycle. Each one of them, the sponsor has the same thing and so on. And in my book I gave questions, for example, oversight for these – on issues, risk, budget, schedule estimate, stakeholder management engagement, selection of contractor and consultant and Gates.

Now you ask me: What do you mean by all of this? I have questions. I say: Leader, you need to ask your team about these questions. Have we considered risk? What did we do with that? How – where did we account for these, this, this, this? And expect these answers. If you look at my book you will see the question, answer, question, answer, question, answer.

And then at the Gate, at each Gate – Gate 1, I provided them with a list of question. As manager, they need to ask these question. Then, go to the next Gate, ask these question. No, more detail, more detail, more detail. So I'm trying to do this and if you look at it, refer to Appendix 4. And if you need a copy of my book, I have a few of them with me. I can give you a gift.

The ecosystem, project ecosystem, the contractual – I have eight minutes to go. And, basically, I want to show the complexity here. So I feel for the project management team and the entire organization. And, look, the key player, their engineering contractor, fabrication contractor, installation contractor and so on. And they hire each – everyone, they work on a vertical – a horizontal plane working relationship, only working relationship and on a contractual relationship only vertical.

Okay, am I complicating it? Maybe, so let me show you. In a – there are two contractual methods; design-bid-build, which the owner hire an engineering company to do engineering and a construction contractor to do construction. Correct. You know this and this is a contractual relationship with vertical and working relationship.

So what is working relationship here at the bottom, if you see this? I'll try to explain it very quickly. Like, if you are a construction contractor – so one of these black spot is a construction contractor, okay? And you need engineering information. So another black dot – engineer. I need your engineering drawings. But the contractor has no contract with the engineer, so they wait. Then the fabricator needs a tool, a pump to be supplied by another supplier. All of them connected vertically with the owner and working horizontally without any contract. I will stop myself from this because who control – if you are an owner at the top there are less of relationship happening there – no contract, actually, no contract. I delay you. You delay me. And then at the very end we see a delay. So I'm going to stop that.

An EPC is also called design build. So if you are in civil engineering or construction or building construction we don't call it EPC. We call it design build. Which basically – one firm, EPC firm or design build firm, will deliver the engineering function and the construction function. So we have one – one person to chase. Now, if you have multiple contracts this is what's going to happen. Too many contract; too many players. So what's the best strategy? I have given you packages, advantages, disadvantages – I will leave that.

Mr. Learmonth asked me: What is the roles and responsibility? I understand on this project they changed the role from EPCM to something look like design build. So SNC-Lavalin started as an EPCM company and ended with an E company – if that makes sense to you. So the roles and responsibility changed completely. So managing the CM – managing construction is no longer SNC-Lavalin, in my point of view, based on the change from design build to design (inaudible).

See if this makes sense to you? And the role is completely different in either one. So this is why I put the roles to say: what is this – improve productivity. And I will end up in five minutes with this one.

Lots of people talk about labour productivity, labour productivity is low, all of that thing. Productivity is affected by technical issues, management issues, human labour issues, external issues and factors and conditions. In some of these projects – very difficult project – difficult, remote – you can see 30 per cent of workday in direct work. That green dot is 30 per cent; i.e., three hours is tool time, the rest is idle, incorrect, travel, waiting. That's not good at all.

But usually on megaproject they blame workers. That is – mark my word – not fair, not nice, not correct. I have investigated labour productivity in 2002, 2009. It is management issue, in a nutshell. I have a report. I can give you the report.

I found workers idle. Why they are idle? Go check root causes. They are waiting for material; nobody ordered the material. The material ordered and stored; nobody knows where. Saw somebody else took it out. They go back and forth. Tools, equipment not there. They keep changing design. All these problems I've been talking about. The impact is (inaudible) the construction phase. Yeah, workers are idle. Absolutely, idle. So this is why we need to look at root causes of the problem. Not workers. If workers are lazy, okay, we have lots of lazy people here. Okay, where is supervision? Supervision is also management, please.

I looked at a project, they said – the workers said, I wake up at 5 a.m. and they bus them for two hours in Fort McMurray. They go and line up through the gates to get into their work, they open their tool boxes, 8:30. At 4 o'clock, they repeat the same thing backward and bused back again. In between, what's – whatever remaining in between lunch and break and coffee and all of that, great, and washroom and things like that. And in between: Wait for this, wait for this, wrong that, correct this. So please – please – I'm going to speak to the microphone: It's not labour issue. It is management issue. And let's deal with it forever.

So even I had a survey ask: How we improve productivity? To improve productivity, improve front-end planning, enhance engineering, proper management of construction operation, management of tool equipment, better management of labour, incentive, access – all of that – enhance communication, clarity of role. Amazing, if you look at it – look at all of that. Enhance supervision and leadership.

And to improve productivity, if you look at this, there are many thing contributing. How we manage engineering, how we manage procedure, material. You can follow this chart. And this is my methodology, how to improve productivity, and I submitted it for proposal and was not accepted. And basically, we audit a project and see what are the root causes and then we go and study – time analysis, we do time analysis, and we go after the root causes and improve them, and hopefully we'll try to increase tool time from – in this case – from 45 to 54.

MR. LEARMONTH: Yeah.

DR. JERGEAS: The last thing, and I will finish –

MR. LEARMONTH: Could I – could we take another say 10 or 15 minutes maximum, 'cause there is a few little points I want to cover, so we –

THE COMMISSIONER: Yes, but –

MR. LEARMONTH: Fifteen?

THE COMMISSIONER: Yeah, were going to keep going, but I assume – when the presentation ends, as I said, you'll be able to ask questions. So that's –

DR. JERGEAS: Yeah.

MR. LEARMONTH: Yeah, There will be – yeah, there will be – but I'd like to have 15 more minutes just to – will that give you enough time to –?

DR. JERGEAS: No, I will do two minutes to finish this one and I stop.

MR. LEARMONTH: Okay.

DR. JERGEAS: And then, please, I appreciate that and ask me.

Mr. Commissioner, this is my last thing. We need to build collaborative relationship. We need to work as a team and to build a collaborative relationship. I have worked on more than 157 project. I go as an independent person, work with a contractor, the suppliers, the engineer, the owner and build a collaborative relationship which is based on open and honest communication, based on trust and respect.

And prerequisites for that open honest communication: equity. We are equal, we are all team – we need each other, we support each other – and commitment and mutual goals. So we develop goals and objectives and we evaluate our performance and we develop issue resolution mechanism. And this is the main section of my methodology of building and sustaining project team. We go and say – develop – we develop common goals and objectives: What are we here for? What are we doing? Why are we doing it? What's in the scope? What is out of scope? What are the risks? What are the stakeholders? How we deal with it? How we define success? What are the critical success factors?

And then we develop another tool called health check. We use it to monitor the health and performance of the team, to see if we are on track, so I come and visit the team many times later. And we develop – in anticipation of a dispute, we develop an issue resolution mechanism that the team will help themselves to resolve their issue in a collaborative way, non-adversarial way, by negotiation. And then we develop the ground rules: How we going to behave with each other or what we expected of each other. And then I emphasize reading and understanding the contract.

With this, I thank you very much. I thank – Commissioner, I thank you for giving me this opportunity and wish you all the best of luck.

MR. LEARMONTH: Okay. I just have a few questions I want to put to you.

THE COMMISSIONER: (Inaudible.)

MR. LEARMONTH: On slide 106, you are talking about building collaborative relationships. Now, is there any importance in there being a collaboration, co-operation, mutual respect between the owner and the contractors?

DR. JERGEAS: Oh, paramount. Paramount to success. If that collaboration and built on open, honest, trust, respect and these things, because contractor will respond. This – the owner initiate this. The owner initiate this to say, on this project, we're going to build a trust-based collaborative relationship.

By the way, most of you sitting in the room are lawyers. You write contract document. This methodology will not change whatever the parties already signed for. So we don't change the contract and say, guys, whatever your contract, comply with it. Fine. Now, we put it aside and we say: We're going to trust each other; we're going to work with each other. And the owner can use the contract to hurt if they want. If somebody mistreat this trust thing – relationship, they still have that power.

But just cool it down, we say to them. You have a contract, you still – and if we don't agree, you going to use it. But back here, let's focus on helping each other. We are in it together. We have common goal. What's our common goal? The owner wants the project to be built according to specification, on time and no embarrassment. What's the contractor want? Want to build a project and make money. They don't want to lose their shirt. And do it in a safe manner. Actually, there is no contradiction. It's good.

If the owner said: Look, my interest is not to make you go bankrupt; this is not my job. Our job is to build the project. And I have seen successful story, and I can name project for you in Calgary – especially the City of Calgary – a project – transportation infrastructure project. My God, I'm involved in every – almost every project there. No litigation, people are working together, you see the team. When we go to meeting, friend and colleagues working together because they meet on next project and next project.

But I stay as an independent person, open to all of them if they have a concern. I probe issues, so no hidden agenda. That's important thing. If you have an issue, this is the importance of health check. No hidden agenda. What are you worry – are we communicating? If I show you the health check, you would – are we communicating? How is cost management? How was (inaudible) management? Are we resolving issues? And marking a scheme and then probe a probe. And if it's a real issue, we deal it. If it's a perceived issue, it's gone. We communicated. It's – emphasize communication.

I strongly recommend this approach because people will respond in kind. Contractor and subcontractor will respond to this initiative positively.

MR. LEARMONTH: Okay.

Now, if there – have you had any experience in examining projects where there is not this collaborative atmosphere and co-operation among the contractors and the owner? Have you seen that in (inaudible)?

DR. JERGEAS: Absolutely, absolutely.

MR. LEARMONTH: And what are the consequences of an absence of collaboration and co-operation? What are the consequences?

DR. JERGEAS: I will tell you: adversarial relationship, unhealthy. Adversarial relationship leading to adversarial approaches to resolution, which is basically arbitration and litigation and cost overrun and blame and very unhealthy. And I've been there. I spent five years of my life working for Revay and Associates exactly doing that.

MR. LEARMONTH: And can – is cost overrun – are cost overruns a natural consequence of – whether it's an atmosphere that lacks collaboration and co-operation?

DR. JERGEAS: I think it does contribute because we – in collaborative approach, I have seen it where people stop caring about each other. I have seen contractor come to the owner, and I have a case like this, where the contractor – we tried to build a collaborative relationship from day one on a project. And the contractor start coming with ideas to reduce cost. Would you believe it? To reduce – and this is the owner telling me, not the contractor. And I can name the owner if you want. And, basically, when this attitude, we're gonna have innovation, more discussion, people care about each other and a quicker decision, mitigation of damages, basically.

MR. LEARMONTH: Okay.

And what about the necessity, if you believe there is one, of having a good collaborative and co-operative relationship among the – well, the owner, the contractors and labour.

DR. JERGEAS: Oh, definitely. This is – the collaboration should include labour. On big project, we should include labour with the contractor and the subcontractors – obviously the owner and the engineer. Bring them all together. And I have seen it in many – a case I just did two to three weeks ago in Calgary. They are building the ring road now, and government was there as well.

So government, also, in some of these session – important. This is a ring road around Calgary, so the government feel – the provincial government – feels that this is important and I agree with them. They brought representative from that. Usually in my assignment, I see contractors, definitely, engineers and the owner. I rarely see labour. On project like this, the big mega, they should.

MR. LEARMONTH: They should.

DR. JERGEAS: They should. They are the soldiers.

MR. LEARMONTH: Mmm.

Now, are you – do you have any experience in working or analyzing projects where there are certain claims by Indigenous groups?

DR. JERGEAS: No.

MR. LEARMONTH: You have no experience with Indigenous –

DR. JERGEAS: No.

MR. LEARMONTH: Well, if there are issues with Indigenous groups, is it better to get them done, out of the way and resolved before the project starts or is it better to wait until you get midway into the project? If you can't answer that that's fine but –

DR. JERGEAS: No, I'm sorry. I had experience. One day there was a bridge in Winnipeg – in Northern Manitoba, sorry. Northern Manitoba – I forgot the bridge – and there was federal government, provincial government, engineer, contractor, and they ask me to come to Winnipeg to do the team building, exactly the same thing.

And – but they insisted, the contractor who hire – who asked me to come, that they meet me the night before for supper. I said, well they're going to look after me very well, those guys. I didn't know why. So I went to supper and they say: George we have a problem, I said what is the problem? They said oh, and this community, the native community, Aboriginal community – they want to us to hire their workers and we think their workers are not productive and you know this is a lump sum contract and all of that and you know, lump sum contract, I'm going to lose my shirt if I'm not productive, this kind of thing.

So they gave me lots of issues and I said whoa, and I said umm, what should I do? So, in the morning I came, in the morning the big – the federal government, provincial government, the engineer, the contractor, the subcontractor who was worried about this and the Aboriginal people came. And I decided – I said I will talk to the Aboriginal – I'll talk to those guys first. I see what's their opinion, what do they think?

They came with their lawyers and those guys, upset up to here, and they – we're gonna sue everybody, all of that thing. I said oh my God, this is a team building session, okay? And so I listened to them. What was their issue? We have lots of unemployed people. Look how this story is going to change to a very positive story – started a negative. And we have lots of unemployed people, they are building their project in our territory and we have lots of unemployed people and they don't want to use them. Hmm, I said that's good.

So we started talking and part of my process, bring the issues on the table, the challenges right away after the introduction. So whatever I heard the night before, nobody brought it, okay, for whatever reason. I brought it and then the Aboriginal time came and they brought all the issues including historic issues. And they brought it all. The solution – the solution was easy. Okay, you guys, the Aboriginal community, bring the best you have, the best people you have. The subcontractor is entitled to interview and select, based on the interview, no favoritism, basically. That's the solution.

So, now, a year later, the contractor phones me and says: George, if those native workers will come with us to Alberta – it was booming in Alberta – if they want to come, we'll take them at short notice. They were so good. So, again, it's all about communication, about understanding, about respect in all – on all level, deal with Aboriginal or regular community, it's the same story. Same story, you need to understand their concerns and issues, with respect, and once you understand, what you do about it, and there is a compromise. If there – if people compromise, we're gonna reach a resolution.

So this is – sorry I said no, but this is the only experience I have.

MR. LEARMONTH: All right. Now, there – in your research into megaprojects, have you come across or seen a situation or situations where the project – where you concluded that the project estimate was kept low, in order to make sure the project was sanctioned? Have you ever seen that situation?

DR. JERGEAS: I cannot prove it, but I heard it many times. I cannot prove it.

MR. LEARMONTH: No.

DR. JERGEAS: That –

MR. LEARMONTH: But do you have any views on that? As a general concept, I'm not –

DR. JERGEAS: I –

MR. LEARMONTH: – talking about Muskrat Falls.

DR. JERGEAS: – no. The reason I don't want to say this, people are trying their best, but they underestimate. They underestimate; they can't visualize the complexity, so they miss many things as well. And it become underestimation problem, in my opinion. I don't think anyone would do this, deliberately.

MR. LEARMONTH: Right. Okay.

Well it's a quarter to now; I may have a few more questions tomorrow morning, but I think if we – would it be appropriate to break now?

THE COMMISSIONER: All right, okay so –

MR. LEARMONTH: And then we'll come back, and if I have a few more questions, I'll ask them then the other counsel will be able to question you.

DR. JERGEAS: Absolutely. Thank you very much.

THE COMMISSIONER: So we'll come back and – just trying to get a flavour – whether we need to start at 9 tomorrow or whether we should start at 9:30, I'm not sure what your –

MR. LEARMONTH: My preference would be 9 o'clock but – just to make sure we have lots of time for the other counsel, but I'm not fixed on that.

THE COMMISSIONER: Nobody's saying anything.

UNIDENTIFIED MALE SPEAKER: (Inaudible.)

MR. SIMMONS: Commissioner, we're quite used to 9 o'clock by now –

THE COMMISSIONER: Okay.

MR. SIMMONS: – so if that's your preference, I don't think we got a problem with it.

THE COMMISSIONER: Was that a dig or …?

Yeah, we'll come –

UNIDENTIFIED MALE SPEAKER: (Inaudible) 8:30.

THE COMMISSIONER: We'll come back at 9:30 – 9 o'clock tomorrow morning, then, and we'll start at 9 o'clock if that's okay with you?

DR. JERGEAS: That's (inaudible) –

THE COMMISSIONER: So we'll adjourn 'til 9 o'clock tomorrow morning.

CLERK: All rise.

This Commission of Inquiry is concluded for the day.