

COMMISSION OF INQUIRY RESPECTING THE MUSKRAT FALLS PROJECT

Transcript | Phase 2

Volume 41

Commissioner: Honourable Justice Richard LeBlanc

Friday 24 May 2019

CLERK (Mulrooney): All rise.

This Commission of Inquiry is now open.

The Honourable Justice Richard LeBlanc presiding as Commissioner.

Please be seated.

THE COMMISSIONER: All right.

Good Morning. It's Friday.

All right, Ms. Morry.

MS. MORRY: Good Morning, Commissioner.

THE COMMISSIONER: Good Morning.

MS. MORRY: First of all, I'd like to enter exhibits; the numbers are – excuse me – the exhibits that need to be entered are P-03745 up to P-03779.

THE COMMISSIONER: All right, those will be entered as number.

And our witness this morning –

MS. MORRY: Our witness this morning is Ms. Tanya Power.

Ms. Power, the clerk will affirm you.

THE COMMISSIONER: Okay, just stand, if you would, please.

MS. POWER: Okay.

CLERK: Do you solemnly affirm that the evidence you shall give to this Inquiry shall be the truth, the whole truth and nothing but the truth?

MS. POWER: I do.

CLERK: Please state your name.

MS. POWER: Tanya Power.

CLERK: Thank you.

THE COMMISSIONER: You can be seated there, and just sit as close to the mic as you can so we can all hear what you have to say.

MS. POWER: Okay.

THE COMMISSIONER: Thank you.

MS. POWER: Yeah, I don't have a very loud voice. Is that okay?

MS. MORRY: That's perfect.

MS. POWER: Okay.

MS. MORRY: Good Morning, Ms. Power.

MS. POWER: Morning.

MS. MORRY: Ms. Power, what is your current job title?

MS. POWER: Project controls manager.

MS. MORRY: And could you give a brief background of your background and education as it relates to project controls?

MS. POWER: Sure.

So education: I completed my Bachelor of Engineering in 1995 here at MUN, so that was in civil, and then I went on to do a Master's of Applied Science in environmental engineering.

So on the work front I started with a company called the SGE Group in 1999 – that was March, I think, of '99 – and they are – or actually were – they don't exist anymore. They – it was an engineering consulting company. So it was about 100 employees; the office here, locally, was about 20 people. So during – just to give you a bit of context for the (inaudible) because that company, as I mentioned, doesn't exist anymore. So a few years after I joined they had a joint venture with SGE and Hatch –

MS. MORRY: Mm-hmm.

MS. POWER: – Hatch and Associates, and then a couple of years after that Acres purchased SGE and then Hatch purchased Acres. So I actually stayed there for 17 years, but the

company name changed a number of times around me.

So just to start off with a couple of, I guess, key points. In the early days I started as a project engineer there; I worked on a lot of different smaller projects. And then, really, within the first couple of years my main client was the College of the North Atlantic here in Newfoundland. So I worked at a number of different projects with them; probably a couple of the key ones would be the medical science facility or wing of the Prince Philip Drive campus. So I was the project engineer on that project. So that involved both coordination of our engineering – of our sub-consultant engineering, and then eventually the actual relocation of the campus which was on Topsail Road over to the Prince Philip Drive campus.

So, once that project finished, that would've been in around 2002, the college actually asked me to go over to Qatar which is where they had a - in Doha, Qatar – they had a contract with that country to open up a facility over there, a technical college. So I went over there as the facilities manager. So I went in June of 2002; I was there for a little under a year. And basically what I did is, as I was coordinating the procurement of all the, you know, the lab equipment, the furniture and anything and everything that was needed, essentially, for that campus to open. So that – it was just a single building, the eventual full campus is 18 or 20 buildings, but that was just where they were starting off. So in September of that year the campus did open successfully and I stayed on until about – I guess it would've been March of 2003, as the facilities manager.

So when I returned, as I mentioned earlier, by that time SGE had formed a joint venture with Hatch, and had been successful in securing the contract, the EPCM contract for the Voisey's Bay demonstration plant, which was out in Argentia. So that project was about a \$100 million. So on that project I moved into the role of infrastructure lead and basically, again, it was similar to previous projects, just a much larger scale. So looking after all of the design of the building itself, and all of the site works and all of the auxiliary buildings around. So that was I guess a few years. It was about a three-year project.

So during that time the other thing that happened is I started to get involved in project controls.

MS. MORRY: Mm-hmm.

MS. POWER: So with that being a larger project, project controls was an actual discipline, whereas on smaller projects it's just part of project management. So the project controls manager was actually a Hatch individual who was up in Ontario. So he had asked me to start to be the key point, I guess, for project controls in St. John's. So I helped with all the reporting, engineer progress tracking.

So then once we finished that project – actually before we finished that project I did also go out to Argentia for about the last six months.

MS. MORRY: Mm-hmm.

MS. POWER: So I was helping with the coordination of all the commissioning and, again, reporting and turnover to the client.

So when we finished that project, we were also then, shortly after, successful in getting the EPCM contract for the permanent facility, which was actually in Long Harbour. So that was, you know, a much larger scale version of the demonstration plant. So, we started that in 2006. So, similar – I guess, terminology-wise, it's –

MS. MORRY: Mm-hmm.

MS. POWER: – similar to this project with, you know, the gates – the DG2, DG3. The terminology is just slightly different in mining, so we did the FEL 2, which is similar to a DG2.

So, during the FEL 2 phase – that's like a prefeasibility study – so, it's, primarily, just engineering hours, but I was actually put into the role of project controls manager at that time. And I, really, just helped to set up all the project controls systems, and, really, get everything ready for the next phase, as well as reporting on that particular phase, engineering progress.

So, when we moved into - in - not sure when it was - it was probably around sometime in 2007, we moved into the FEL 2- or 3 phase, sorry. So, at that time, I moved into the role of engineering controls lead, and we had a project

controls manager come in from another Hatch office in Australia. So, underneath his direction, I looked after all of the engineering progress, the engineering schedule, and all of the reporting around that, basically.

So, once we finished that project – 'cause we never did do execution, when we got to execution, there was a different company floor who actually got the EPCM for that.

So, during that past, probably, year on that project, I started to get more involved, from a corporate perspective, in project controls. So, it was around, I think, 2008 or '09, I took on the role of the regional lead for engineering controls. So, as a company, Hatch was moving towards getting more standardized systems. We were developing new tools for engineering progress, making things very automated. So, I was part of that team. So, regional is – I don't mean, like, Newfoundland – I mean, regional as in North America 'cause –

MS. MORRY: Mm-hmm.

MS. POWER: – it was a large global company.

So, at the last, probably, six to eight months of 2009, I travelled across Canada to all of our offices, rolled out the engineering progress tool, did training with everything from the practitioners of the tool, itself, up through the engineering discipline leaders, the engineering managers, project managers and general managers of the offices. So, I was on the road for probably eight months, I guess.

So, then a new opportunity came up, I moved into a new project. It was a gold mine project that was actually being constructed in the Dominican Republic, but, initially, I went to the office in Oakville. So, that was the beginning of 2010.

So, at that point, I took on the role of project services manager, and that, basically, involved all of the reporting. So, obviously, I was quite close to what was going on with construction progress, engineering progress, procurement progress and all the other disciplines within there. And the project controls manager, who – it was a different role – he and I worked very closely together on, basically, all of that

reporting. And he often travelled to the Dominican, and I took on the projects control manager as his delegate as well during that time.

So in late 2011, I actually went down to the Dominican for the last 14 months of the project. And at that time, I took on an additional role to the project services manager. We were having some struggles with getting – commissioning resources. So I also took on a secondary role of the turnover and commissioning coordinator. So that involved, of course, a number of people, from a staff perspective. Also involved progress on the commissioning side and reporting and all that sort of things. So I finished there in – it was late 2012.

And then, basically, my next project was when I joined the Lower Churchill Project, in May of 2013

MS. MORRY: Right.

MS. POWER: So, yeah, I guess you wanted to know how I got, yeah –

MS. MORRY: Exactly.

MS. POWER: – how I got there.

MS. MORRY: So what roles have you held in the Lower Churchill project?

MS. POWER: Right. So just, I guess, to give a background on how I got there. I have to backtrack a little bit.

So, as you are aware, Hatch was one of the bidders for the EPCM contract. We weren't successful, obviously, SNC won, but I was actually on that proposal. So, as I think other people have mentioned, one of the things that Nalcor did during that time is they interviewed anybody who was listed in a key role. So they did the same with Hatch, of course.

So I was actually interviewed during that process. The role I was proposed for was the senior cost controller. So I was interviewed by Jason Keane and Mark Peddle as part of that process, so I had met them. But, as mentioned, and, of course, we weren't successful. So I guess it was – I think it was perhaps twice, I can't tell you the exact time frame, but I believe during 20

- probably late 2011, perhaps again in 2012, the - our - one of our managers in St John's had called, and, as mentioned, obviously they were in Oakville, at that time, or down in the Dominican.

I think that was, you know, both — I guess, on the owner side, they were building up the Lower Churchill Project team. And then, I guess, into 2012, as they've talked about, they were looking for addition resources that SNC had not been able to fill. So I was called a couple of times, not by the project but my own manager, and asked if I wanted — or if I was interested in going the project. So at that time, I had said no, I was in the middle of another project; didn't wanna leave.

So when I finished in late 2012, I did contact my home office, here in St John's, just to see if there was anything before I went to a new project. So at that time, there wasn't. But then in – I think it was around February of 2013, I received another phone call with a similar question, might I be available. So at that point, I was just starting on a new project, so I said, yes, I was certainly interested.

So initially, I spoke to – via phone, I spoke to Serge Guerette who was the project controls manager at the time. And then a few weeks later – sometime, I think, in March – I was home for a visit, so I went in and met with both Serge and Jason.

So that eventually led to me starting on the project in mid-May. So my initial title, when I started, was a senior cost and schedule specialist. Now, I was focused not on the Muskrat Falls side of the project but rather on the transmission side. So that was focused specifically in HVDC specialties and the transmission – overland transmission group.

So at that time, they were really just starting into construction and they were building up that project controls team and working out what roles they wanted to fit in. They were in the midst, of course, of transitioning to an integrated management team, from EPCM.

So around – I think, was October of that year, in 2013, I moved into a more specific role focused

on HVDC specialties, so I was their project controls lead.

And then from there, I was in that role, I guess, for – whatever that was, I guess two and a half years. And in May of 2016, I was asked if I would take on the role of the project controls manager for the overall project. Which I did.

MS. MORRY: Right.

MS. POWER: One last thing I just wanted to mention. So, up until that time in 2016, I was still a Hatch employee although, obviously, I hadn't been there in a long time. But shortly after I took on that role, I actually decided to leave Hatch. So I actually have my own company now. So that was, I think, August of 2016 my employer changed from Hatch to an independent contractor.

MS. MORRY: Right.

MS. POWER: Yep.

MS. MORRY: Okay, thank you.

Now, in terms of the Lower Churchill Project manager – project controls manager role –

MS. POWER: Yeah.

MS. MORRY: – you've mentioned that Serge Guerette was in initially, when you joined the project.

MS. POWER: Yes, he was there when I first joined, yeah.

MS. MORRY: And who succeeded him in that role?

MS. POWER: So he left – I think it was September, maybe, of 2013. It was a few months later. Briefly, in the interim, Ken McClintock was there, but I think fairly quickly after, Ed Bush came into that role. And he would have been there, I think, probably about 14 or 15 months. And then he transitioned to a different role; he was more focused on Astaldi and basically moved up to site.

So a gentleman named Anthony Embury moved into the role and he came in – I believe it would

have been around the beginning of 2015. And then he left, I think it was around April of 2016.

MS. MORRY: Mm-hmm.

MS. POWER: So there was probably – whether it was six or eight weeks, there wasn't anyone in that role for a very short period of time, and then I moved into the role.

So, during that time, I guess I, from a functional perspective, reported to that person.

MS. MORRY: Mm-hmm.

MS. POWER: But a direct report was actually Darren DeBourke as the HVDC specialties project manager.

MS. MORRY: Right, yeah.

Okay. So next I'd like to put you to tab 36, in binder 2.

MS. POWER: Okay.

MS. MORRY: Which is P-03774, Madam Clerk.

MS. POWER: Binder 2?

MS. MORRY: Yeah, in binder 2. That's right.

MS. POWER: Okay. Okay.

MS. MORRY: So this is –

THE COMMISSIONER: 03774.

MS. MORRY: You're – have you got it?

MS. POWER: No.

MS. MORRY: It's on the screen.

MS. POWER: What tab is it again?

MS. MORRY: Excuse me, tab 36,

THE COMMISSIONER: Thirty-six.

MS. POWER: Oh, 36, I thought you said (inaudible).

Yeah, got it.

MS. MORRY: Okay.

So I understand this is a presentation that you put together that describes the project controls function and how it works within the Lower Churchill Project. Is that right?

MS. POWER: Yeah, that's right. Yes.

MS. MORRY: And I understand the information in here comes from the Project Controls Management Plan, like the formal –

MS. POWER: Yes.

MS. MORRY: - documents.

MS. POWER: Yeah, it's the exact same information, it's just an easier version of it because the Project Controls Management Plan is – I don't know, it's probably 60 or 80 pages or something.

MS. MORRY: Right, yeah.

MS. POWER: Yeah, so this is really just meant to be a summary.

MS. MORRY: Mm-hmm.

MS. POWER: Sorry, I'm just going to move over.

It's meant to be a summary of all the key areas, really, to give somewhat of a bit of a brief overview.

MS. POWER: Right.

MS. MORRY: Yeah.

So in a high-level sense, Ms. Power –

MS. POWER: Sure.

MS. MORRY: – what is the project controls discipline all about?

MS. POWER: Sure. So on – I can read, if you like, sort of the official definition, but I might give a bit plainer description –

MS. MORRY: Sure.

MS. POWER: – as well. So really what we've got here – and, again, this is straight out of the Project Controls Management Plan: "Project controls are the data gathering, management and analytical processes used to predict, understand and constructively influence the time and cost outcomes of a project or program; through the communication of information in formats that assist effective management and decision making."

So I think that's relatively clear but just if someone asks me, I probably don't use as many big words, but I mean, really, it's just that. It's gathering of information as – you know, in a timely fashion, whatever information is available, being able to effectively communicate that and provide that to the management of a project, like the management team of any project, so that they can really make informed decisions.

MS. MORRY: And so how does the project controls role fit within Nalcor's organization? I understand you have an organizational chart there on page 2?

MS. POWER: Yeah, I do. Yeah. So I have -I guess that's on page 4.

MS. MORRY: Yeah.

MS. POWER: If we want to flip to that –

MS. MORRY: Let's do that.

MS. POWER: – and then we'll probably flip back to page 3.

MS. MORRY: Mm-hmm.

MS. POWER: So, yes, on page 4 here – so this is just a little bit of a generic organization chart; this was one where we had taken the names off. But I guess, initially, when I took on that role, I actually only reported – because as I took that role on is exactly when the project was bifurcated.

MS. MORRY: Right.

MS. POWER: So, initially, it would've been reporting to the general project manager, but this is kind of the organization that was in place very shortly after I took on this role.

So I really support both sides of the project. So I report to the project director of Generation and the – at that time, it was general project manager but the current, actually, is a project director in Transmission.

MS. MORRY: Mm-hmm.

MS. POWER: So, underneath that, I'm one of the functional leads. So, that would be the same as, you know, human resources, finance, those sorts of areas. We have a functional group kind of outside that supports both sides, but underneath that you'll see, on the far right, there's a project controls lead for Muskrat Falls. And, at that time, there was, you know, a project controls lead for the HVDC specialities group and for the overland transmission group.

Now, today, naturally, as we move along in project completion, those two transmission project controls leads are one combined position. So the reason for the dashed line, just to understand, is that they're –

MS. MORRY: Mm-hmm.

MS. POWER: – from a functional perspective, they report to me, but their direct report would be the project manager for those particular components.

So outside of that, just to kind of quickly go through the rest of this, I have – on senior cost control teams, both for construction side of the cost, as well as the owner's team.

MS. MORRY: Mm-hmm.

MS. POWER: And then, underneath the owner's team is one that reports directly to me; whereas, the cost controllers who would be looking after each of the components, they would report into the project controls lead for that component.

MS. MORRY: Right.

MS. POWER: And then I also have a senior planner who looks after the integrated project schedule. So he reports directly under me but, again, there's planners under the individual groups. And then I also have a stewardship reporting coordinator who looks after all of the reports, which I know we'll talk about. And then, change and interface management lead — that role, actually, is no longer filled. Just, again with — as time moves on, but within the components there's change and interface coordinators or engineers in each group and same with risk.

MS. MORRY: Okay.

MS. POWER: There's coordinators within each

group.

MS. MORRY: So on page 3 –

MS. POWER: Yeah.

MS. MORRY: – of your –

MS. POWER: Yeah.

MS. MORRY: – presentation, there's several areas that fall under project control, and I'm going to ask you about each of them one by one.

MS. POWER: Okay.

MS. MORRY: So I wonder if you could first tell me about how project controls addresses planning and scheduling, and I think the details for that are on slide 6, if you'd like.

MS. POWER: Sure. Yeah.

Yes, so I guess just to, kind of, clue up with the wheel on page 3, this is all the different functions that are basically –

MS. MORRY: Yeah.

MS. POWER: – within project controls. So, you can see, both from this wheel and from the organization chart that there's quite a number of areas in this group –

MS. MORRY: For sure.

MS. POWER: – so it is a large team. At one time, I think we had probably around 60 people but, again, as the project moves towards completion, I think right now I'm down about 35 people, and they're both within the St. John's office at the Muskrat Falls site.

MS. MORRY: Right. Yes, excuse me.

So your team, generally, do you work at the head office?

MS. POWER: I – yes, I do. I work at Torbay Road.

MS. MORRY: Yeah.

MS. POWER: And there are certainly all of the senior group that I have work at Torbay Road –

MS. MORRY: Right.

MS. POWER: – because they cover the entire project. I do have – the two project controls leads are there, the people on the Transmission side are also at Torbay Road –

MS. MORRY: Mm-hmm.

MS. POWER: – because they're – they don't have a site, they have a number of sites, of course. But we did have project controls coordinators at Soldiers Pond, at Churchill Falls and at Muskrat –

MS. MORRY: Mm-hmm.

MS. POWER: – focused on HVDC specialties. And, as well, then there now it's a fairly small team at Muskrat Falls, but at one time there were quite a number of people at Muskrat Falls who were project controls focused.

MS. MORRY: Sure.

MS. POWER: So there was a number of cost controllers, quantity coordinators and planners, and we also had some document control resources there. Now, since then, we're starting to kind of bring people back –

MS. MORRY: Sure.

MS. POWER: – to the office, or as roles are no longer required, people have left.

MS. MORRY: Okay.

MS. POWER: Yeah.

MS. MORRY: So I'll put you to page 6 next –

MS. POWER: Yeah.

MS. MORRY: – which is about planning and scheduling. So what is the integrated project schedule?

MS. POWER: Okay. So, actually, if you want to –

MS. MORRY: Sure.

MS. POWER: – perhaps flip to page 7.

MS. MORRY: Yeah.

MS. POWER: So page 7 actually shows – I know this is fairly high level, but it shows –

MS. MORRY: Yeah.

MS. POWER: – the different levels of schedule. So the integrated project schedule – so just kind of to anchor back to DG3, so while I wasn't there I generally know how it was all setup.

MS. MORRY: Mm-hmm.

MS. POWER: So during and up to DG3 there was a detailed schedule developed by SNC, by their planners. I know that schedule was extensive. It was, you know, 10,000 line items but, you know, it was all, of course, a theoretical schedule; this is what it will take to build this – these facilities. So out of that, essentially, we produced a rolled up schedule which is the integrated project schedule. So that had, I think at that time, 700-plus activities.

MS. MORRY: Mm-hmm.

MS. POWER: So it still had the exact same scope, however, obviously, at a much more rolled up version, but it's still a logic-based schedule. So the activities in that schedule still

have, you know, a start, a duration – so a finish date, they have relationships where, you know, this has to be done before this, this has to be done before that. So it's entirely logic based which does allow us to produce a critical path.

So, essentially, when you look at what a critical path is, it would be the activities that are actually essentially pushing the end date in a bit simplistic terms.

MS. MORRY: Mm-hmm.

MS. POWER: But – 'cause, you know, you have different activities that – you know, one activity may finish and if that activity slips by two months, it still wouldn't affect the end date. So, that's not on the critical path.

MS. MORRY: Right.

MS. POWER: But an activity that if it slips a day, it pushes the end date, that would be your critical path.

MS. MORRY: Right.

MS. POWER: So, basically that Integrated Project Schedule is really for a couple of purposes. It's really for our primary reporting tool. It, again, also allows us to track the critical path at a high level – our overall project critical path, so it integrates not only the Muskrat Falls scope but also the transmission scopes – the overland transmission and the HVDC specialities. And it also ties in the eventual high-power testing and the connections to the actual grid.

MS. MORRY: Right.

MS. POWER: So it kind of takes you through the whole project.

MS. MORRY: And so how frequently is the IPS updated?

MS. POWER: The IPS is updated every month.

MS. MORRY: Mm-hmm.

MS. POWER: And basically, how that gets updated – so you'll see on this page number 7, the boxes underneath, so on the right hand side

the items in blue, in the blue box, those are really all of the contracts for each of the different groups. So when you look at any of our major contracts as part of the contract itself, the project controls mostly focused exhibit would be exhibit 3. That's in every contract.

MS. MORRY: Mm-hmm.

MS. POWER: And that contract outlines all of the rules around planning and cost, but on the planning side, it outlines that they – basically, they need to use Primavera or P6 –

MS. MORRY: Mm-hmm.

MS. POWER: – as we call it. So, that is a tool that's used very standard across pretty well, I think, every industry. And that essentially is a very detailed schedule. So the contractors' schedules would be, you know, incredibly detailed. Every activity is in there; the entire scope is in there. So, they update those schedules, again, within the requirements of the each of the contracts. They update those every month. So that would come in to the particular project controls group for that component.

They would be reviewing that, looking at any changes, working with the rest of the project controls team like those who are more directly involved in construction. And they would provide updates towards the end of every month to our IPS planner, who would then update the IPS with any changes that have occurred during that past month. So, that's the basic process. I think, does that cover –?

MS. MORRY: It does – yeah.

MS. POWER: Yeah, okay.

MS. MORRY: I think that is great.

MS. POWER: All right.

MS. MORRY: Just one further question there. What's the – is there a distinction between the IPS and the management summary schedule –

MS. POWER: Yes -

MS. MORRY: – (inaudible) on the slide?

MS. POWER: – there is, yes. So the management summary schedule is really for primarily external stakeholders.

MS. MORRY: Mm-hmm.

MS. POWER: So, Primavera schedules, for those who aren't looking at them every day, are not terribly friendly, and of course they're also – even the IPS is 40 or 50 pages. So it's certainly not something that someone who – you know, an external stakeholder is looking at.

So the management summary schedule is actually just – it's not any kind of a real logic schedule; it's a picture.

MS. MORRY: Mm-hmm.

MS. POWER: So it's something that I do in Excel. It just has sort of the key durations and dates of some of our items, so it would just be a single page. So, you would see it in something like a board meeting, presentation, in the Oversight Committee presentations and, as well, to even our senior leadership can certainly use that as a communication tool.

But that's – it's not something were used from a working level. It's purely a presentation.

MS. MORRY: Right.

MS. POWER: Yeah.

MS. MORRY: Okay. So next, just briefly –

MS. POWER: Okay.

MS. MORRY: – about estimating and cost baselining. I think that's on page –

MS. POWER: Eight.

MS. MORRY: Eight. Exactly.

MS. POWER: Yeah.

MS. MORRY: Now, I understand that at this point in the project, that's – doesn't play a huge role in your work, but if you could just briefly describe the project controls aspect of it?

MS. POWER: Sure.

Yes, so I think in previous testimony, you've heard lots of discussion on the original estimate and cost baseline.

MS. MORRY: Mm-hmm.

MS. POWER: So that was something that the project controls group at that time were certainly involved in. As – you know, as I've mentioned, moving into this role in 2016, and even when I was in the project controls lead role for HVDC specialties in 2013, this was something that was already complete.

MS. MORRY: Mm-hmm.

MS. POWER: So I never had much involvement. The only part of it where I did from an estimating perspective, anyway, is even after the estimate is complete. During bid processes and also during execution of certain contracts, we did use some estimating services. So Paul Lemay, who's been here on the stand —

MS. MORRY: Mm-hmm.

MS. POWER: – Paul was within my group. So we used his services to be able to help us evaluate change orders – larger ones and stuff anyway – and any other items that we required that needed estimating. But, again, at this point in the project, it's not a function I even have anymore.

MS. MORRY: Okay.

MS. POWER: We don't really require it at this time.

MS. MORRY: Okay.

So another area that falls under project controls is cost control.

MS. POWER: Mm-hmm.

MS. MORRY: And I wonder if you could tell us how project – what makes project controls different from finance or accounting in –

MS. POWER: Okay.

MS. MORRY: – within the organization.

MS. POWER: Yes. Yeah, and that's, I think, frequently something that isn't necessarily understood outside of projects –

MS. MORRY: Right.

MS. POWER: – 'cause budgets and that are often looked as almost like invoice and finance. So, yes, they are two different functions. Don't get me wrong, they're obviously closely tied together, and I work with the finance team quite frequently. But really, to me anyway – and, again, I'm gonna simplify it a bit –

MS. MORRY: Yeah.

MS. POWER: – it's probably not –

MS. MORRY: Please.

MS. POWER: – a perfect way to describe it, but finance are really more focused on the side of, you know, the invoicing what's been spent and accounting for all those things. Cost control is, I would suggest, more about the future and the forecast.

MS. MORRY: Right.

MS. POWER: Now, obviously, though, within the budgets that have been set. So, I think what – just to help kind of demonstrate a little bit if we

MS. MORRY: Yeah.

MS. POWER: – look at page 10?

MS. MORRY: Yeah. Thank you.

MS. POWER: Yeah. It's a bit of graphic there. So, on the left hand side, of course, is the estimate comes in, and it's set up as budgets. So while the estimate is, you know, at a high level at that time, at DG3, was 6.2.

MS. MORRY: Mm-hmm.

MS. POWER: That was broken down into commitment packages. So each commitment package was really a scope of work that may or may not be equal to an actual contract. A scope of work may be issued to one contractor and it may be issued to many contractors. But that's

how we essentially budget is, you know, at that commitment package level.

So really, what the cost controllers are doing is once you get to the point where contracts are awarded on a monthly basis – so within each contract – and I know it's been talked about, the kind of area manager structure.

MS. MORRY: Mm-hmm.

MS. POWER: So within that area manager structure, there's a package engineer or a package leader for each of the contracts. So the cost controller in that group would also be working on essentially every month with the package lead, with the planner, and they would all be looking at the reporting that's coming in from the contractor. So, again, in that exhibit 3 I mentioned earlier —

MS. MORRY: Mm-hmm.

MS. POWER: – there are also requirements for cost reporting. So they're required on a monthly basis to provide us with their incurred. So, incurred would not only be what they have been paid; it's also what they believe they've earned for say the last month or anything they haven't invoiced yet. So, incurred is certainly one of our key deliverables. So from a cost control perspective, we're not terribly, I guess, interested from a reporting perspective in what's been actually paid. That's more on the finance side.

MS. MORRY: Mm-hmm.

MS. POWER: For us, it's more about what has been earned. So, essentially if a contractor was stopped today, how much would we owe them?

MS. MORRY: Right.

MS. POWER: That's – again, it's simplistic but that's generally how incurred is. It's what's been paid plus what's been accrued or earned in the last month or since the last invoice.

MS. MORRY: Sure.

MS. POWER: So each month they're looking at, with the package team, not only the work that's been earned – certainly, that's one of the

things they're looking at – they're also getting information from the contract cost controllers.

MS. MORRY: Mm-hmm.

MS. POWER: They're also looking at any change requests that we may have in-house.

MS. MORRY: Mm-hmm.

MS. POWER: So what the values of those are, so that would be some of our potentials. Some of the change – they'd be working with the package team to determine is this now something we know is going to happen, is this a potential? So they're categorizing these things with the package team and they're looking at their overall remaining budget for that package and whether they have any concerns about if there's enough budget in the package to cover any changes, any other potentials or trends; so, again, depending on the contract.

So a lump sum contract, unless you were looking at a scope change, you probably wouldn't have too much in the way of trends from a cost perspective. But if you're certainly looking at some of our other packages, of course, our reimbursable unit price —

MS. MORRY: Mm-hmm.

MS. POWER: – so are we seeing quantity variations in the field? Are we seeing the productivity is not matching where we should be? So then, of course, that would flag a potential issue from a cost perspective.

So, all of this information, like I said, is done at the package level.

MS. MORRY: Yeah.

MS. POWER: There is a meeting every month within each of the groups with the area managers, with the project manager to say here's what we're going to be reporting.

MS. MORRY: Mm-hmm.

MS. POWER: So that would be essentially pretty well right at the end of the month, first week of the next month. That information is all then passed along and entered into our tool. So

just, I guess, to mention our tool, so from a cost perspective our primary reporting tool is PM+.

MS. MORRY: Mm-hmm.

MS. POWER: So PM+ is a computer program that is actually SNC. But even after the changeover to the integrated management team, we continued to use and still today use PM+ –

MS. MORRY: Mm-hmm.

MS. POWER: – as our primary reporting tool. So the lead cost controller, which was on the org chart earlier – that is the person who really owns that overall tool. So all of the other cost controllers are passing their information along to him, not only what's in PM+ as sort of official –

MS. MORRY: Mm-hmm.

MS. POWER: – but also any potentials or trends that are seen. And then, basically, all of that is compiled together and we review that then with the senior leadership of the project management team in order to finalize all of our cost reporting for the end of any given month.

MS. MORRY: Right.

MS. POWER: Okay?

MS. MORRY: So the final output here, the –

MS. POWER: Yeah.

MS. MORRY: – in the red box is the –

MS. POWER: Right.

MS. MORRY: – final forecast cost calculation.

MS. POWER: Right.

MS. MORRY: And so that number includes the trends that you identified and trends – I know that the word might sound like it's kind of uncertain, but is it, in fact – what, the level of certainty of a trend?

MS. POWER: It depends. I mean there can certainly be – you know, trend is kind of used pretty broadly.

MS. MORRY: Mm-hmm.

MS. POWER: It could include anything from, well, you know, on quantity variation that we're seeing were 50 per cent of the way through, and quantity variation has either been significant or not significant.

MS. MORRY: Mm-hmm.

MS. POWER: So that may be able to allow you then to do some forecasting with the package engineers, what do we think the variation could be for the remainder of the contract.

MS. MORRY: Mm-hmm.

MS. POWER: When you're looking at things like productivity, if your productivity is very low – and then you can use that as a trend to help you calculate or estimate, I should say. It's not a direct calculation but it can certainly help you estimate where you think you'll end up at the end. So it depends.

MS. MORRY: Mm-hmm.

MS. POWER: Some of these things are included in the official forecast. And when I say forecast, there – and I think we'll see that in some of –

MS. MORRY: Yeah.

MS. POWER: – the decks later, but –

MS. MORRY: We will.

MS. POWER: Yeah. So, to me, there's two different things, right? There's the overall forecast of exactly what's in each commitment package, and contingency is a separate bucket.

MS. MORRY: Mm-hmm.

MS. POWER: So even if something is not forecast specifically in a commitment package, it doesn't mean it's not in your forecast because we often have what we do – and I think we'll go through that today – is we're looking at what our trends are that are not in our forecast as compared to what's in contingency. So that tells you whether you have enough to actually cover those if they were to come to pass or once –

MS. MORRY: Right.

MS. POWER: – you get more information and come up with a more exact number.

MS. MORRY: Sure.

MS. POWER: Yeah.

MS. MORRY: And so as – so we will go through one of the monthly forecast reports. Well, let's – if we could just very briefly –

MS. POWER: Yeah.

MS. MORRY: – go through the rest of the areas

_

MS. POWER: Sure.

MS. MORRY: – that connect to project

controls.

MS. POWER: Okay.

MS. MORRY: So in terms of progress and

performance measurement –

MS. POWER: Yeah.

MS. MORRY: – what's the earned-value

method?

MS. POWER: So, essentially, earned-value method, depending on what you're talking about – and this applies to whether you're talking about engineering progress, procurement progress, construction progress – earned value is really about determining your percentage complete based on, I'll say, deliverables or actual physical work.

MS. MORRY: Mm-hmm.

MS. POWER: So in the case of engineering, when you're talking about engineering progress, it should be based on the total number of deliverables you anticipate completing. So if you had a hundred deliverables and 50 of them are a hundred per cent complete –

MS. MORRY: Mm-hmm.

MS. POWER: – and the other 50 are zero, well, you're 50 per cent complete. And so that's really what it's about.

MS. MORRY: Mm-hmm.

MS. POWER: Like, it's not how many hours have been spent because that's completely irrelevant. That – I think that's often a misunderstanding. So, from an engineering perspective, that would be how you would calculate a progress.

From construction, of course, you're basically talking about – depending on the contract, again, it could be how many cubic metres of concrete you poured versus your total amount of concrete, how many tons of steel you've placed versus what the plan is. And then, as well, when you look at installation of equipment, usually what we'll do is there'll be rules of credit. So it might be that, you know, you place your equipment. Is a certain percentage complete? You actually bolt down the piece of equipment into the – that's a certain percentage complete.

MS. MORRY: Sure.

MS. POWER: So, essentially, what that does, it allows you – I mean, it's always an estimate but it allows you to estimate exactly where you are. So the importance of that, of course, is that the beginning of the contract or the beginning of the scope of work we're outlining planned progress.

MS. MORRY: Mm-hmm.

MS. POWER: So we're estimating that and we're doing that, essentially, based on hours or level of effort it takes. That's how you would wait between different things. So when you're looking at concrete, yes, okay, fine, it's cubic metres of concrete and, you know, you're whatever, 10 per cent complete, and on steel you're a different percentage, but how you combine those into a fully rolled-up version of progress is really based on level of effort.

MS. MORRY: Sure.

MS. POWER: So how we do it, especially when you have a lot of lump-sum contracts, we actually use the construction cost. So the procurement cost is left out but the actual

construction cost, which would be pretty well close to – because most of the construction cost is labour. So we would be actually rolling up the percentage complete for each individual component of a package.

MS. MORRY: Okay.

MS. POWER: That then rolls up to give you an overall percentage complete for a particular site. And that eventually rolls up where we can produce an overall percentage complete for the entire project.

MS. MORRY: Okay. Thanks.

So it's measured against the baseline plan.

MS. POWER: Yeah.

MS. MORRY: And whose decision would it be to re-baseline the project then?

MS. POWER: So re-baselining of a project is something that's, obviously, fairly usual.

MS. MORRY: Mm-hmm.

MS. POWER: On previous projects I've been on it's certainly occurred. It's not something that's frequently done. At the end of the day, it's always a decision of the overall senior management on – to re-baseline a project. We did, of course – when I first took over in June of 2016 is actually the last time that we did a full re-baseline.

MS. MORRY: Yeah.

MS. POWER: But it means, certainly, no matter where you are, your percentage complete versus your plan is useful information. It's not the only thing you should be looking at, there's a number of things. It's that plus the cost plus all the other factors, you know, we'll talk about.

MS. MORRY: Yeah.

MS. POWER: But it is, fundamentally, a decision by senior management. Having said that, it certainly can get to a point that if you're reporting against a baseline that's significantly different, whether it be earlier or later –

MS. MORRY: Mm-hmm.

MS. POWER: – it doesn't become as useful as – of a tool. So you need to be able re-baseline to say: Well, this is where we're now targeting, and that allows you to get a – one of the indicators that tells you whether you're going to make your end date.

MS. MORRY: Right. And so –

MS. POWER: Yeah.

MS. MORRY: – what is the – it's not – is it necessarily the case that re-baselining means changing the end date?

MS. POWER: It doesn't have to.

MS. MORRY: Mm-hmm.

MS. POWER: A lot of times it does, though, because if your end date –

MS. MORRY: Mm-hmm.

MS. POWER: – unless you're on an extremely long project – presumably, if you're either way ahead or way behind, and you're going to rebaseline, I would think it's – ultimately, your end date is moving.

MS. MORRY: Right.

MS. POWER: It doesn't technically have to be, but I'm not sure I've ever seen a re-baseline that it wasn't because there was probably a delay.

MS. MORRY: Right.

MS. POWER: That would be most of the reason why.

MS. MORRY: Now, on the Lower Churchill Project, you mentioned the last re-baseline happened in – when you came on board as project controls manager.

MS. POWER: Yeah, it was July of 2017.

MS. MORRY: Right – or 2016?

MS. POWER: Sorry, yes, 2016.

MS. MORRY: Not to worry.

MS. POWER: Yeah.

MS. MORRY: And -

MS. POWER: Yeah, that's right.

MS. MORRY: Now, I understand that did

involve a change in the end date.

MS. POWER: Yes, that's correct.

MS. MORRY: Right.

But before that, on the Lower Churchill –

MS. POWER: Yeah.

MS. MORRY: – Project, there had been a few re-baselines occurring, but the end date never changed.

MS. POWER: Yeah. No, like I said, it depends on, really, what you're looking at. It can also be that if your early works are slower than planned – and, in particular, if you have a – so one of the examples, I think – because if I recall correctly, probably, a couple of the biggest changes were on the transmission side of the project.

MS. MORRY: Mm-hmm.

MS. POWER: So the transmission side of the project wasn't on the critical path of the overall project. So I think if you looked at – and I haven't looked, to be honest, but I'm fairly sure that the transmission dates had pushed out. Now, it would not have pushed out the overall project because they weren't critical path.

MS. MORRY: Sure.

MS. POWER: But that doesn't mean that we wouldn't decide to, you know, make a choice to re-baseline those portions, which would, of course, affect the overall. I know there was, as well, on – I don't recall exactly when, but there was a time earlier on as well that the MF portion of the project was also re-baselined.

MS. MORRY: Mm-hmm.

MS. POWER: And, again, it would've been some of the activities that were pushed out that didn't, necessarily, impact the end date.

MS. MORRY: Right.

Now, it's the evidence so far that –

MS. POWER: Mm-hmm.

MS. MORRY: – very little was achieved by Astaldi in 2014.

MS. POWER: Yeah. Yeah.

MS. MORRY: Now, there were re-baselines in June 2014, October –

MS. POWER: Right.

MS. MORRY: – 2014 and September 2015 is my understanding.

MS. POWER: Okay.

MS. MORRY: And the end date for the project didn't shift on those occasions.

MS. POWER: Mm-hmm.

Yeah.

MS. MORRY: Does it seem reasonable, from your experience –

MS. POWER: Yeah.

MS. MORRY: – for the end date not to change in a re-baseline in a situation like that?

MS. POWER: I mean you'd have to look at the details.

MS. MORRY: Yes.

MS. POWER: I have some knowledge of what was happening during that time. I wasn't involved at the time because, as I said, I was on the HVDC specialties. I know within those groups the end dates did actually shift.

MS. MORRY: Uh-huh.

MS. POWER: So that part of the re-baseline was a move.

MS. MORRY: Mm-hmm.

MS. POWER: I know certainly within the 2014 time frame – and to be honest I've learned some of this more in the last number of months –

MS. MORRY: Mm-hmm.

MS. POWER: – is that, yes, Astaldi did have a poor start, but the reality is that they were – it's not like they were planning to pour 200,000 cubic metres of concrete in 2014, it was more like, I think, 70,000 and they only achieved maybe 30. So, certainly, that's a concern.

MS. MORRY: Mm-hmm.

MS. POWER: And they also decided to do a couple of other things, like they shifted the initial river diversion into 2016. That was from 2015. They also were looking at what impacts there were from Astaldi and Astaldi were indicating that they were – could recover and –

MS. MORRY: Mm-hmm.

MS. POWER: – were indicating – you know what I mean, were indicating that. The shift in diversion also changed, for example, the start of the North Dam. So I can see that there would have been a number of items that were moving around.

MS. MORRY: Mm-hmm.

MS. POWER: And so you would've ended up in a situation where you have, you know, a baseline plan that doesn't really match the current plan. I mean just – it's probably another good example, it's a much smaller part but while I stated that a full re-baseline was done in 2016

MS. MORRY: Mm-hmm

MS. POWER: – I did do a partial re-baseline of a single contract since that time. It wasn't a major impact but for that particular contract, when we moved the RCC for the North Dam, that was initially thought to be done in one season, but a change was made in order to

reduce risk and to do it over two seasons. So we did re-baseline that part of our overall and it didn't actually change the overall end date of course.

MS. MORRY: Yeah.

MS. POWER: It certainly changed the end date for the North Dam scope.

MS. MORRY: Mm-hmm

MS. POWER: But, again, it had no impact on the overall, so I really think it just depends. I'd have to get into the weeds of the detail.

MS. MORRY: I understand now.

MS. POWER: Yeah. Yeah.

MS. MORRY: But, yes, thank you, speaking from your experience (inaudible).

MS. POWER: Yeah. Yeah, it can happen.

MS. MORRY: Yeah.

MS. POWER: It depends on what the particular situation is.

MS. MORRY: Understood.

MS. POWER: Yeah.

MS. MORRY: Okay.

Now, change management is another area.

MS. POWER: Yeah.

MS. MORRY: So just in a very brief way –

MS. POWER: Mm-hmm.

MS. MORRY: – what are the – how has change management happened within the project?

MS. POWER: Okay.

MS. MORRY: What's the difference between a deviation alert notice and a project change notice especially?

MS. POWER: Okay.

So change management is really about monitoring anything from scope creep to – you know, of the project itself, as well as looking at schedule changes, quantity changes, any kind of change, really. So I'm probably – if we want to flip to page 13 –

MS. MORRY: Mm-hmm.

MS. POWER: – that just kind of shows the –

MS. MORRY: The process, yeah.

MS. POWER: – yeah, the overall cycle.

So, basically, in the change management area the entire project team – and this isn't – while project controls stewards this process, I wouldn't say that we actually own this process. We help the rest of the team be able to essentially go through this process as it is lined out.

So we have a tool that was internally developed for this project. It's called LCPtracker. So that is where we would – it's essentially a database, but that's where we would enter deviation alert notices. So a deviation alert notice is essentially just that, I guess, it's a flag that there's a potential deviation. That could be anything from, as I've mentioned, a change we see, say, at site, in the field. It could be an engineering change. It could also be an opportunity that somebody sees we can improve schedule or save money by doing whatever it is this idea is.

So anybody on the entire project can open up that program and –

MS. MORRY: Mm-hmm.

MS. POWER: – enter a deviation alert notice.

MS. MORRY: Right.

MS. POWER: So once they do, that's where my team would get involved and kind of help steward everybody through this process.

So a deviation alert notice is just your initial flag. Once that happens, so in each of the groups – so, say at this point, within the Transmission group and within the Muskrat Falls group they have a biweekly meeting where they meet with all of the area managers and package leads and

they would go through, in that system, any new deviation alert notices that have been entered.

MS. MORRY: Mm-hmm.

MS. POWER: They would be looking at and discussing as a group: Is this something that we want to investigate further. So that's really when you're going through initial assessment, then, if we do want to investigate further, we'd go through more of a detailed analysis. And then, along that way, of course, you're involving, I think, more and more senior people.

MS. MORRY: Mm-hmm.

MS. POWER: And, really, when you get to the point of a PCN – which is a project change notice – that's when there's a second part of the system. And there's – it's generally – it's probably a 9- or 10-page document that would outline: Here's a description of the change that we want to make, here's the rationale of why we want to do it, here's the benefits that we believe the project will see out of this.

MS. MORRY: Mm-hmm.

MS. POWER: It will then go through any changes from a cost perspective – any changes or impacts, I should say – on a schedule, on environment, on health and safety, on the contracts group. So, there's about 15 areas that you could potentially put information in there and then there's the section on risk.

So, you'd be looking at risk pre-change and risk post-change and any impact it has on our risk profile and then it has a section for implementation plan and action. So, any actions that have to be done – if it's approved –

MS. MORRY: Mm-hmm.

MS. POWER: – and you often have a number of attachments. So, for some of our larger impact changes we would have what's called a decision support package. So that would generally be prepared by whoever is leading that change. So that would be, usually, whether it's the package (inaudible) use, the area manager – it depends on what the particular topic is, and then basically that document is circulated for approval.

MS. MORRY: Right. And so that has to be approved by the project director. Is that right?

MS. POWER: It does. So, the way that we set this up – I mean, you know, a lot of them usually have some impact on cost –

MS. MORRY: Mm-hmm.

MS. POWER: – whether that is drawing from contingency or returning money to contingency

MS. MORRY: Yeah.

MS. POWER: – if it's a savings. Or, even if you're transferring between commitment packages. So any time you're touching contingency, the only person who has the authority to approve that is the project director.

MS. MORRY: Right.

MS. POWER: So – now, so – technically, I guess, if it had no impact on cost – but it doesn't matter – we've always gone down that path, that the project director signs every PCN.

MS. MORRY: Yeah.

MS. POWER: And, of course, there's two project directors. So –

MS. MORRY: Right.

MS. POWER: – depending on which area of the project you're talking about it would be a different person and I sign every PCN and, of course, the project manager for that particular area would – the area manager – project controls individuals – the cost person. So, there's quite a few people –

MS. MORRY: Yeah.

MS. POWER: – who go through that and then when it's – once it's approved – the actions would be implemented.

MS. MORRY: Okay.

And so the last area that I'd like to talk about, from our perspective, in your bailiwick, would be risk management.

MS. POWER: Okay.

MS. MORRY: So, that's on page 15 of your presentation.

MS. POWER: Mm-hmm.

MS. MORRY: And so, just in a brief way, how does risk management connect to the project controls work?

MS. POWER: So again, I think that, you know, risk is – as many of the areas – it's everyone's responsibility and interest.

MS. MORRY: Yeah.

MS. POWER: But the individuals on my team help to lead the effort within each team. So, I think on page 16 – I don't think I need to define risk, I know that's been talked about a lot here –

MS. MORRY: Sure.

MS. POWER: –but on page 16 – this is kind of the – and I think you've probably actually seen this before. But, basically, we identify risk, assess the risk, develop any kind of response and then monitor and control. So, really, what that means in our everyday world – we have a program called IRIS Intelligence –

MS. MORRY: Mm-hmm.

MS. POWER: – is the name of the program; it's web-based. It's something that, I understand, is used in a lot of different industries. It's a fairly commonly used program.

So, the risk coordinators within my group, they would – at one time we would've had, you know, on mostly a monthly basis, a meeting for each individual package.

MS. MORRY: Mm-hmm.

MS. POWER: As well to – within the contractor's monthly reports, particularly the major packages, they would also have, as part of their original submission, you know, under the exhibit 3 requirements, a risk management plan, and they would have a section of their monthly report that talks about risk.

So, really, then, now – just to give you a bit of context – for now, the transmission group has a single meeting each month to talk about the current open risks.

MS. MORRY: Mm-hmm.

MS. POWER: And that is pretty well the entire team. Like, from the project manager to the area managers to the package engineers. And on the Muskrat Falls side, there's still, of course, a few active packages. So, again, they're tracking, on a regular basis, any of the risks that they're monitoring —

MS. MORRY: Mm-hmm.

MS. POWER: – that they've seen arise. They're tracking the mitigation actions to make sure that they're being completed, and then they would be retiring risks as they are, you know, basically no longer a risk.

MS. MORRY: Right.

MS. POWER: Or if they've actually turned into an issue and not a risk.

MS. MORRY: Sure.

MS. POWER: So at my level, I guess, a couple of things; so, we've often talked about strategic risks. So they're generally, really, outside of what the project teams would necessarily be managing.

MS. MORRY: Yeah.

MS. POWER: So they're more something that I'm looking at myself. So, I keep track of those – that are still active in IRIS.

MS. MORRY: Mm-hmm.

MS. POWER: And I would be talking to the project directors, essentially, about those items. So, again, what you'll see in our project controls monthly package that we review –

MS. MORRY: Yeah.

MS. POWER: – risks are part of the items that we review in there. So, we'll see that, I guess, as we go through.

MS. MORRY: Yes, exactly.

MS. POWER: Okay.

MS. MORRY: And so you mentioned this monthly project controls summary meeting.

MS. POWER: Yes.

MS. MORRY: Who attends that meeting?

MS. POWER: So, there's actually two meetings –

MS. MORRY: Yeah.

MS. POWER: – because where we have a transmission and generation, so it's just more efficient to have them separate.

MS. MORRY: Yeah.

MS. POWER: So, it's myself, my lead cost controller – he actually prepares the package itself –

MS. MORRY: Mm-hmm.

MS. POWER: – and then on the – it's – I guess, at a – just from a job title perspective –

MS. MORRY: But – the name of the cost controller?

MS. POWER: Oh, sure. Sorry, yes. So, the senior cost controller, who attends both meetings – his name is George Chehab.

MS. MORRY: Yeah.

MS. POWER: And then myself. And, so, then, on the Muskrat Falls side of the project at this point – or generation is what we call it – we would have the project controls lead.

Do you want me to name off -?

MS. MORRY: Yeah, sure.

MS. POWER: Okay.

MS. MORRY: The names would –

MS. POWER: Sure.

MS. MORRY: – be perfect.

MS. POWER: Okay. Yeah.

The project controls lead on the generation side, his name is Greg McKenney.

MS. MORRY: Yeah.

MS. POWER: Then there would be Scott O'Brien, the project manager; Ron Power, the deputy project director; and Paul Harrington, the project director; and Gilbert Bennett –

MS. MORRY: Right.

MS. POWER: – the EVP for generation; and as well Jim Meaney frequently attends; he's the VP of Finance.

And then on the transmission side – so at this point, of course, there's been a couple of recent changes so again it would be myself; and George –

MS. MORRY: Mm-hmm.

MS. POWER: – the project controls lead for the transmission group, his name is Ken Wall; and then the project manager for the transmission side, Andrew DuPlessis –

MS. MORRY: Mm-hmm.

MS. POWER: – the project director is Gerard Dunphy; and then the EVP, Jim Haynes – so Jim of course has just been in the last couple of months and prior to that John MacIsaac generally attended; and then – sorry, Jim Meaney as well also frequently attends – I think that picks up everybody.

Yeah, so that meeting happens once a month –

MS. MORRY: Mm-hmm.

MS. POWER: – basically, it happens on the 10th of the month –

MS. MORRY: Mm-hmm.

MS. POWER: – unless the 10th is a weekend. And George prepares that package for – so I – while George prepares it there's inputs that I

provide to him directly or others provide to him. At one time that meeting was entirely cost focused but over the last – it's probably close to two years, I think, we cover – and to me it just seemed a bit more efficient, I guess – we cover not only the cost but at the same time we cover the risk, the key milestone schedule dates, we look at progress measurement. So we kind of look at a – it's an all-in package for project controls.

MS. MORRY: Okay. All right, thank you.

Now, Commissioner I think this might be a good time for our morning break if –

THE COMMISSIONER: It's a bit early, do you want to –

MS. MORRY: Oh, I'm happy to continue.

THE COMMISSIONER: Yup.

MS. MORRY: All right, thank you.

Now - so Ms. Power -

MS. POWER: Mm-hmm.

MS. MORRY: – I think I'll put you directly to tab 29 –

MS. POWER: Okay.

MS. MORRY: – next, that – this is an example of the monthly project controls summary report that we were discussing just now that relates to –

MS. POWER: Okay.

MS. MORRY: – the meeting.

THE COMMISSIONER: So P-03768.

MS. MORRY: Excuse me. Yes, P-03768.

MS. POWER: Okay. So it's June 2017.

MS. MORRY: Yup, that's right.

MS. POWER: Okay.

MS. MORRY: So when we look at this

document -

MS. POWER: Yeah.

MS. MORRY: – the front page communicates quite a lot of information.

MS. POWER: Yes.

MS. MORRY: Could you describe what the different rows are telling us here –

MS. POWER: Sure.

MS. MORRY: – in an overview.

MS. POWER: Okay. So, I'll probably just go through the fourth one over, LCP. The information is the same; it's just it's – I expect that it's probably understood at this point so – excuse me. The project and the overall budget is really split –

MS. MORRY: Mm-hmm.

MS. POWER: – into three companies. They are three different assets of three different entities, so that's why you see the MF, the LITL, the LTA.

MS. MORRY: Right.

MS. POWER: So, the overall, the LCP, so you'll see on the top couple of lines and then you'll see the yellow, the AFE. So basically at this point, in June of 2017, our overall budget, which would have been what was assigned to commitment packages, so our current control budget, excluding contingency, was almost \$9.8 billion.

MS. MORRY: Mm-hmm.

MS. POWER: The budgeted contingency at that time, excuse me, was just under \$340 million, so 339. And that gave us a total value of just over \$10.1 billion. Then when you go down through – so this actually, sorry. So, yes, January 2017 would've been actually when we actually moved to \$10.1 billion.

MS. MORRY: Right.

MS. POWER: Yeah. So underneath there you'll see that there's a value for Committed. So Committed is really the value of the actual

committed contracts. As well as anything – I mean, that's generally it. It's the value of the contracts. There are other things, so, for example, on the owner's team, we would have committed any of the individuals – so all of the project management team, they're committed one year at a time as their contracts are renewed.

So that's essentially where we are at that time –

MS. MORRY: Mm-hmm.

MS. POWER: – is to just under \$8.4 billion. Incurred, and so as mentioned earlier, Incurred is really what we've paid plus what's been accrued up to that date. So at that time, it was just over \$7 billion. Excuse me. And then the forecast to complete, again, excluding contingency, was just over 2.7. And then –

MS. MORRY: Okay. So forecast to complete –

MS. POWER: Yeah. Yeah.

MS. MORRY: – that's the forecast to complete the project but excluding contingency.

MS. POWER: Right.

MS. MORRY: And so, then, you have Forecasted Contingency underneath there.

MS. POWER: Right.

MS. MORRY: And so is forecasted contingency something you expect to spend?

MS. POWER: Yes. In theory –

MS. MORRY: (Inaudible.)

MS. POWER: – it would be –

MS. MORRY: Right.

MS. POWER: So, in particular, so this 2017 was – baseline was the result of a QRA that was completed –

MS. MORRY: Mm-hmm.

MS. POWER: – in the previous months. So, yes, according to the risk analysis, we would

assume that we're going to spend that contingency.

MS. MORRY: Right.

MS. POWER: So, basically, I guess, to give you an idea, you'll see that there's a Budgeted Contingency and a Forecasted Contingency. At that point, of course, they are the same number, but that's because they just re-baselined. Normally, they wouldn't be.

MS. MORRY: Right.

MS. POWER: So, when we're looking at a commitments package, and we have a current committed dollar value, budget would be something higher than that. So, when you look at the actual CCB at the top, that would include the full budget of that a package. Now, that package would include some form of growth allowance. There may be scope that hasn't been awarded yet.

MS. MORRY: Mm-hmm.

MS. POWER: So – and then, of course, your forecast would also include any trends that you've approved to include. And, so, that's where you would see your forecast contingency may be lower than your budgeted contingency.

MS. MORRY: Mm-hmm.

MS. POWER: Because you're forecasting, you're going to spend it on a particular package, but the PCN hasn't been actually completed yet.

MS. MORRY: Sure.

MS. POWER: Okay?

And then – so, basically this package, you can see there's a number of signatures at the bottom. So, again, obviously, I've forgot that at one time, Lance Clarke attended the meeting. And you'll see, as well, that the project director of transmission, at that time, was Greg Fleming. That would be the equivalent, I mentioned earlier, of Gerard Dunphy.

MS. MORRY: Sure.

MS. POWER: So, this meeting is really about doing that review. It's – each of the meetings – as I mentioned, there's two – they're pretty well, like, two hours.

MS. MORRY: Mm-hmm.

MS. POWER: There isn't anything that would come as a surprise, to be honest, to any of the attendees anyway.

MS. MORRY: Mm-hmm.

MS. POWER: But it does, certainly, give them a roll-up of this is, you know, all the things we talk about, because I talked to all these individuals, you know, every day. But, then, this gives them an overall picture of where we are, and it also is – the purpose of their signatures is to, really, approve, and everybody is aligned with our current forecast, and all the rest of the information in this package for any given month, and that – once I have this –

MS. MORRY: Mm-hmm.

MS. POWER: – that's, essentially, my goahead to move on and start to produce all of the reports.

MS. MORRY: Right.

Now - so, we have the AFE line, which is highlighted.

MS. POWER: Yeah.

MS. MORRY: And the –

MS. POWER: Right.

MS. MORRY: – FFC line, which is –

MS. POWER: Right.

MS. MORRY: – highlighted.

What is the relationship between those two numbers?

MS. POWER: So, really, for us, the FFC is – well, I – so, the AFE is what we're reporting against.

MS. MORRY: Right.

MS. POWER: So, we're reporting where are we today versus this AFE.

For the most part, it's, of course, always – I can't say for the most part – it is always the same number, and what you'll see change from month to month is the FTC and the forecast contingency will move depending on – as we identify either additional funds required within certain packages or money that is not required as we're closing out contracts that goes back to contingency.

So, they're the two numbers that you'll see, of course, fluctuate. So, while at the bottom line, you won't see a change because we're always assuming, according to, you know, our overall risk analysis that we're going to spend that contingency.

MS. MORRY: Mm-hmm.

MS. POWER: So, we always assume we are going to spend it. One thing I think you will see in this package – and it's a couple of pages down – but that contingency, where, actually, it's not a single bucket like it looks like here, we actually have internally ourselves looked at all of the risks, looked at the other trends that are not yet in the package forecast that may be uncertain, particularly claims and that sort of stuff that have a range. And we have assigned internally that contingency to different packages and where we believe it will be required.

MS. MORRY: Right.

MS. POWER: What that allows us to do is to be able to say, reasonably confidently, that even with trends, even with – that aren't yet fully forecast, even with claims that we're potentially expecting, we know whether we're in good shape versus that contingency.

MS. MORRY: Right. Now, again, on the front page here –

MS. POWER: Yeah.

MS. MORRY: – we'll see in the FFC row – so I see the fourth column has LCP at \$10.1 billion.

MS. POWER: Correct.

MS. MORRY: The fifth column which is LCP (Previous Month), has the FFC at 9.396.

MS. POWER: Right.

MS. MORRY: So, that's a change of about \$650 million –

MS. POWER: Yup.

MS. MORRY: – so in the previous month, the FFC, the forecast, was quite a bit lower. Now –

MS. POWER: Yeah.

MS. MORRY: – my question for you is if we were to turn to tab 28, which is the –

MS. POWER: Okay.

MS. MORRY: – the previous month's –

MS. POWER: Right.

MS. MORRY: – report, which is P-03767, Madam Clerk. So, if we were to look at this document –

MS. POWER: Mm-hmm.

MS. MORRY: – what signs are in here, if any, that –

MS. POWER: Yeah.

MS. MORRY: – there would be such a big change in the next month?

MS. POWER: Right. So, if you go to page 4 of the document.

MS. MORRY: Yeah.

MS. POWER: Yeah, I can't possibly read what's in front of me –

MS. MORRY: It's quite small –

MS. POWER: - it's way too small.

MS. MORRY: – I understand.

MS. POWER: Yeah. So, if you take a look, so – yeah, if we could just scroll up a little bit there, I just wanted – so you'll see up here, if you go up, sorry, just a little tiny bit more. So, if you see at the top, so the \$235 million with the contingency that was set in June of 2016. All of the items below it, these are where we've approved PCNs and we've either taken or returned money to contingency.

MS. MORRY: Mm-hmm.

MS. POWER: So, this is the list of every PCN and this is MF specific. And then you'll see the next screen is the current available contingency at that time is 183. So, then, everything below that is not yet approved on a PCN. So, you'll see if you go down – so just, I guess, like, so, right now, it basically says 183 is our available contingency. So sorry, yes, if you go down a bit further –

MS. MORRY: Yeah.

MS. POWER: – you'll see the next screen, it says that the short-term requirements from contingency is just over 88 million.

MS. MORRY: Mm-hmm.

MS. POWER: So that basically leaves us with less than a hundred.

So if you scroll down and look at long-term requirements, you're going to see that we actually need 190. So this is telling us that we know, just based on the trends captured here, we are a \$100 million short on top of that. And like, these are more – 'cause one thing that you don't see, and that's kind of changed since – but one thing you don't see here is this doesn't count for risk. This is pure calculation of things we know that we need money for.

MS. MORRY: Sure.

MS. POWER: So certainly here, everybody would be aware there we're at least \$100 million short on MF, plus any of the other risks. So at that time, of course, in May of 2017, we had also just completed the QRA.

MS. MORRY: Mm-hmm.

MS. POWER: So the other thing that we would've picked up from a risk perspective is we knew, and it had been actually even publically communicated by our CEO, that while the Astaldi completion agreement had been completed and signed, the full impact on some of the claims from our other contractors, such as ANDRITZ, had not been settled yet.

So the primary focus of, really, that QRA was picking up what we thought the likely settlement would be. So that wouldn't have been here; that would've been part of our risks that was being separately evaluated. But even in the things – sort of in the day to day, we knew about – we knew we were \$100 million short on MF.

MS. MORRY: Sure. And then I think on page 9

MS. POWER: Yes.

MS. MORRY: – that's –

MS. POWER: That's right –

MS. MORRY: – the LIL.

MS. POWER: – keep going down. Yeah.

MS. MORRY: So, there's a similar blue line at the bottom, for required contingency –

MS. POWER: Yeah.

MS. MORRY: – considering all known issues. And so, is that similar to that \$100-million figure?

MS. POWER: It is. Now I think – I know we haven't gotten down there yet. I think the numbers on the LIL and the LTA are –

MS. MORRY: Yeah.

MS. POWER: – actually positive, and the number –

MS. MORRY: Oh, okay.

MS. POWER: – is negative on MF.

MS. MORRY: Right.

MS. POWER: The reason for that – that's preference of the project director.

MS. MORRY: Oh, I see.

MS. POWER: Yeah.

MS. MORRY: So –

MS. POWER: Yeah. So it was just the way that the project director wanted –

MS. MORRY: Yeah.

MS. POWER: – to see the number. And so that's why – while you see this as a single package, in reality it's actually, as I mentioned, two different meetings.

MS. MORRY: Sure.

MS. POWER: So when you go down to the bottom of LIL, you're going to see, I think, they were short – I can't remember, it's more than \$100 million

MS. MORRY: Yeah. So it's -

MS. POWER: \$175 million.

MS. MORRY: Exactly.

MS. POWER: Yeah.

MS. MORRY: Yeah.

MS. POWER: And, plus risk.

MS. MORRY: Plus risk.

MS. POWER: So the main risk there at that time – that was being evaluated. We did capture a fair amount of it here, but it was really any kind of Valard settlement. We had picked up within the southern 75, you'll see a lot of the pure quantitative, like a lot of the quantitative variation, a lot of additional scope that we knew that they were doing, and we also picked up, of course, things within HVDC specialities.

And then on LTA, if you go down to that one, I think it was around 8 or 9 –

MS. MORRY: Oh, eight, yeah.

MS. POWER: – million. Yeah. Now, the new AFE only increased it by 16 anyway. And, again, that would have been picking up the risk on top of this sort of day-to-day cost control activities.

MS. MORRY: Sure.

MS. POWER: Yeah.

MS. MORRY: Okay, so –

MS. POWER: So, yes, it was certainly well-known that we were running out the previous – and if you go even back further, you'll see – you'll see we didn't have enough money. It wouldn't be this high, I don't think, but you would see each month it's starting to creep up and creep up. And so during that entire time, from – I think we started around February of 2017, we were taking a detailed analysis on all these contracts as well as any claims and anything else going on. And that was all part of the QRA.

MS. MORRY: Sure.

MS. POWER: Yeah.

MS. MORRY: Now, so is – from the project

controls' point of view –

MS. POWER: Yeah.

MS. MORRY: – the need for an AFE –

MS. POWER: Yeah.

MS. MORRY: – in June 2017 was not a surprise?

MS. POWER: No, no. We – I mean, to me, yeah, it hadn't been a surprise for a long time. As I mentioned, when the 9.1 –

MS. MORRY: Mm-hmm.

MS. POWER: – the previous June, of 2016, so I wasn't involved in that QRA, of course. I was just taking over that role.

MS. MORRY: Mm-hmm.

MS. POWER: But, from there, we knew two things were really not – significant things were not resolved. One being there was Westney's analysis was included of what we thought it would take for Astaldi to complete. That number, of course, changed in – so in December of 2016, there was actually another AFE –

MS. MORRY: Mm-hmm.

MS. POWER: – but that was entirely specific to MF, to a single contract, to –

MS. MORRY: Right.

MS. POWER: – secure the funds required for the Astaldi completion agreement. So even at that time, it was known that the full impacts – now that we had an agreement and we had final dates, that gave us our interface dates with the other contractors.

So it was – again, I believe Stan Marshall had mentioned publicly that we knew we had to do an analysis and now, of where we thought the rest of the contracts could settle out and our full impacts.

So that was really an exercise that we started, like I said, in early 2017 –

MS. MORRY: Mm-hmm.

MS. POWER: – and that, really, was picking up all of our risks. So just – actually, the page we're on here on the screen –

MS. MORRY: Yeah.

MS. POWER: – you'll see on the right-hand side, so that's where we have a lot of the risks, as well, that we're picking up, right.

MS. MORRY: Sure.

MS. POWER: And at that time, there wasn't anything in the budget to be able to cover these items.

So now, though – I guess, just to kind of anchor back to now –

MS. MORRY: Mm-hmm.

MS. POWER: – this is a very similar format to what we currently use, and we don't have this issue today.

MS. MORRY: Mm-hmm.

MS. POWER: We look at all of our risks, all of our potential claims, and we, essentially, have everything covered within the contingency. And that's where I've mentioned we have internally assigned contingency to particular packages.

MS. MORRY: Now, Ms. Power, you may or may not be able to –

MS. POWER: Okay.

MS. MORRY: – comment on this, but I would like to – just to request. We had a recent interview, a very recent interview with Cathy Bennett who is the former minister of Finance.

MS. POWER: Okay.

MS. MORRY: And she indicated that the June 2017 new number –

MS. POWER: Okay.

MS. MORRY: – came as quite a surprise to her, and she was –

MS. POWER: Okay.

MS. MORRY: – but, so – and she expressed some dismay about that.

Now, in terms of communication of the final forecast cost –

MS. POWER: Yeah.

MS. MORRY: – your role is only within Nalcor. Is that correct?

MS. POWER: It was at that time.

MS. MORRY: Uh-huh.

MS. POWER: Actually, since then – and it probably would've been around then – so, at this point, for about the last 18 months, I actually attend the Oversight Committee meeting.

MS. MORRY: Mm-hmm.

MS. POWER: And I also attend the meeting we have at the – and that's a monthly meeting, sorry.

MS. MORRY: Mm-hmm.

MS. POWER: And I also attend the meeting with the independent engineer of Government of Canada. That only started, though, in late 2017.

MS. MORRY: Mm-hmm.

MS. POWER: So, prior to that, no. I would never have had any communication directly with either – certainly, from an oversight perspective, I, certainly, had met Nik and – you know, Nik Argirov, and had communicated with him but not in a formal format. So, I don't know what communication would've been done.

MS. MORRY: Sure.

MS. POWER: I did take a look at my own records 'cause I couldn't remember when I had started to attend those.

MS. MORRY: Mm-hmm.

MS. POWER: I do have an Oversight Committee presentation from June of 2017. Now that, of course, wasn't prior to this; it was at that time.

MS. MORRY: Right.

MS. POWER: That was the cost update –

MS. MORRY: Yeah.

MS. POWER: – on – I believe I probably attended the meeting, I'm not even sure, to be honest. I certainly prepared the presentation. But prior to that, I don't recall ever having any kind of direct contact with any of our external stakeholders. That would've been done outside of my area.

MS. MORRY: Okay. And –

MS. POWER: Yeah.

MS. MORRY: – okay. Thank you.

Now, the next thing I'd like to address –

MS. POWER: Yeah.

MS. MORRY: – with you, Ms. Power, is a memorandum that you've prepared for us.

MS. POWER: Okay.

MS. MORRY: This is at tab 39 of binder 2, and it's P-03779.

MS. POWER: Okay.

MS. MORRY: So, Ms. Power, did you prepare this document?

MS. POWER: Sorry.

MS. MORRY: Oh, please –

MS. POWER: No, I thought the question might be longer.

MS. MORRY: No, no.

MS. POWER: Yes. Yes, I did prepare this document. It – yeah?

MS. MORRY: Can you describe what led to you doing that?

MS. POWER: Sure, yeah.

So I – in my interview on March 13 of this year, and that was with Kate O'Brien and yourself –

MS. MORRY: Mm-hmm.

MS. POWER: – we had been talking about, I guess, some of these project controls, monthly packages we just looked at.

MS. MORRY: Mm-hmm.

MS. POWER: They would've been only, I think, a cost summary back in 2013 and '14, and it was kind of a bit of a similar exercise to what we were just doing. I think she was looking for signs that the project budget wasn't sufficient.

MS. MORRY: Sure.

MS. POWER: So, again, while I wasn't in the role, I was generally aware that there was really, somewhat, a couple of different processes. There was the day-to-day cost control of the actual management of the packages that were awarded. But outside of that there was also a process that the senior cost controller, which is George Chehab – I mentioned earlier. So he also had management outlook files and they were really in support of what Paul Harrington and others would've been communicating to Nalcor executive.

MS. MORRY: Mm-hmm.

MS. POWER: So Ms. O'Brien asked me if – so she – I think she had been aware of that and Paul Harrington, of course, had provided those management outlooks –

MS. MORRY: Right.

MS. POWER: – and I know they're part of the Grant Thornton report. But – and he had indicated that he had gotten the information from project controls. So this is, I guess, what she'd been looking for.

So, subsequent to that interview, I went through our cost files. So our cost files are, essentially, organized by year and then under that by month.

MS. MORRY: Mm-hmm.

MS. POWER: So I – relatively easily, to be honest – located files that dated as far back as June of 2013 that would've been different than the official cost summaries that were reviewed with a much larger audience. So while I've just mentioned that monthly meeting –

MS. MORRY: Yeah.

MS. POWER: – we have, it's a very small group today, to be honest –

MS. MORRY: Yeah.

MS. POWER: – and it's two different groups. If you go back to 2013, '14, '15 that was, of course, the entire project was covered in a single meeting. There was a large number of people there. In fact, even the cost controllers would frequently be there.

So my understanding is back in 2013-14 as bids were actually coming in, the bid information is not even a matter of commercially sensitive — it's actually confidential. So there was a very, very small number of people who would've been aware of that. So this isn't something that would've been shared with the cost controllers at the working level.

MS. MORRY: Mm-hmm.

MS. POWER: So they actually had – and George prepared for Paul and the project controls managers during that time, a separate cost package which was similar in the sense that it listed every single commitment package.

MS. MORRY: Mm-hmm.

MS. POWER: It listed the current forecast, and in many of the cases, of course, that not only would've included contracts that were awarded, it would've included contracts that were under evaluation or even contracts that, you know, we didn't have the bids yet.

So, really, I went through; I found all these files. So I had organized them into a memo for – at that time it was for Ms. O'Brien – and tried to – and it very easily, I guess, tied back to the presentations – the management outlooks that Paul Harrington had done.

MS. MORRY: Right.

MS. POWER: So these are – they're not numbers. Like, they're very detailed files that show –

MS. MORRY: Yes.

MS. POWER: – you exactly what the assumptions are from a management outlook; whether it's based on a bid, whether it's based on the current trend of other bids – and, really, these files followed along the same that, you know, in mid-2013 the management outlook file was about \$7 billion. You can see from month to month it varies, sometimes it's up; sometimes it's down depending on the latest information.

MS. MORRY: Yeah.

MS. POWER: And not every – while there was - very frequently, there was a meeting. So I also had George go back through his files and pull out of our Lotus Notes, which is our email program – he just pulled out meeting notices. And so I took those and provided them as well, just to indicate who was in the meetings, when the meetings happened, and of course Mr. Harrington wasn't meeting with Ed Martin every month, but at certain points along the way you can see the tie-in to when he did. Because, really, it all stayed between 6.8 and 7 throughout 2013, and then in 2014 as we get towards the first major AFE revision you will see that's when it was around 7.5. And, again, I know all that information is in the Grant Thornton report.

MS. MORRY: Right.

Thank you.

MS. POWER: Okay.

MS. MORRY: So I think – and you've given a great summary there, but I would like to lead you through and detail some of the –

MS. POWER: Okay.

MS. MORRY: – 2013 ones.

MS. POWER: Sure.

MS. MORRY: And the – so – and you've had a chance to look over this document before testifying today and –

MS. POWER: This – the memo?

MS. MORRY: The memo, yeah.

MS. POWER: Yes, the memo I have.

MS. MORRY: Yeah.

MS. POWER: And, I mean, I've briefly looked at some of the files themselves, but I hadn't looked in detail.

MS. MORRY: Sure.

MS. POWER: And, actually, one thing to note, too, because –

MS. MORRY: Yeah.

MS. POWER: – you'll see they all have a NAL number in front of them.

MS. MORRY: Yeah.

MS. POWER: So that was something that actually McInnes had added after so – and I think Ms. O'Brien was aware of that –

MS. MORRY: Yeah.

MS. POWER: – that they – that you likely had the files.

MS. MORRY: (Inaudible.)

MS. POWER: And so they already were handed over but, of course, trying to find them in the millions of files is not easy, so ...

MS. MORRY: And we certainly appreciate that.

MS. POWER: Yeah, yeah. No, it was a lot easier for me to find them.

MS. MORRY: Right.

Now – so if we look at the June 2013 section –

MS. POWER: Right.

MS. MORRY: – you found three files there.

MS. POWER: Yes.

MS. MORRY: And the range is from \$6.971 billion, approximately –

MS. POWER: Yeah.

MS. MORRY: – to 7.004.

MS. POWER: Right.

MS. MORRY: So, at that time, according to the GT report –

MS. POWER: Mm-hmm.

MS. MORRY: – the publicly communicated number was 6.2 still, right?

MS. POWER: Right.

MS. MORRY: Right.

MS. POWER: Yeah, that's my understanding.

MS. MORRY: Right.

Now, in July 2013 you found one more file at 6.971.

MS. POWER: Right.

MS. MORRY: In August you found four files which range from 6.815 to 6.949.

MS. POWER: Mm-hmm.

MS. MORRY: In -

MS. POWER: Correct.

MS. MORRY: Yeah.

In September 2013 you found one with the number \$6.935 billion for the final forecast cost.

MS. POWER: Mm-hmm.

MS. MORRY: And in October 2013 the \$6.814-billion figure is there in one file.

Now, you – are you – you're aware of the date of financial close –

MS. POWER: Yes.

MS. MORRY: – approximately, right?

MS. POWER: Right.

MS. MORRY: So November 29, 2013 –

MS. POWER: Right.

MS. MORRY: – with money flowing in December, in early December.

MS. POWER: Right.

MS. MORRY: So that October 2013 file –

MS. POWER: Mm-hmm.

MS. MORRY: – that would be the last one that you located before the financial close date? Is that correct?

MS. POWER: Yes, that's right.

MS. MORRY: And so the figure that was generated for management outlook purposes was \$6.814 billion at that time.

MS. POWER: Right.

MS. MORRY: Now, in evidence so far at the Commission there's been discussion of a 6.531 figure which appears to have been shared with certain people within the Government of Newfoundland and Labrador.

MS. POWER: Right.

MS. MORRY: Now, I'd like to put you to tab 5 of your first binder there which is P-03747.

MS. POWER: Sorry, what – tab 5?

MS. MORRY: Yes, tab 5.

MS. POWER: Okay.

Right, yeah.

MS. MORRY: So is this – this is an earlier iteration of the monthly summary report that we discussed earlier.

MS. POWER: Yeah, I believe –

MS. MORRY: Is that correct?

MS. POWER: – it's actually the first one.

MS. MORRY: The first one, exactly.

MS. POWER: Yeah, in this type of format anyway. It's the first one I found.

MS. MORRY: Right.

MS. POWER: Yeah.

MS. MORRY: Now, I noticed there's a handwritten note there. Do you happen to know whose handwriting that is?

MS. POWER: I believe it's George's.

MS. MORRY: Right.

MS. POWER: Yeah.

MS. MORRY: And he confirmed that, actually.

MS. POWER: Yes

MS. MORRY: Now, do you have any knowledge of what that note means? It says – could you read it out, actually?

MS. POWER: Sure.

It says: "Official FFC in Dashboard will remain at 6.531 B as presented to Feds in Nov 06 Audit as Instructed by Paul H."

MS. MORRY: Thank you.

So when it says official FFC in dashboard –

MS. POWER: Right.

MS. MORRY: – what does that mean?

MS. POWER: I – my understanding of what it means is that –

MS. MORRY: Yes.

MS. POWER: – so at that point, October, November, the reporting – it was the financial close number –

MS. MORRY: Yeah.

MS. POWER: – that's the 6.531, versus what this package showed, of course, which was a forecast of actually something less than that.

MS. MORRY: Mm-hmm.

MS. POWER: However, though, it also showed potential trends that were in excess of contingency.

MS. MORRY: Mm-hmm.

MS. POWER: But I believe if you add those together you'd still be underneath the 6.5.

MS. MORRY: Mm-hmm.

MS. POWER: So I think that was really – I can't speak to why the 6.5 number –

MS. MORRY: Yeah.

MS. POWER: – or what that was about. I believe it was about the things that were relatively certain at that time. As we just talked about, the number from the management outlooks were –

MS. MORRY: Yeah.

MS. POWER: – at the exact same time, they would've been just over 6.8. I can – I know in those files –

MS. MORRY: Yeah.

MS. POWER: – you'll see a column that says 6.5 and you'll see a column that says 6.8 and you can see exactly what the differences are.

MS. MORRY: Yeah.

MS. POWER: If you're asking me why they went with 6.5, I don't know.

MS. MORRY: I understand.

MS. POWER: Yeah.

MS. MORRY: But in terms of your investigation and your –

MS. POWER: Yeah.

MS. MORRY: – looking through these documents –

MS. POWER: Yeah.

MS. MORRY: – you found this 6.814 figure –

MS. POWER: I did.

MS. MORRY: – that was generated by projects controls –

MS. POWER: Right.

MS. MORRY: – and, presumably, would have been shared with the project management team.

MS. POWER: Yes. Well, yeah, I didn't find a meeting notice –

MS. MORRY: No.

MS. POWER: – for that particular month, but you'll see there's meeting notice for previous months and the number is not much different, it's 6.8, 6.9.

MS. MORRY: Right.

MS. POWER: Yeah.

MS. MORRY: Okay, thank you.

Now –

THE COMMISSIONER: Did you want to – it's now 11 o'clock. Did you want to take the break here now or is this a convenient time?

MS. MORRY: This is a convenient time.

Thank you, Commissioner.

THE COMMISSIONER: All right, let's take 10 minutes then.

MS. MORRY: Okay.

CLERK: All rise.

Recess

CLERK: All rise.

Please be seated.

THE COMMISSIONER: Yeah. I need a doorbell here just to get the others back. So, just one second now and we'll get everyone else back.

MS. POWER: We need one of those theatre things – the bells go off so that everybody knows.

MS. MORRY: Mm-hmm.

THE COMMISSIONER: Or flash the lights.

MS. MORRY: Yeah.

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

MS. MORRY: Thank you, Commissioner.

So, Ms. Power, we had left off talking about this section of your memorandum at October 2013.

MS. POWER: Right.

MS. MORRY: So, the financial close number of 6.531 – would you agree that was a very important number from the project – from the LCP – the Lower Churchill Project's point of view?

MS. POWER: Well, certainly over the last, I would say, couple of months, I've come to understand –

MS. MORRY: Sure.

MS. POWER: – how important it was, yes. At the time, no –

MS. MORRY: No.

MS. POWER: – I wouldn't have really even known it existed, to be honest.

MS. MORRY: Right.

MS. POWER: But yes, I do understand now it was an important number.

MS. MORRY: Mm-hmm.

Now, the six point – it seems to me that if there's a 6.814 figure available to the project management team –

MS. POWER: Mm-hmm.

MS. MORRY: – and to Nalcor's senior executive, would they want to use the most accurate, most – number available?

MS. POWER: I would think so.

MS. MORRY: Mm-hmm.

MS. POWER: I guess, obviously, it depends on any potential variables that are in there. But certainly, you know, over the preceding months, you can see through those last six months, the number wasn't changing significantly.

MS. MORRY: Yeah.

MS. POWER: Now, I say significantly, I mean, you know, 6.8 billion, 6.9 billion – still significant. But you know –

MS. MORRY: That's right.

MS. POWER: – what I mean. It was within a small range –

MS. MORRY: Right.

MS. POWER: – I would say.

So it would have appeared, at least in hindsight, that that number may have been, you know, a relatively good number that was staying somewhat consistent.

MS. MORRY: Mm-hmm.

MS. POWER: I don't know specifically. I would have to go back and look at exactly what was in the 6.5 –

MS. MORRY: Mm-hmm.

MS. POWER: – versus that 6.8. And I believe that the files that I've referenced actually have specific columns –

MS. MORRY: Yeah.

MS. POWER: – so you would actually be able to see exactly what was in the 6.8 that was not included in the 6.5. I don't know off the top of my head –

MS. MORRY: Absolutely.

MS. POWER: – I didn't go into that level of detail.

So it – there's potential there for at least some, if not all of it, that maybe there were reasons why.

MS. MORRY: Mm-hmm.

MS. POWER: But, again, I can't speak to them, but certainly I think, you know, it was known to Nalcor executive that that number was in that range of 6.8-6.9 in – you know, by the latter half, say, of 2013.

MS. MORRY: Sure.

Okay. Thank you.

Now, in December, 2013 you found three files.

MS. POWER: Yeah. Sorry what tab number was that again?

MS. MORRY: Of course.

MS. POWER: I must have closed it.

MS. MORRY: That's at tab 39.

MS. POWER: Thirty-nine.

MS. MORRY: And it's Exhibit P-03779.

MS. POWER: Yeah. Okay. I got it. Sorry. Okay. Yeah.

MS. MORRY: Okay.

MS. POWER: December? Yeah?

MS. MORRY: So, for December you found three files ranging from 6.867 to 6.988. And you also found a – some meeting notices related to that one.

MS. POWER: Yes.

MS. MORRY: So then, in January 2014, the final forecast cost is 6.988 in both of the files that you located.

MS. POWER: Right.

MS. MORRY: And then, in February and March 2014, you found files – one for February of 7.9 – sorry – excuse me – 7.190 and for March 7.157. Now, I understand that in June 2014 was the first AFE revision. Is that correct?

MS. POWER: Correct.

MS. MORRY: And that AFE revision - as - was for \$7.0 billion, approximately.

MS. POWER: Yeah.

MS. MORRY: 6.9.

MS. POWER: 6.99. Yeah.

MS. MORRY: Right. So, you also located several files there – so, one for April, again at 7.268.

MS. POWER: Right.

MS. MORRY: And then, the next bunch here, on page 5 of your memorandum, are called AFE Rev 1 Files, and you found seven of them and they're from May and June.

MS. POWER: Right.

MS. MORRY: And they range from 7.501 to 7.504. So, they're all very similar to one another at this –

MS. POWER: Right.

MS. MORRY: – in this grouping.

MS. POWER: Yeah. And I should have mentioned, I guess, while all the other files are by year and by month –

MS. MORRY: Yeah.

MS. POWER: – the other thing, besides those in our cost files, is there is a file that's entitled AFE Rev 1. And then there's one for Rev 2, Rev 3, Rev 4. So, that that's the other place I looked when –

MS. MORRY: Sure.

MS. POWER: – when we got around that AFE time. So, yeah. So, that's – as I've noted – that's where I found those files.

MS. MORRY: Right. I understand.

MS. POWER: Yeah.

MS. MORRY: So, you found these in a folder that was entitled AFE (inaudible).

MS. POWER: AFE Rev 1. Right.

MS. MORRY: Which would be around May, June 2014.

MS. POWER: Correct. Yes. And there are, obviously, a lot of other files in there besides these –

MS. MORRY: Yeah.

MS. POWER: – but these were the ones that were actually called, you know, either management outlook –

MS. MORRY: Yeah.

MS. POWER: – or the ones that were essentially a follow-on from the ones that were from the April time frame.

MS. MORRY: Yeah.

MS. POWER: And there were also, of course, all the AFE rev 1 files themselves were also in that same folder.

MS. MORRY: Sure.

MS. POWER: Okay.

MS. MORRY: Now, if we were to look at tab 6 in your first binder, which is P-03748.

MS. POWER: Okay. Yeah.

MS. MORRY: Now, this is another one of those monthly report documents.

MS. POWER: Right.

MS. MORRY: Another one from before your tenure as project controls manager. This one is from May 2014.

MS. POWER: Right.

MS. MORRY: So, what's the final forecast cost listed on this document?

MS. POWER: So the final forecast cost at that point is listed as 6.493. And then, just to note as well, right, the potential exposure wouldn't –

MS. MORRY: Yes. Please.

MS. POWER: – be included in that. Yeah, so that's the number noted at the bottom, \$169 million and with, I guess, remaining contingency of 83, it – that contingency can't cover the potential trends that are listed there.

MS. MORRY: Right.

MS. POWER: Right.

And I guess, as we've talked about, there would still be, at that point obviously, information with respect to bids not yet awarded and that that are in the management outlook files —

MS. MORRY: Yeah.

MS. POWER: – which are not covered in this file.

MS. MORRY: Yes.

MS. POWER: Sure. Yeah.

MS. MORRY: And on note 4 there, on the front page of this document –

MS. POWER: Right.

MS. MORRY: – could you read that out?

MS. POWER: Yeah.

It says: "FFC that goes into the dashboard reports remains at 6,532 B as presented to" MWH review on November 6. So, essentially, my understanding of that is –

MS. MORRY: Mm-hmm.

MS. POWER: – that similar to now, we're reporting against an AFE, so they were still reporting 6.532.

MS. MORRY: Sure.

MS. POWER: Yeah. Yeah.

MS. MORRY: Now, let's look next at tab 40 in

your second book, which is P-01831.

MS. POWER: Okay.

MS. MORRY: And this is one of the files that I think you mentioned earlier, one of the cost decks prepared by the project management team for the Commission.

MS. POWER: Yes, the first page is. I think the rest of it is presentations given, right?

MS. MORRY: Right.

MS. POWER: Yeah, okay. Yes.

MS. MORRY: Right. So it's –

MS. POWER: Yeah, that's right.

MS. MORRY: So, this is a collection.

MS. POWER: Right.

MS. MORRY: And if I bring you to page 9 –

MS. POWER: Okay, page 9, yeah.

MS. MORRY: – it says: AFE and outlook recommendation.

MS. POWER: Right.

MS. MORRY: And so it says: Requested AFE with a note 1 there. And it says 6.99 as the figure – \$6.99 billion. And the note 1 says: It includes \$224 million of contingency, which is four per cent of the AFC [sp. AFE] forecast to completion? Is that correct, FTC was –?

MS. POWER: Right. Forecast to complete, right.

MS. MORRY: Right. So –

MS. POWER: And I think that was – it couldn't have been – yeah, okay. No – yes, forecast to complete. Sorry.

MS. MORRY: No, please –

MS. POWER: I didn't produce it so I'm – yes, I believe that's correct.

MS. MORRY: (Inaudible.)

MS. POWER: It's forecast to complete so it would have been 4 per cent of the remainder to complete.

MS. MORRY: Sure.

Now, then underneath there's another line that says: Management outlook for short term is \$7.2 billion, while management outlook for project duration is at 7.5.

MS. POWER: Right.

MS. MORRY: And so that aligns with -

MS. POWER: Yes.

MS. MORRY: – the document collection that you found for AFE rev 1.

MS. POWER: Right, the overall management outlook was 7.5.

MS. MORRY: Now, in your experience in project controls, is an AFE intended to cover the project from the AFE date all the way to project completion, or is it time bound?

MS. POWER: So I'm not sure AFE terminology I'd ever seen before, to be honest.

MS. MORRY: Yeah.

MS. POWER: But – and I guess the other problem is that on – all of my experience was on the EPCM consultant side.

MS. MORRY: Sure.

MS. POWER: So what the client was doing, I actually don't know.

MS. MORRY: Yeah.

MS. POWER: And I think really, you know, from a project controls perspective, the information was being provided as requested, and then broken down, obviously, into short and long term. I don't know what Nalcor's rule are around an AFE.

MS. MORRY: Mm-hmm.

MS. POWER: I think the only thing I can comment on is that, you know, that was the information requested that: What is the overall project duration final capital forecast, and then the short- and long-term outputs. What they include in an AFE —

MS. MORRY: Mm-hmm.

MS. POWER: – is not really a decision that project controls would even necessarily be involved in.

MS. MORRY: Sure.

MS. POWER: We would just be providing the information. So it depends on the particular client's requirements and – so, I can't really speak to –

MS. MORRY: I understand.

MS. POWER: – you know what I mean, what decision was made.

MS. MORRY: No, that's –

MS. POWER: Yeah.

MS. MORRY: Yeah.

MS. POWER: Yeah.

MS. MORRY: Now, I know your colleague, George Chehab, who you mentioned previously

MS. POWER: Right. Yeah.

MS. MORRY: – he indicated in an interview with me the other day that –

MS. POWER: Okay.

MS. MORRY: – it was unusual, in his experience, to have a request for –

MS. POWER: Yeah.

MS. MORRY: – an AFE that covered a particular time period –

MS. POWER: Sure.

MS. MORRY: So we're -

MS. POWER: Yeah – no, and I wouldn't argue with that. I wouldn't suggest, to be honest, either way about whether it would be usual or unusual. I think that every – again, coming from the EPCM world –

MS. MORRY: Yeah.

MS. POWER: – that any client we work with had different requirements. I don't particularly recall a time that, you know, our overall forecast – I mean, we were reporting our overall forecast. Whether the client was reporting something different to their stakeholders, to be honest, I don't even think I ever would've known.

MS. MORRY: Sure.

MS. POWER: You know what I mean? Because –

MS. MORRY: Yeah.

MS. POWER: – they weren't public projects, any of them.

MS. MORRY: Yeah.

MS. POWER: So that wouldn't – you know, these were private mining companies.

MS. MORRY: Mm-hmm.

MS. POWER: So I don't know, to be honest. I can't really comment on what's usual. I'm not sure if the previous projects that George worked on – he may be able to absolutely make that statement.

MS. MORRY: Right.

MS. POWER: Yeah.

MS. MORRY: So, the main point I just want to draw your attention to here is that the AFE 1 in June 2014 was for \$6.99 billion.

MS. POWER: Right.

MS. MORRY: But on this slide here, we see that the management outlook for project

duration is what it says, and it's listed as \$7.5 billion.

MS. POWER: Yeah, very clearly.

MS. MORRY: Why wouldn't the AFE be for \$7.5 billion, rather than 6.99?

MS. POWER: Well, I think, like I said, that's not a decision.

MS. MORRY: Mm-hmm.

MS. POWER: I mean, I wasn't even in this role, but even if I had been –

MS. MORRY: Yeah.

MS. POWER: – it wouldn't be a project controls decision. Project controls has, I guess, given the information of: We're looking at a final forecast cost based on today's information of 7.5.

MS. MORRY: Mm-hmm.

MS. POWER: I don't know, then, why they were looking at short term, long term. Yeah –

MS. MORRY: Yeah.

MS. POWER: – I could speculate but I don't – I really don't know.

MS. MORRY: I understand.

MS. POWER: I don't know why – you know, there was obviously reasons why they made these decisions.

MS. MORRY: Sure.

So another few questions on this –

MS. POWER: Okay.

MS. MORRY: – slide here, just – it mentions the contingency as being 4 per cent of the AFE forecast to completion, right?

MS. POWER: Right.

MS. MORRY: So when you're going for an AFE –

MS. POWER: Right.

MS. MORRY: – you're requesting an amount to cover project contingency as a whole, as I understand it.

MS. POWER: Right.

MS. MORRY: Now, the contingency amount would correspond to reasonable assessment of the amount of risk remaining on the project. Would that be right?

MS. POWER: It would, yeah. It certainly should.

So we would have – one of the things – and, again, I'd have to look at the detail 'cause I know how growth allowances were treated has changed throughout the project. Sometimes it's been in contingency and –

MS. MORRY: Mm-hmm.

MS. POWER: – sometimes it's been put into the package.

So, I think what would probably be a better thing to look at, at that point, would be how much of the 6.99 was actually based on firm numbers. And, actually, I think that – yeah, it's actually on the page before.

MS. MORRY: Yeah.

MS. POWER: I think "Contracts with firm bid price" was 6.35 and, then, "Contracts without firm bid price" was 0.64. So, you know, again, I know that contingency wasn't developed with somebody saying, let's put 4 per cent. It was based on each individual package. So I think if you looked at the details of this sheet, it would actually – the Excel file –

MS. MORRY: Mmm.

MS. POWER: – that I had found, I know that it lists out every commitment package.

MS. MORRY: Right.

MS. POWER: And within that it lists out, you know, the current budget at that time, which would have been something less. The overall

management outlook forecast, of course, on the bottom line was 7.5. But there are a number of other columns there, so it has, like, assumptions. I believe the amount between the 6.99 and the 7.5, which – about \$500 million –

MS. MORRY: Mm-hmm.

MS. POWER: – that was listed in a column called management reserve. And so the assumptions of what that was exactly for was listed in another column. It actually had this is what management reserve is for, this is where we're pulling it.

So it wasn't based on 4 per cent. It's just (inaudible) your 4 per cent. It was actually built from the bottom up.

MS. MORRY: Sure.

MS. POWER: You know – and it just happened to be 4 per cent. Now, how much of that they were including in growth allowance within the packages and how much was not in there – so all in contingency – you'd have to know that before you really look at whether 4 per cent seemed like a reasonable number.

MS. MORRY: Right. 'Cause – so we've heard evidence recently from Ernst & Young –

MS. POWER: Right.

MS. MORRY: – that waiting for a long time before doing a quantitative risk assessment when you're –

MS. POWER: Yeah.

MS. MORRY: – doing a project, especially when risks materialize along the way –

MS. POWER: Right.

MS. MORRY: – that it's not advisable to wait –

MS. POWER: Yeah.

MS. MORRY: – beyond –

MS. POWER: I understand.

MS. MORRY: – so – now, on the Lower Churchill Project, my understanding is that there was no QRA done between –

MS. POWER: Right.

MS. MORRY: – 2012 and 2016, right?

MS. POWER: Right. Yeah. That's correct.

MS. MORRY: Now, so if you have no quantification of the risks, how can you generate a contingency number when you're going for an AFE –

MS. POWER: Yeah.

MS. MORRY: – that will reflect your need for the project as a whole?

MS. POWER: Well, I guess a couple things. So my background has always been mostly on, you know, the execution side.

MS. MORRY: Yeah.

MS. POWER: I have to be honest, never heard of a QRA until this project. So, to me, QRA was something that you do at sanction, so not necessarily something I, like, as I mentioned, would have been involved in. And perhaps also done by the client. Now, whether a client did it during the life of a project I was on, it's possible, but then they just didn't – you know, they might not have come to us.

MS. MORRY: Mm-hmm.

MS. POWER: So I think there's a couple things. I think there was certainly – and to be honest, this is just my opinion after the years on this project. In 2012, you know, obviously, the QRA was a key tool. In managing risk from the day of execution start to today, the QRA is not a tool I'm using to managing risk, certainly. And I think it's relatively understood they're two different things.

MS. MORRY: Yeah.

MS. POWER: The biggest thing with the QRA that I've certainly learned – and this is, you know, through as well working with Westney over the last couple of years – you're only going

to get a good result, of course, based on whatever information you have to put in. So, I can – I guess there's two things. One, the original *Project Controls Management Plan* – and, you know, over the last number of months, I have taken a look at some of these things – it actually never envisioned a QRA being done again, I don't believe, after – unless something – you know, some kind of major change.

So, my understanding, anyway, and, again, I started in this role and really became involved in the QRA process when that first one was done. In –

MS. MORRY: Right.

MS. POWER: – the early part of 2016. And so my understanding of a couple of things, I guess, of why obviously, they wanted to do that at that point. There was a couple of – very large things had happened I guess from a – that changed the risk profile. So, one obviously was Astaldi. And during that previous year, there had been significant review by Westney, by Ibbs on productivity.

And, you know, could they have done a QRA in 2015? I'm sure the answer is always yes, you can do it. Would the results have been very useful? I guess we'll never know. I suspect that they might not have been because of the fact that the range of potential outcomes was so wide. So the wider and wider your range, what comes out of there is not necessarily going to be terribly useful.

So, for example, I mentioned earlier in 2014, when you look at what Astaldi had done as compared to the plan. If you assumed that that rate of production was going to continue, you know, you would have forecast that they would be finished in 2025 or something, which of course that's not a reasonable range. I don't think anybody ever believed – but technically based on the information you had, that would have been your result.

MS. MORRY: Sure.

MS. POWER: So, you know, putting that kind of thing into a model, the model is going to give you nonsense. So, I – you know, again, I'm a bit speculating, but I can understand why – in 2014,

I don't think there would have been notion of doing a model. All of the things that are — were being done at that time were really around the change in market conditions versus what was in the estimate —

MS. MORRY: Right.

MS. POWER: – 'cause, I mean, as we know today – and really that's – even the 7.5 number, it's the same thing. This is really all what came in at the time of award. So, really, you went from 6.2 to 7.5 and you haven't really started to manage anything yet.

MS. MORRY: Yeah.

MS. POWER: Now, I know that didn't happen in 2013. By the time that all the major contracts got awarded and we started to get a good feel, you know, you're already – that's a third of the eventual total overrun. So there wasn't anything to model here. This was all about award.

So, really, when they got to the point, I think, of enough information throughout 2015 to see what Astaldi actually could do, when they made the decision and did all of the analysis with all these different groups and eventually made the decision to negotiate, and, you know, it was decided that that would be, while not preferable, the least cost way out of the situation that we were in, I can certainly see at that point why doing a QRA would have been extremely helpful because now you've got at least some idea of where this is going to end up from a cost and schedule perspective.

It had been communicated, of course, for quite a while that – I'm saying communicated – communicated to Nalcor executive, probably not publicly that I am aware of, and I believe through, you know, the last number of months, I've learned that it likely wasn't public – but had certainly been communicated as early as – you know, early in 2015, we were in serious schedule trouble. By mid-2015, the schedule can't be met; we won't have first power in December 2017 but we don't know where that is yet. We're working with Astaldi; we're trying to figure out how do we get through this.

And at that time, the primary focus was to get river diversion complete, which was in 2016,

'cause that was the actual critical path of the overall project. The powerhouse wasn't the critical path at that time.

MS. MORRY: Right.

MS. POWER: So really that was were everyone's focus was and that – of course, it actually did occur in 2016. So through all of that, they had enough information that they did the QRA in 2016. As it turned out, a few months later, we knew that that analysis – at least specifically around Astaldi and where we thought we would land through that settlement, it did actually turn out it was incorrect.

MS. MORRY: Mm-hmm.

MS. POWER: And, of course, there was another AFE in December of 2016.

MS. MORRY: Right.

MS. POWER: So from there, of course, the reason why we really did one in 2017 is, again, we now had a change in our risk profile; we had a couple of things that occurred. So with – the Astaldi agreement had been inked, we now had a much, you know, we had firm dates again from an interface perspective into ANDRITZ and, you know, all the other contractors. And so we had, again, very solid information to be able to do another analysis with Westney.

MS. MORRY: Mm-hmm.

MS. POWER: We also had another couple of things which occurred during that time, which in late 2016 with, you know, the protests and we had the site shut down, and we had some issues with the cofferdam. So, again, lots of information that you're able to get good information and so we did it again in 2017.

MS. MORRY: Right.

MS. POWER: And so, yes, there's no question that, you know, at those time frames it certainly helped us to develop what the overall outlook looked like for the project. Technically, Westney didn't actually determine the contingency. They just —

MS. MORRY: No.

MS. POWER: – determined the final number. We would then take that – and I say we – that's where project controls comes in – is we would take that number; we would backtrack that through the system and look at what we believe – what we know we need in commitment packages based on where we are and some growth allowance. And then there would be a discussion: Did we want to put more growth allowance in that package? Did we want to put it in contingency and basically hold the area managers and those involved accountable to that budget? And they have to write a PCN to get any more.

MS. MORRY: Right.

MS. POWER: And so, you know, how we did that changed a few times. So looking at the actual dollar value of contingency, there's times when it would be all over the place because we used it differently to try to manage the project.

MS. MORRY: Right.

MS. POWER: The – more important is what's the difference between your final forecast cost and your current commitment, I guess.

MS. MORRY: So are you saying that you disagree with the point from Ernst & Young that QRAs should have been done on a regular basis?

MS. POWER: I think that – in my mind, I guess, I believed they were as it was possible. I mean, there was one done in 2016-17 and '18 for that matter.

MS. MORRY: But between 2012 and 2016.

MS. POWER: No, I know what you mean –

MS. MORRY: And I understand that's before your tenure but –

MS. POWER: Yeah, yeah. No, I know what you mean.

You know what – I mean, when – I think Mike Kennedy mentioned when he was there in 2017, he and I spent a fair bit of time together.

MS. MORRY: Mm-hmm.

MS. POWER: So, yeah, we discussed that extensively because even at that time they were talking about: Oh, well, you should do a QRA, at this point, twice a year. We talked about the practicality of that as well, right, and I mean in the end, yeah, I think we kind of came to a resolution that he thought: Yeah, I see what you mean, like, obviously this is something that takes a lot of time.

MS. MORRY: Mm-hmm.

MS. POWER: I think ideally, absolutely, it'd be great if you could do that on a regular basis. Now, having said that, if your risk profile isn't changing and nothing is going wrong –

MS. MORRY: Mm-hmm.

MS. POWER: – then no, I wouldn't agree with the statement, because you don't need it because if there's – there's no issues, right? Now, again, not very often on megaprojects. So, I don't know, I mean, if I was gonna do another megaproject today, would I do a QRA on a regular basis? I believe I would certainly do it, you know, with the best information we have.

MS. MORRY: Mm-hmm.

MS. POWER: I think the situation in 2014 and '15 was incredibly difficult.

MS. MORRY: Sure.

MS. POWER: So I don't wanna go so far as to say I disagree with Mike's comment.

MS. MORRY: Yeah.

MS. POWER: I think that ideally I would agree. I think – realistically I think it may have been, you know, an exercise that may not have resulted in very useful information, but it wasn't done so we won't ever know.

MS. MORRY: Right.

MS. POWER: But that's my opinion anyway.

MS. MORRY: I understand, and –

MS. POWER: Okay.

MS. MORRY: - thank you.

So – oh, one other question about AFE and how –

MS. POWER: Okay.

MS. MORRY: How would foreign exchange variance be factored into what you do, if at all?

MS. POWER: So it is, yeah. So one of the things – and this is pretty standard on any project, at the beginning of a – for cost control purposes –

MS. MORRY: Yeah.

MS. POWER: – at the beginning of any project, we would actually set exchange rates. So officially if you were to go into our system, the US dollar is like 1.0371 –

MS. MORRY: Yeah.

MS. POWER: – yeah, we wish. Of course it's not now. It's not even close to that, unfortunately, now.

But so, from a cost perspective, you can't have this variance all over the place. So we actually have a separate package called foreign exchange.

MS. MORRY: Mm-hmm.

MS. POWER: And I am aware at one time the foreign exchange was actually not included in the capital costs budget itself. I actually – I have no idea why. I can only surmise that it was meant to be part of, perhaps, the financing. I know – and whether there was gonna be some hedging by Nalcor, I don't know.

I do know along the way it was certainly something we were conscious of 'cause, as I said, in our system if you enter a contract in US dollars, the Canadian that's gonna come out is gonna be multiplied by 1.0371.

MS. MORRY: Right.

MS. POWER: The reality, of course, it's when it's actually being paid – it's a different value today or, you know, next week or last year. And

so when that's paid on the invoice side, that variance between what our system assumes is the exchange rate and the real exchange rate – that's captured in a separate package. So it would've been – I don't remember if it –

MS. MORRY: Yeah.

MS. POWER: – was 2016 or 2017, but in one of the AFEs at least two or three years ago, we did actually officially put foreign exchange into our capital budget.

MS. MORRY: Mm-hmm.

MS. POWER: I think it's around about \$40 million total, and that would – and at this point, our foreign exchange risk is very low. There's very little left to pay that's not Canadian.

MS. MORRY: Sure.

MS. POWER: Because most of our construction contracts – or actually all our construction contracts are in Canadian. It would be some of the original procurements would've been in other dollar values. And there were even a couple of cases – I know, just where I came from HVDC specialties, our contracts with Alstom –

MS. MORRY: Mm-hmm.

MS. POWER: – we actually converted them and they looked after the hedging, and that was a change order we did. So they took the risk on foreign exchange.

MS. MORRY: Mm-hmm.

MS. POWER: But that wasn't the case on – in I think some of the – I think most of the foreign exchange was more on the DC and AC transmission line equipment – material purchases. Yeah.

MS. MORRY: Okay.

Thank you.

MS. POWER: Yeah.

MS. MORRY: So let's return to your memorandum there –

MS. POWER: Okay.

MS. MORRY: – which is at tab 39, Exhibit 03779.

MS. POWER: I got it.

MS. MORRY: So we just talked about the AFE Rev. 1 files –

MS. POWER: Right.

MS. MORRY: – and some of the related documents to that.

Now, in September 2014 you found one file and I understand there are two final forecast cost figures in there. Could you just describe what you found there?

MS. POWER: Yeah, so what I found there, as you mentioned, there was — I'll call the, you know, the regular file which was still in the range of the 7.5 that had been flagged, I guess, the previous May. The only real — so at that point, of course, towards the end of 2014 — and I think Lance Clarke discussed some of this yesterday — is that, you know, the project was starting to look at, you know, the amount of hours that Astaldi had been burning versus what was in their LMax and, you know, coming to realize, okay, we obviously have a potential risk out there depending on Astaldi's corporate liquidity and whether they could take the losses. So we were looking at that.

So the second number, the 7.868, that actually has within it – essentially, you can see it's an additional, I guess, \$300 million or so. That was a calculation at that time where we thought Astaldi would end up and it was an assumption of – okay, well, our highest risk would be that we actually covered that loss.

The lower number, the 7.526, I'll say was our – you know, our regular file just updated for September. In that one, though, they did actually include a \$50 million, as it states there, "allowance for schedule incentives" for Astaldi but not covering any of their losses from a labour overrun. So I think it was just – at that time, it was things they were starting to look at and what the potential impact could be.

MS. MORRY: Sure.

MS. POWER: So in these – so, there's the two versions –

MS. POWER: Right.

MS. MORRY: – 7.526 versus 7.868.

MS. POWER: Right.

MS. MORRY: Now, that's in September 2014.

MS. POWER: Yes.

MS. MORRY: Now in September 2015, a whole year later, that's when AFE Rev 2 came, for \$7.7 billion.

MS. POWER: Right. 7.65.

MS. MORRY: 7.65 –

MS. POWER: Yeah.

MS. MORRY: – excuse me.

MS. POWER: Yeah.

MS. MORRY: That – more accurate, yes.

Now in December 2014, you found a file with the FFC of 7.516.

MS. POWER: Right.

MS. MORRY: Then, as we move into 2015, you found – so sort of a similar – I'm assuming you found a similar file, like, AFE Rev 2. Correct?

MS. POWER: Yes. Yeah, that's basically where these files came from.

MS. MORRY: Yeah.

MS. POWER: So, yeah, I think in – you know, certainly, a lot of the major contracts would have been awarded, not all of them but quite a few, so I don't know if they were doing the management outlook every day – or every month, I should say. But when you take a look, actually, like – and that's – unfortunately, with the passage of

time, you'll see that the very first file I found was actually called Rev 6.

MS. MORRY: Yeah.

MS. POWER: So I'm guessing there was a Rev 1, a Rev 2 or Rev 3 but – you know, I asked George about it and he – like, he said: I have no idea, this is years ago. More than likely, he probably just saved it and then renamed the file.

MS. MORRY: I can see that.

MS. POWER: Yeah, so that's probably the case. So I do believe – my understanding is that throughout the all of 2015, there was, you know, regular updates of this but – yes, the first ones I found would have been actually – I think it looks like probably – the date of the file was, like, July?

MS. MORRY: Yeah, I see –

MS. POWER: Yeah.

MS. MORRY: – a July one there.

MS. POWER: So that was like a Rev 8, right. And like – Rev 6 is dated in August, but, again, that could just be someone opened file and saved it

MS. MORRY: Yup.

MS. POWER: So just, I guess, to be clear, like, I was just picking up what in the IT perspective – the modified date.

MS. MORRY: Yeah.

MS. POWER: The actual – what the change was made, it could have been nothing.

MS. MORRY: Yeah.

MS. POWER: It could have been somebody opened it and saved it, and then, of course, the modified date changes.

MS. MORRY: Sure.

MS. POWER: Yeah.

MS. MORRY: So, with that being said, the –

MS. POWER: Mm-hmm.

MS. MORRY: – the members in the AFE Rev 2 collection there, they range from 7.626 –

MS. POWER: Right.

MS. MORRY: – to 7.743 – or no, excuse me, to 7.916 –

MS. POWER: Yes.

MS. MORRY: – 7.976. So, again, the September 2015 update was actually only for 7.65, as you mentioned –

MS. POWER: Right.

MS. MORRY: – as a –

MS. POWER: I think actually you can probably

MS. MORRY: Mm-hmm.

MS. POWER: – see the last – the last bullet point on page 6 and the first one on page 7 –

MS. MORRY: Yeah.

MS. POWER: – actually, even the second-last one. They all have that 6.5 number –

MS. MORRY: Right

MS. POWER: – 7.65 number. And you can see, there's a varying dollar value – actually, it's all pretty much a hundred – yeah, it varies from a 172 to 323 million, that's in potential trends on top of that and that's where the –

MS. MORRY: (Inaudible.)

MS. POWER: – the other number comes from, the 7.9s –

MS. MORRY: Yeah.

MS. POWER: - and the 7.88.

MS. MORRY: Right. And so, you make note in the memorandum as well –

MS. POWER: Yeah.

MS. MORRY: – that there was some presentations with qualifiers.

MS. POWER: There were.

MS. MORRY: So, what's included and what's excluded from these management outlook figures?

MS. POWER: So, my understanding is that the 7.65, let me – sorry, let me just remind myself here. So, yeah –

MS. MORRY: Please.

MS. POWER: – the key qualifier notes – so any cost increase, and I'm just reading from this, actually. So this was a direct quote from what was in the file. It said: "Any cost increase resulting of schedule delays, acceleration or change in milestones dates for any of the contractors is not included in the AFE revision."

So again, at that point, if we're — 'cause I know a lot of this work was done throughout 2015 — there wasn't a — there had certainly been flags up to executive, a potential — I think it was around that time like, it might have been a little bit later than that but around July, August anyway, of 2015 — that it was acknowledged the schedule couldn't be met. And I think that's why the qualifiers are there, 'cause the cost control part of the team didn't have any kind of firm date to be able to calculate, well, okay, we need to move to that owner's team, we need to move out some of our ongoing expenses.

MS. MORRY: Yeah.

MS. POWER: So, they did have some trends that were picked up. But generally, as noted, right, what was in the AFE, the 7.653, it was known at least internally and known up to the executive that that 7.653 was only ever gonna get us to Q2 of 2016 from a schedule perspective, I guess, from a – you know, MFL, right? Our MFL is our staffing plan. And that would've been a lot of our owner's cost, right?

So, our owner's cost would've been covered up to Q2 2016, and I think they covered so much beyond that but we – you know, what would have been the original project duration? They weren't accounting for what – you know, was it

being worked through at that time, and would eventually lead, of course, to a project extension into – into now and just – you know, this year and 2020.

MS. MORRY: Sure.

MS. POWER: Yeah.

THE COMMISSIONER: So, I note as well that if you continue on that, that also did not include changes for the Astaldi contract.

MS. POWER: No. At that time, it didn't. So, that would have been in 2015, I think that would have been – I can't remember the exact timing because, of course, I wasn't involved in Astaldi at all in 2015. But just what I've learned in the last little bit – that they certainly were talking to Astaldi, at that time; they were working with -ifsome productivity – but there certainly hadn't been any decision made with respect to whether, you know, we would be changing out Astaldi because – of course, that would be, again, one extreme where you could have a very different schedule or results – a very different cost forecast. Or – you know, just sticking with Astaldi – this is your contract number so then there'd be no cost impact, but there would still be a schedule impact, certainly. Or the – somewhere in between, which is where we ended up which was, you know, helping Astaldi get to the end. So, all of that was not known in 2015.

MS. MORRY: Mm-hmm.

MS. POWER: So, but it was known that something was going to happen. But basically, that's why I think the qualifiers were in there to say, like: We haven't included anything for this, we don't know where it's going to be.

MS. MORRY: Yeah.

MS. POWER: So, everybody was aware that this is the information that we were providing, right?

MS. MORRY: Now, I'll point you to tab 15 in your first binder, which is another one of those monthly reports, this one from July 2015.

MS. POWER: Okay. Sorry. Hang on a minute.

MS. MORRY: Oh, please. Yeah.

THE COMMISSIONER: Tab 15, you say?

MS. MORRY: That tab 15, that's right. And

that's -

MS. POWER: Fifteen ...

MS. MORRY: – P-03755.

MS. POWER: Okay.

MS. MORRY: So, we see the - what's the final

forecast cost listed on this report.

MS. POWER: So, yeah - so at that point, it was 6.99, so it was aligned with the AFE approved in

the previous year –

MS. MORRY: Right.

MS. POWER: – in June of 2015.

MS. MORRY: Yeah. Okay. Thank you.

MS. POWER: One thing, actually, I noted when I took a look through a few of these – it – not that it, actually, really helps much but – but anyway, in – there were – the potential trends was still included in the package but for some reason, it was – it wasn't put on the front page

here.

MS. MORRY: Okay.

MS. POWER: So, it's - so, what is there, it's

133 million.

MS. MORRY: Right.

MS. POWER: But, to be honest, like I said,

theoretically, that would actually be within the

contingency. So -

MS. MORRY: Sure.

MS. POWER: – but it's just a clarification

point that I did note, it's not on the front cover.

MS. MORRY: No, and I appreciate you helping

us –

MS. POWER: Yeah.

MS. MORRY: – guide us through these documents, for sure.

MS. POWER: Yeah.

MS. MORRY: So, 6.99 plus the potential trends, as you note, but that's still quite a bit

below the management -

MS. POWER: Yeah.

MS. MORRY: – outlook files that you found,

right?

MS. POWER: Yes. It is.

MS. MORRY: All right.

MS. POWER: Yes, because at that point, they

were – well, 7, 8 or 9 –

MS. MORRY: Right.

MS. POWER: – that we were talking about.

MS. MORRY: Okay.

So, now - so this is almost the end of your

memorandum, now, for 2015.

MS. POWER: Right.

MS. MORRY: You found some more emails

and meeting notices.

And - so, I think that brings us, basically, to the

end of your memorandum –

MS. POWER: Okay.

MS. MORRY: – for the FFC.

MS. POWER: And I didn't – sorry, I'm a little

_

MS. MORRY: Please, if you have any more

thoughts on –

MS. POWER: I – no – yeah, I didn't look – not

that I didn't look – there wasn't anything to find

after this point –

MS. MORRY: Okay.

MS. POWER: – because, really, this kind of brings us that AFE in 2015.

MS. MORRY: Yeah.

MS. POWER: And beyond that, I think that's when the QRA process picked up, kind of, where this left off.

MS. MORRY: Okay.

MS. POWER: And then, since then, of course, the regular QRA.

So, I mean, you know, I know this is not a modelling process, but I think that, you know, it was obvious to me that project controls was gathering whatever their information was available and providing it.

MS. MORRY: Yeah.

MS. POWER: But, you know, there was, obviously, gaps in available information; primarily, what was going to happen with Astaldi.

MS. MORRY: Sure.

So, after this point –

MS. POWER: Yeah.

MS. MORRY: – is it fair to say that the monthly reports – the project summary reports, to your understanding – they would have – they would reflect a final forecast cost that would be similar to what the management outlooks would be. Like, there's – so, during the period covered by your memorandums –

MS. POWER: Yeah.

MS. MORRY: Sorry, if I can just clarify.

MS. POWER: Yeah.

MS. MORRY: In June 2013 to September 2015

_

MS. POWER: Right.

MS. MORRY: – there's these management outlook numbers, and then there's, also, the final forecast cost –

MS. POWER: Yes.

MS. MORRY: – reflected in the monthly report.

MS. POWER: There was two different things, yeah.

MS. MORRY: So, two different ones.

MS. POWER: Right.

MS. MORRY: After this point, is it fair to say that the monthly summary reports have the FFC number?

MS. POWER: I think that that would, probably, be the implementation of the QRA and the AFE

MS. MORRY: Yeah.

MS. POWER: – in June of 2014 – sorry – June of 2016.

MS. MORRY: Right.

MS. POWER: Yes, at that point, there – you know, and I think the reason why I – you know, and I asked George about it – why there wasn't anything beyond that, and he said: Well, you know, once they get towards the end of the 2015, they were into the weeds of the Astaldi stuff and working with Westney.

MS. MORRY: Mm-hmm.

MS. POWER: So, he just wasn't required to do this anymore.

MS. MORRY: Yeah.

MS. POWER: Outside of his regular reporting, which, of course, was still going into the Westney analysis. But now, they have kind of taken over on how to deal with the Astaldi and that.

So, once, though, we got to June of 2016, when I came into –

MS. MORRY: When you took over.

MS. POWER: – the role – yeah. There – we didn't have those big unknowns anymore. So, yes, it's always been reflective. I guess the only exception I will note is, as we looked at earlier –

MS. MORRY: Mm-hmm.

MS. POWER: – in May of 2017, we would have been picking up all of the day-to-day risks – or, sorry, the day-to-day trends in that file. So, of course, we noted that when we looked at – in May of 2017 – it was obvious there wasn't enough money.

MS. MORRY: Mm-hmm.

MS. POWER: – to cover, and we knew the QRA was about to be – and a new AFE implemented. So the only difference, I think, is since June of 2017, the reports that are produced on a monthly basis are even more inclusive –

MS. MORRY: Mm-hmm.

MS. POWER: – in that we also look at the dollar value of the risk and are comparing that against contingency –

MS. MORRY: Right.

MS. POWER: – so, you know, in the theory it wouldn't be any different in the sense that if there was anything occurring that looked like it was going to be outside of our current AFE, you would definitely find it in that package.

MS. MORRY: Yeah.

MS. POWER: It wouldn't be anywhere else. And I think that was true, even in 2016 –

MS. MORRY: Okay.

MS. POWER: – from June 2016 to June 2017, same thing. There wasn't a separate package. It was all in that one package. Is that –

MS. MORRY: That -

MS. POWER: – what you're looking for?

MS. MORRY: – answers my question. Thank you.

MS. POWER: Okay.

MS. MORRY: Now, so your memorandum very helpfully set out lots of information that project controls was providing to the – to management in terms of a final forecast cost figure.

MS. POWER: Right.

MS. MORRY: Did you find anything similar in terms of schedule risk?

MS. POWER: Yeah, so – yes. So in the same interview, Ms. O'Brien asked me that. I did start

MS. MORRY: Mm-hmm.

MS. POWER: – looking. I, unfortunately, have not been able to have the time to put together, sort of, this, you know, very organized memo. But I have found a number of things.

So throughout 2014 – and I'm gonna speak more specifically – 2015, in particular – I spoke to the lead planner –

MS. MORRY: Mm-hmm.

MS. POWER: – for the component 1 section with Muskrat Falls. And I also looked through some of the files. So I have – it's literally like 300-plus emails that he forwarded to me from that time frame, as well as what is probably hundreds of files.

So, in order to properly evaluate what project controls was doing –

MS. MORRY: Mm-hmm.

MS. POWER: – and sort of really organize it like I did with that memo, it will take some time.

MS. MORRY: Mm-hmm.

MS. POWER: Unfortunately, I haven't just – I haven't really had it. I did this one and I was starting into that and gathered the information, but then actually there was another request from

the Inquiry I was asked to do – from the Commission. So, I felt that took priority. So – but to give you a kind of high level –

MS. MORRY: Yup.

MS. POWER: – what I found. So throughout – and I am going to focus more on '15 – so throughout 2015, there was a significant amount of work between the planners on the project and the Astaldi planners. So, I know there have been discussion about – you know, high level discussions, CEOs – but I certainly saw plenty of correspondence back and forth, versions of schedules –

MS. MORRY: Mm-hmm.

MS. POWER: – going back and forth. Up until certainly – I think, even in early 2015 – Astaldi's formal schedule, they were submitting under their contract said that they could recover.

We, of course, you know, certainly, at that point, were starting to doubt whether we believed they could. So, the focus throughout 2015 was really around, as I mentioned earlier, river diversion. So, for example, in – one thing you'll see, just in the correspondence, within the contract itself – is that, say, for example, if they hit a milestone – Astaldi hit a milestone of M4, which was upstream of the spillway, ready for owner's hydro mechanical contractor. So that was a single milestone. So in a perfect world, what was meant to happen, they were suppose to finish all of their scope so that they would leave and ANDRITZ would come in and do their work.

The reality was, is that if we left it that way, we were going to miss river diversion. So, what I saw was a significant amount of, again, correspondence back and forth between the planners. We brought in a couple of external planers, as well, one being Lee Stanton, who I think had previously been SNC, but he has 40 years experience in hydroplaning.

So they were working with that group to try to break down those milestones and be able to – and so, if you look in the contract, in Astaldi, you will see they ended up with a 4A, 4B, 4C, 4D, and the purpose of that was really to be able to say, yes, we wanted you to have everything

done so ANDRITZ could come into this clean site.

What, in reality, is the minimum that you can — that we can get you to do so that ANDRITZ can start their work? So all of the focus through 2015, to be honest, was very much around that.

MS. MORRY: Sure.

MS. POWER: It was, how do we get river diversion to happen in 2016? 'Cause if we miss that window, it goes to 2017. And, as I mentioned, that was the critical path, and until river diversion happened, you couldn't get your North Dam contractor to start –

MS. MORRY: Mm-hmm.

MS. POWER: – because they wouldn't have anywhere to work, of course; it would still be underwater.

So that was really their focus. Now, during that time, there was, as well – and again, I saw a number of emails from that planner to both Scott O'Brien, the project manager, and Paul Harrington. They were providing regular updates on – this entire process was called the schedule development initiative. So you would see regular updates on the SDI – is what they called it. And so, that would certainly have, as I mentioned, what they're doing about how we're going to make river diversion.

The powerhouse, to be honest, at that point was becoming secondary. It wasn't on the critical path at that time but, of course, if you delay it enough, it ends up on the critical path, and that's where we are today. But, at that time, they – that was a primary focus, but they did also provide scenarios and saying: Okay, if this is how we go forward, this is where we think we'll end up on the powerhouse. So that was giving information with respect to potential delays.

MS. MORRY: Sure.

MS. POWER: So, I think those things are what anchored back to what Mr. Harrington was providing to the Nalcor executive.

MS. MORRY: Yeah.

MS. POWER: So in – again, you know, when you get to, I think, mid-2015 he's indicating to the executive that December of 2017 can't be met. That would've been coming from these scenarios to say, like, there's no scenario under which we can make it.

And so at that point he was indicating a delay, I think, of six to nine months. Once they got later into 2015 and in – by the time, I think, early 2016, they knew that it was likely in 2019 before that first power was going to happen.

So I certainly saw evidence of all of that, but, again, as I mentioned, it's literally hundreds of emails and –

MS. MORRY: Yeah.

MS. POWER: – I was trying to go through them and gather them and I just haven't had time. I don't know if it's something that –

MS. MORRY: No, I appreciate the update.

MS. POWER: Yeah.

MS. MORRY: And thank you for describing –

MS. POWER: Sure.

MS. MORRY: – what you saw.

MS. POWER: Okay.

MS. MORRY: So -

THE COMMISSIONER: I'm just wondering – just thinking here right at the moment.

MS. MORRY: Yeah.

THE COMMISSIONER: Recognizing the amount of work that you have – and I appreciate the work that you've done for the Commission at our request – I'm wondering if any of the parties feel that we need more than this highlevel –

MS. POWER: Sure.

THE COMMISSIONER: – observation, or whether we need something more detailed, or whether you would need any more detail. I think

I'd be satisfied with the high-level observations, but I'm just wondering whether anyone here would find it necessary to actually do a little bit of a deeper dive for a memorandum similar to what –

MS. POWER: Yeah.

THE COMMISSIONER: – she did – you know, this witness has done before, recognizing, too, that means more work for her.

Just wondering, anybody have any thoughts?

Mr. Simmons - just turn your mic on there.

MR. SIMMONS: Commissioner, that's certainly something that we can have some further discussion with Commission counsel about, and work out whether, you know – and frame out what might be useful, bearing in mind that it's been recognized that it's a – I think Ms. Power had described it to me as a larger undertaking than what she had to do –

THE COMMISSIONER: Right.

MR. SIMMONS: – to prepare this particular memo on cost and a more difficult one, appreciating that she's really doing an investigation and looking back at the work of others to do this. So we're happy to have some discussions with Commission counsel and see if there's something reasonable we can undertake.

THE COMMISSIONER: Yeah, and it may well be that the evidence that we hear later is not going to conflict with the high-level observations that this witness is giving, and if that's the case, then it may not be that material.

But I think in your discussions on this, I think we need input from others here. So I expect that, you know, the Concerned Citizens Coalition, the Consumer Advocate, others may want to be involved in that discussion. So have the discussion but, as I say, my initial reaction would be that this may be enough. But I'll leave that up to you.

MS. MORRY: Thank you, Commissioner.

And I'll certainly have that conversation with counsel for parties.

Ms. Power, those are all my questions.

MS. POWER: Okay. Thanks.

MS. MORRY: And I thank you very much.

THE COMMISSIONER: That's fine.

All right, Province of Newfoundland and Labrador.

MR. RALPH: Good – I guess it's afternoon now, Ms. Power. My name is –

MS. POWER: It is, just –

THE COMMISSIONER: Just put your mic on there, please.

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

MS. POWER: Mr. Ralph.

MR. RALPH: And I just have a few questions largely about the – about oversight.

MS. POWER: Okay.

MR. RALPH: And what I'm interested in knowing is sort of asking you to sort of compare the information that your groups get – the generation group and the transmission group gets on a monthly basis with what the independent engineer receives and the Oversight Committee. Are you in a position to do that?

MS. POWER: I can only speak to probably the last 18 months is the only problem. I can't provide anything before that.

MR. RALPH: Yeah, that's fair enough.

MS. POWER: Okay.

So, basically, yes, I did take a look at - I have been attending for some time and I did check - I believe it was October, November of 2017 -

MR. RALPH: Yes.

MS. POWER: – that I attended the Oversight Committee meeting. On the generation side, I

prepared the actual presentation itself and that still remains the same today.

On the transmission side, at one time I also put that together, but we actually have another individual on that side who puts it together. But, to be honest, I still attend the full meeting.

So we have a meeting once a month with the Oversight Committee and that meeting is generally split into two. It might be, you know, an hour to an hour and a half for generation, then an hour to an hour and a half for transmission. Sometime probably in the last six to eight months, what they've started doing is generation is one month, transmission is the next month and then on a quarterly basis it's everybody.

MR. RALPH: Yes.

MS. POWER: So I attend all of them anyway.

MR. RALPH: Yes.

MS. POWER: So I am present for all of them. And then, either way, whether it's one of the groups or the other, there's two presentations provided, there's just only one group comes to actually present.

MR. RALPH: Right.

MS. POWER: And then, the next day – so that happens on – it's, like, the first Thursday of the month now; at one time it was a different day. But the next day, generally, we meet with the independent engineer and the Government of Canada representatives, this is generally via phone and, at this point, they literally get the same presentation. So there is nothing different and same with the LCP board of directors, they also – which they have three (inaudible) get the same.

MR. RALPH: So just – I'm sorry, who attends that meeting with the independent engineer? Is it –?

MS. POWER: So –

MR. RALPH: I understand the Government of Newfoundland and Labrador also has a representative at that meeting.

MS. POWER: That's correct. So I can't remember how far back that goes, I'm thinking maybe only about – it might only be six months, it might be longer. But, Paul Carter, who's the executive director of the Oversight Committee, yes, he also attends via phone.

MR. RALPH: Yes.

MS. POWER: Because, yes, while the presentations are identical, there could always be different questions that perhaps weren't asked at the Oversight Committee. And so Paul certainly then, is able to keep informed on the questions that the independent engineer and Government of Canada are asking as well.

MR. RALPH: Right.

MS. POWER: Yeah.

MR. RALPH: So if you would, could you compare the sort of level of detail that –

MS. POWER: Sure.

MR. RALPH: – you give the employees of Nalcor who are on the generation and transmission groups –

MS. POWER: Right.

MR. RALPH: – and compare that level of detail with the level of detail that the Oversight commission and the IE –

MS. POWER: Sure.

MR. RALPH: - would receive.

MS. POWER: So I mean, yeah, obviously there's different levels of information for different groups. So, for example, within my group the team focused on generation. They would be providing the rest of their team with incredibly detailed information, as you can imagine. They would have, for each of the contracts – so they have what's called a KPI package, so it's the key performance indicators.

So within there they have, you know, cubic metres of concrete being poured, they have key milestones where they're forecasting. They have exactly what is left in the budget for those

packages and what it's for and what the trends are and the potential. So it's incredibly detailed, as you can imagine.

Then, as you start to move up, I think you've seen an example of the package that we produce for our own senior management. So, then, when you move up to the next level to, like, the other stakeholders such as Oversight, IE and Government of Canada and the board of directors, so really, the key focus there is certainly they get the percentage complete of where we are overall.

MR. RALPH: Yes.

MS. POWER: There's a little bit of detail under that. So, you know, this particular scope is 90 per cent, this particular scope is 80. It has changed, obviously, over time, as – so, for example, at one time we had a graph that would be included that would have shown the cubic metres of where we were on the North Dam.

MR. RALPH: Yes.

MS. POWER: Once it was completed, obviously, that's gone. So, we certainly, for oversight, provide information with respect to how much contingency we currently have, how much contingency we used in the previous month, how much we actually took through PCNs. We'll also have a slide there that covers risk.

So, we have a list of four or five key risks, I would say – it's not every single risk because it's not at the tactical level – where it's packaged specific and you have a risk that's \$100,000. No, we're probably not telling the Oversight Committee about that. That's all within.

So, it sort of the big risks and it's – so, this risk might have a range, you know, somewhere less than \$20 million. This particular risk might be something that's less than \$5 million. We might have an opportunity, with an insurance claim, that has an opportunity of a recovery of \$10 million. So, it's those types of risks we're reviewing that have, you know, any significant material potential to impact our budget. And the key thing, of course, naturally, they're interested in: is this within your budget? Is this something that is a concern? And then we also, of course,

identify any key risks that would be outside of our budget. So, really, these are the few strategic risks that have been publicly noted by the Oversight Committee presentations and by Mr. Marshall.

MR. RALPH: I guess you're specifically talking about the risk associated with the Inquiry and the IEAC, I believe.

MS. POWER: There are a number of them. So, yes – the – any kind of government directive and, again, this is – I know – I checked it so I knew what was publicly out there for the OC committee.

So, yes, it would include any recommendations to be implemented from the IEAC that are not already agreed to be implemented because there's a number of environmental ones. They're fine. They don't have any impact on us, essentially. But the ones that – like, any kind of major clearing of the reservoir, any wetland capping. So, those are the types of things that we're really discussing and where that is, you know, from a cost perspective. And, you know, if you go back a year and a half, if a directive had been given, would have one impact; it has a different impact in winter. It has a different impact today. So, those types are flagged.

MR. RALPH: Oh. So, they're considered strategic risks but they're not –

MS. POWER: They're strategic risks that –

MR. RALPH: They're not in the budget.

MS. POWER: They're not – right, they're not in the budget. So, it speaks –

MR. RALPH: And why is that? Why is it not included in the –

MS. POWER: Well, I -

MR. RALPH: -AFE?

MS. POWER: – mean, again, particular when you're looking at IEAC recommendations, if the recommendation weren't – if government were to direct us to clear the reservoir, that would be significant. It would be billions.

MR. RALPH: So, it's a difficulty of –

MS. POWER: You're not –

MR. RALPH: – measuring the risk. Is that the difficulty?

MS. POWER: It's – no, it's not a matter or measuring the – that's – it's a risk that's not off. Either it's a you're doing it or you're not. If you're not doing it, it's zero. If you're doing it, it's a significant dollar value.

So, to me, yeah, why would you put it in your budget today because, I mean, its, you know, potential is for zero.

MR. RALPH: Right.

MS. POWER: So it's not like it's a range –

MR. RALPH: Mm-hmm.

MS. POWER: – you know what I mean? It's –

MR. RALPH: Yes.

MS. POWER: – not something that's a range. It's either a yes or a no.

MR. RALPH: Right.

MS. POWER: It's zero or it's whatever number

MR. RALPH: Right.

MS. POWER: – a big one. So –

MR. RALPH: 'Cause it's interesting – 'cause Westney, I think, recommended in 2012 that strategic risks be included in the budget.

MS. POWER: Well, what – I don't know if that's – I'm not sure if Westney recommended that. They certainly –

MR. RALPH: I understood that.

MS. POWER: – identified strategic risk.

MR. RALPH: Yes.

MS. POWER: And they identified it as management reserve, and I think I've frequently seen that, you know, a lot of clients do keep management reserve separate from what they give the project —

MR. RALPH: Right.

MS. POWER: – team.

But these ones are – these aren't a range. Like, these are very much like on, off, right?

MR. RALPH: Sure.

MS. POWER: Now – no, you're right, when we have others, like any other government directives, or we also have, for example, if there was any kind of significant protests that meant the site had to be disrupted in any way for any length of time, those are ones as well identified in the 2018 QRA that a decision was made not to include budget for these things.

So, again, many of them are if they don't happen, there's no question –

MR. RALPH: Right.

MS. POWER: – they're all zero.

MR. RALPH: So part of –

MS. POWER: Yeah.

MR. RALPH: – your role is to participate in both meetings with the Oversight Committee and the independent engineer?

MS. POWER: Yes, that's correct.

MR. RALPH: (Inaudible.) I –

MS. POWER: Yeah.

MR. RALPH: – have no further questions. Thank you.

MS. POWER: Okay, thanks.

THE COMMISSIONER: Concerned Citizens

Coalition?

MR. HISCOCK: Good morning, Ms. Power. It's Will Hiscock from the Concerned Citizens Coalition.

MS. POWER: Mr. Hiscock.

MR. HISCOCK: I just have one question, really, I guess, or one area anyways –

MS. POWER: Okay.

MR. HISCOCK: – which is, I mean, we – you have these differences between the final forecast cost and the management outlook.

MS. POWER: Yes.

MR. HISCOCK: And my understanding is that they are relatively aligned today.

MS. POWER: Yes, yeah. There isn't two things, yeah –

MR. HISCOCK: Right.

MS. POWER: – it's an all-in and I think – so is your question is why, perhaps?

MR. HISCOCK: Well -

MS. POWER: Okay.

MR. HISCOCK: - why - yeah, why in the past - is -

MS. POWER: Sure.

MR. HISCOCK: – there a legitimate reason? Would there be a business reason or whatever –

MS. POWER: Yeah.

MR. HISCOCK: – that those numbers would be so different? 'Cause it's a half-billion dollars difference, almost –

MS. POWER: Yeah.

MR. HISCOCK: – a billion dollars at one –

MS. POWER: There is.

MR. HISCOCK: – point.

MS. POWER: Yeah.

MR. HISCOCK: Yeah.

MS. POWER: Yes. I – in looking back at the files, I can understand why they had something different in, you know 2013, 2014. So as I mentioned, during that time, you still had ongoing bids coming in and being evaluated. And that information is actually confidential. So, for example, there are very, very few people – it literally is two or three – who would attend a bid opening, and the bid evaluations were kept very close. So, the problem is you had, I guess – and, you know, some of this is what people tell me but I understand – is that you would have had a much broader audience with access to that regular forecast, of course.

And whereas you could not have a broader audience being aware of some of these other numbers. So even – and I guess things changed over time. In, you know, 2016, I had within the package a dollar value for balance of plant. Now, that wasn't awarded at that time. I had no – zero visibility into the evaluation of the balance of plant contract. That wouldn't be my role. I'm not part of that evaluation team.

So, I just had, from Mr. Harrington, a plug number. He told me, no, add this much money. Could they have done it back then? I guess they could have and in a similar format. But I think that from our perspective – and I mean our as in project controls – I believe the team is just making sure that the information was provided. And how it was presented in different reports was, you know, not the decision of project controls, necessarily.

MR. HISCOCK: So, the final forecast cost would be –

MS. POWER: Yeah.

MR. HISCOCK: – basically the best estimate you had at the time that you felt you could put public – could make public, disperse to a broad range of people without a commercial problem resulting?

MS. POWER: Well, maybe a little bit of that but I think, though, the final forecast cost that was provided by project controls was not – as

we've clearly seen – was not necessarily the final forecast cost that was communicated.

So, again, that wouldn't have been the decision of project controls. As for why, I certainly think that there's times when, you know, we've got ranges of what's out there, and it's something we've addressed in the last couple of years, that the Oversight Committee wanted to report specifically how much contingency was in each asset.

MR. HISCOCK: Mm-hmm.

MS. POWER: To us – now you're telling contractors exactly how much money we have. So, I think that's always been something that's been a bit sensitive. And there's no question that, like myself, a lot of us have, you know, not necessarily, worked on a public project, and normally this information is very, very close to the chest, right? So, I think, you know, there's probably been times over the years when things weren't made public for those reasons.

MR. HISCOCK: Okay.

And looking back – and I'm thinking, specifically, you know, 2013, 2014, into early 2015 when we have these big spread between the FFC –

MS. POWER: Mmm.

MR. HISCOCK: – and the management outlook. During that period, are you aware which numbers would have been going to the board of directors, for example? Would they be advised to the management outlook to the best of your knowledge? Would that – like –

MS. POWER: I don't know.

MR. HISCOCK: – internal –

MS. POWER: Yeah.

MR. HISCOCK: – governance would have used the true number, the management outlook number –

MS. POWER: Yeah.

MR. HISCOCK: – like, the best number that the company had –

MS. POWER: Yeah.

MR. HISCOCK: – or the FFC to the best of your knowledge?

MS. POWER: Yeah. No, I understand your question. I don't know. I know, you know, through the management outlooks that it was – the full number was presented to Mr. Martin. I have no idea what was presented to the board at that time.

MR. HISCOCK: Okay. Would you also – I mean, I'm asking this honestly which is in terms of the management outlook number that was available at the time.

MS. POWER: Yeah.

MR. HISCOCK: And we'll say when there was a half-billion dollar spread, say.

MS. POWER: Right.

MR. HISCOCK: So you're reporting 6.99 as the FFC, and it's a 7.5 number –

MS. POWER: Right.

MR. HISCOCK: – or something in that range or 7.8, 7.9 even, in –

MS. POWER: Yeah.

MR. HISCOCK: – the management outlook. Would it not have been possible in your view at this point, and when you're presenting numbers

MS. POWER: Sure.

MR. HISCOCK: – in your role now, that that management outlook number could've been presented even in an FFC number without divulging the full underlying details that would've caused commercial problems?

MS. POWER: Yes. I – if you're just talking (inaudible) – like, at that, you're just talking about big round numbers?

MR. HISCOCK: Yeah.

MS. POWER: In theory, I would think that that would have been possible. I don't know why – you know, why certain things were presented versus others from an AFE perspective. I don't know if, you know, the contractual relationship was a concern or if it was just a matter of depending on how things fell out, in particular with Astaldi, you could – the number might be completely wrong.

MR. HISCOCK: Yeah.

MS. POWER: You know? So I think it was more around uncertainty rather that any kind of commercial sensitivity I would think at that point.

MR. HISCOCK: Okay. But –

MS. POWER: But I don't know.

MR. HISCOCK: – but I do wanna confirm something, which is the –

MS. POWER: Yeah.

MR. HISCOCK: – management outlook number –

MS. POWER: Yeah.

MR. HISCOCK: – would be the most accurate number, the best assessment that your team could come up with at that time?

MS. POWER: Yes. I would agree.

MR. HISCOCK: Okay.

MS. POWER: That would be what they believed was the final forecast cost.

MR. HISCOCK: Right.

MS. POWER: Yeah.

MR. HISCOCK: Yeah. So that's what they believed the final forecast cost to be. They hand that off –

MS. POWER: Yeah.

MR. HISCOCK: – and then a different final forecast cost is being presented to others?

MS. POWER: Yes.

MR. HISCOCK: Okay.

MS. POWER: It would appear so.

MR. HISCOCK: Right. You hand a number off to whom exactly? Who would be the person that would be the –

MS. POWER: Yeah.

MR. HISCOCK: – bridge point between the management outlook number and the FFC?

MS. POWER: Sure. Well, I guess that, I don't know that I can answer it because there is no difference since I've been in that role. We haven't had that variance.

MR. HISCOCK: But in terms of who – in this point, where there is no variance now. But still –

MS. POWER: Yeah.

MR. HISCOCK: – the process is the same and that you're providing the management outlook, correct?

MS. POWER: Well, we're providing an FFC.

MR. HISCOCK: Yeah.

MS. POWER: We're not calling it a management outlook but, yes, we're providing an FFC. We're providing a monthly package. So I think, as you saw earlier, there's a number of individuals who sign off on that?

MR. HISCOCK: Yes.

MS. POWER: So really, I suppose, if there was going to be any variance, if somebody would not sign it and was telling me to do something different, that's where it would come. Once I have those signatures, I'm good to go report it to all our reporting deliverables of course, right?

MR. HISCOCK: When you look back at the information in the past –

MS. POWER: Mm-hmm.

MR. HISCOCK: – when there was this differential, we'll say –

MS. POWER: Right.

MR. HISCOCK: – were there signatures missing? Was there communications that this shouldn't be made public? And if so, by whom?

MS. POWER: Not that I'm aware of. So I do know the regular, as we can see, the regular monthly packages which had, I'll say, the lower number –

MR. HISCOCK: Yeah.

MS. POWER: – the one that aligned with the AFE, those were all obviously signed. The management outlooks were presented in, I'll say, separate meetings and formed part of the presentations that Mr. Harrington provided to Ed Martin at that time. So there was no approval process there. That would have been discussions between Paul and Ed, I believe, right?

MR. HISCOCK: Yeah, okay.

MS. POWER: And ultimately, I understand it would have been, I assume, Ed who made that call. But that wasn't something that project controls – they were just providing the management outlook, and then it just went off. But what got signed was this (inaudible) –

MR. HISCOCK: Is the FFC?

MS. POWER: I know, I'm pointing to something you can't see –

MR. HISCOCK: Yeah, sorry, yes, but is the FFC not the management outlook –

MS. POWER: Right, correct.

MR. HISCOCK: – is what got signed?

MS. POWER: Yeah, so that's what was being present in an internal environment and that's what was signed off.

MR. HISCOCK: Okay.

In the – my last question, I guess, is –

MS. POWER: Okay.

MR. HISCOCK: – would every person who signed that FFC have known – have had access to the management outlook?

MS. POWER: I'd believe the answer is yes.

MR. HISCOCK: Okay.

MS. POWER: I think – I just happen to have ones open here and I don't think it's ever generally changed. If we were to compare the people who signed the FFC with that memo –

MR. HISCOCK: Yes.

MS. POWER: – which has meeting notices, I believe it will generally be the same people. So it would be, you know, George, the project controls manager at the time, and it would have been, I guess, Jason Kean, Ron Power, Paul Harrington. I believe if we check the meeting notices –

MR. HISCOCK: Yeah.

MS. POWER: – for the management outlook meetings.

MR. HISCOCK: It was those people in management –

MS. POWER: It's the same people, yeah.

MR. HISCOCK: Yes.

Okay.

MS. POWER: That's right.

MR. HISCOCK: So just to confirm that when the FFC was signed off on, every person who signed that number –

MS. POWER: Yes.

MR. HISCOCK: – should have, at least, have had access to the management outlook numbers and have known that there was a difference of a

MS. POWER: Yes –

MR. HISCOCK: – half billion or a billion dollars?

MS. POWER: – they would have been aware. Yes.

MR. HISCOCK: Thank you. That's all my questions.

THE COMMISSIONER: All right, Edmund Martin.

MR. SMITH: Harold Smith for Edmund Martin.

MS. POWER: Hello, Mr. Smith.

I'm really following up on a couple questions you more recently received.

MS. POWER: Okay.

MR. SMITH: And that is the FFC versus AFE.

MS. POWER: Yes.

MR. SMITH: Okay.

The FFC that you produce each month, is that, to your knowledge, released to the public?

MS. POWER: Now? Are you asking me?

MR. SMITH: Yeah.

MS. POWER: Or –?

MR. SMITH: Yeah.

MS. POWER: Okay. Yes.

So – yes, I know that not every month, I don't think, as far as I know anyway. What I do know is that the Oversight Committee produces a report on a quarterly basis, and that is posted on their web page. So, certainly on a quarterly basis, the current FFC – and, actually, that even includes the overall contingency remaining on the project within that FFC.

MR. SMITH: And when did that start?

MS. POWER: The Oversight Committee presentations?

MR. SMITH: Yeah, to release the FFCs in the Oversight Committee's report.

MS. POWER: I'm not sure. I – like, we could actually check the Oversight Committee web page. I – it's been a couple of years. I couldn't tell you exactly when. I'd have to look.

MR. SMITH: Now, you've indicated that the content of the FFC has –

MS. POWER: Yeah.

MR. SMITH: – changed over time, has it not?

MS. POWER: It's not that it's changed, necessarily, I guess. It's just that at one time, the official project – so the FFC, from a project reporting perspective, and the AFE have always been the same number. I guess that's one thing. I think everybody is aware of that.

So, as we've talked about outside of that, there were management outlooks at one time in the first couple of years. So – and those management outlooks were a different number than the official FFC.

MR. SMITH: Okay.

MS. POWER: So, is it - I'm not -

MR. SMITH: Well, we've heard some evidence here at the –

MS. POWER: Yeah.

MR. SMITH: – Commission that FFCs were produced, I think, prior to 2016 when the AFE stayed at 6.2. In other words, the FFC and the AFE were entirely different. In fact, it's been a point of investigation by –

MS. POWER: Yeah.

MR. SMITH: - Commission counsel.

MS. POWER: So, I guess, it depends on which – yeah, because when you're saying FFC, I'm taking that to mean the officially reported FFC. So, that would've been in line with the AFE if

you were to go – if you go the construction reports.

But, yes, there was a management outlook FFC that was different.

MR. SMITH: Okay.

MS. POWER: I think if that's what you're getting at?

MR. SMITH: Okay. So, we have to look at our terminology in terms of the –

MS. POWER: It could be.

MR. SMITH: – period of time between, say, sanction and – of 6.2 and the AFE –

MS. POWER: Yeah.

MR. SMITH: – developed for sanction, 6.2. We have to then look at what terminology we are using when we are saying that the FFC is different then the AFE. What you're really referring to is the management outlook is –

MS. POWER: Yeah.

MR. SMITH: – different than –

MS. POWER: Yeah.

MR. SMITH: – the AFE. And how, in your experience, you know, is – reliable is the management outlook and does it contain things that you – may not necessarily come to fruition?

MS. POWER: I think it can contain things that may not come to fruition, but having said that, I guess, when you look at fairly consistent numbers over a period of time – I mean, you'd have to look at the details. I expect some of them were, you know – and you'll see at times it went down. And that would've been that, you know, maybe bids came in for a particular package but when we got into details of it we were able to find some cost savings and adjust the actual scope. And so suddenly what you thought was an FFC might be reduced by \$30 million for that package because your final award is a completely different number. So there's certainly – there's uncertainty; there is no question, yes.

MR. SMITH: Okay.

MS. POWER: Yeah.

MR. SMITH: So if we take that to, you know – an example we have heard here at the Commission that from the time the bid came in until the contract was awarded was eight months.

MS. POWER: Yeah. Oh – yeah, there's times it was more, potentially. But, yes, it was an extended period. So during that time there wasn't any, necessarily, certainty what the value would be. It may be exactly what was on the bid, it may be lower and it may be higher depending – more often than not it probably ended up lower.

MR. SMITH: So looking at the management –

MS. POWER: Yeah.

MR. SMITH: - outlook -

MS. POWER: Yeah.

MR. SMITH: – is risky in terms of actually saying what the actual cost would be.

MS. POWER: It certainly contains uncertainty.

MR. SMITH: Uncertainty, okay.

MS. POWER: Yes. Not sure if I would say it's risky. It depends on exactly what is included in it. I think that's what has to be clear.

MR. SMITH: But you – would you agree that when the management outlook, if that would be disclosed generally, which would show considerably more money available over the AFE –

MS. POWER: Mmm.

MR. SMITH: – in certain instances I think – you know, counsel for the Concerned Citizens indicated that as much as half a billion dollars could be the difference –

MS. POWER: Yeah.

MR. SMITH: – right? Could you – would you understand that possibly to interfere with the bargaining that's going on –

MS. POWER: The bid process.

MR. SMITH: – with the process?

MS. POWER: Yeah, it certainly can have an impact. I mean, it's always better for the contractor to think you have no money. That's never really a bad thing.

MR. SMITH: Okay.

MS. POWER: So, no, certainly, yes. And I would say particularly in the 2014 time frame when you were – and 2013 – when you were very heavy into bid evaluations and bid – after bid coming in. You certainly – that – I can certainly understand that being a consideration – that you don't want the contractors to think you have this unlimited fountain of money.

MR. SMITH: Okay.

MS. POWER: Yeah.

MR. SMITH: Thank you very much.

That's all the questions I have.

THE COMMISSIONER: Okay.

Thank you.

It's 12:30. I'm just gonna see how we're gonna do here.

Kathy Dunderdale is not here.

Former Provincial Government Officials.

MR. J. KING: I have no questions.

THE COMMISSIONER: Okay.

Julia Mullaley, Charles Bown. Not here.

Robert Thompson is not here.

Consumer Advocate, how long do you –?

MR. HOGAN: Five to 10 minutes.

THE COMMISSIONER: Five, 10 minutes. Okay, let's see where we go.

And then Former Nalcor Board Members.

MS. MORRIS: We have no questions, Commissioner.

THE COMMISSIONER: Okay.

And how long do you think you're gonna be, Mr. Simmons?

MR. SIMMONS: Maybe a minute.

THE COMMISSIONER: Okay, so – okay.

Let's go. Let's – we'll try –

MS. POWER: All right, we'll keep going.

THE COMMISSIONER: – to finish off then.

UNIDENTIFIED MALE SPEAKER: (Inaudible.)

MS. POWER: You're lucky I'm on a Friday.

MR. HOGAN: So good afternoon, Ms. Power.

My name is John Hogan. I'm counsel for the Consumer Advocate.

MS. POWER: (Inaudible.)

MR. HOGAN: So I don't have many questions and maybe you've already answered them, but I need some clarification, so –

MS. POWER: Okay.

MR. HOGAN: I don't know if Mr. Ralph was asking you these specific questions, but just so I'm clear. You do talk in your – when you did your interview about how you track trends that are good and bad, and the quote you said was it's done to predict the future, right?

MS. POWER: Yeah.

MR. HOGAN: And you do it in conjunction with the finance team. I assume you meant the Nalcor finance team?

MS. POWER: I'm not sure what context I would've been talking about with that.

MR. HOGAN: Okay. I don't necessarily need to read it out. My question really is, though, are the trends that you talk about –

MS. POWER: Yeah.

MR. HOGAN: – are they communicated to the Department of Natural Resources or the Department of Finance?

MS. POWER: So the trends – again, I can only speak to the last couple of years. So the trends I'm talking about are – these are all things that are within the contingency.

MR. HOGAN: So those trends are built into the numbers that are reported to the Oversight –

MS. POWER: Yes.

MR. HOGAN: - Committee.

MS. POWER: Yes, yes.

MR. HOGAN: For better or for worse, those trends –

MS. POWER: Absolutely.

So, I mean, at this point today, for example – and I could say the same thing whether I go back a year or two years, for that matter – what we communicate to the Oversight Committee and what is even publicly communicated, for that matter – our overall FFC covers essentially everything. Not only our commitments, but any trends, any change orders, change – you know, all that sort of thing that we're seeing.

And if there is anything that – so, obviously, at some point in 2017, you know, we did the QRA, and we increased our budget. But since that time, the 10.1 has not changed and while I don't speak directly to – I think you mentioned like the Department of Natural Resources and stuff. There are, I believe, members –

MR. HOGAN: Okay.

MS. POWER: – within that department on the Oversight Committee. So, yes, they're aware of

anything that – of exactly what's within that 10.1 and what is not covered in that 10.1. And we discuss on a monthly basis, to be honest, if there's any increase in risk in the things that are not included. And like I said, the things that are not included, they've clearly been communicated; they're on the Oversight Committee webpage –

MR. HOGAN: So that would be my next question, the things that are not included. So just one sec though.

MS. POWER: Yeah.

MR. HOGAN: You do – if you have a possible claim – that is my understanding –

MS. POWER: Yeah.

MR. HOGAN: – you don't include that then in that number, right?

MS. POWER: No, not – that's not necessarily true.

MR. HOGAN: Okay.

MS. POWER: It depends. So we wouldn't include it in the – so you know how on that front page there was a forecast excluding contingency and there was contingency. So a potential claim would likely not be included in the package forecast. However, generally claims – usually anyway, they don't come completely out of the blue; we know they're coming or we know there is a potential.

So, for example, right now within our monthly package, we have our contingency – our forecast contingency remaining is broken down by commitment package and within there we would indicate either, one, we have a claim and so we think here is the range and this is how much we have available for that claim. Or it might be we think we might get a claim, or the contractor is talking about claims.

So, no, to be honest, at this point outside of the Astaldi arbitration, which is clearly noted as outside of our budget, any other claims that we're aware of or even anticipate, we should be able to cover within out budget. Now, I say that

assuming no one else comes with some massive claim, obviously.

MR. HOGAN: So over the last couple of years _

MS. POWER: Yeah.

MR. HOGAN: – is there – when you go with the number –

MS. POWER: Yeah.

MR. HOGAN: – are there times when you say: Look, there's also a potential for X number of claims, worth X number of dollars, that is not included in that number?

MS. POWER: We usually tell the – I (inaudible) say usually – so we do talk to the Oversight Committee about potential claims we think are out there. They're are a part of our risk sild that we would present to them. And we certainly indicate to them whether we believe they're within or not our AFE. But I guess at this point, for the last year or more, they are always within our AFE. We don't have anything else –

MR. HOGAN: Within the last year.

MS. POWER: – couple of years, I should say, since we got to the 10.1. Since the 10.1 there has been no, nothing communicated either to Oversight Committee, or internally for that matter, to be honest. That we're –

MR. HOGAN: It sounds like you're saying that before that, there were times when potential claims were not included.

MS. POWER: I can't –

MR. HOGAN: Knowing that a potential claim could be zero or it could be –

MS. POWER: Yeah, yeah. So I don't know that specifically either way –

MR. HOGAN: Okay.

MS. POWER: – because I wasn't involved in it.

MR. HOGAN: Okay.

MS. POWER: And I know, certainly, when you look at the big claims, so for example, whether you call it a claim but the completion agreement with Astaldi. So certainly, when we had the budget that was set in mid 2016, that was the first budget that I was really looking after. We had a dollar value within that overall budget to address the Astaldi – what we hoped would become a completion agreement.

I don't know who would've been aware of what that number was. I mean obviously –

MR. HOGAN: Yeah.

MS. POWER: – I was aware. I wasn't involved with the government at that time. But, of course, it still turned out to not be enough, and we ended up with another one in December of 2016. So I wouldn't say that – you know, general claims are expected, and I believe, for the most part, they're incorporated. Some of these very large ones –

MR. HOGAN: Yes.

MS. POWER: – obviously can be a lot more challenging to incorporate within your budget.

MR. HOGAN: Okay.

MS. POWER: Yeah.

MR. HOGAN: And it's my understanding that for the contingency for each package – there is a number for each package, right?

MS. POWER: There is –

MR. HOGAN: A contingency number for each package.

MS. POWER: There is.

MR. HOGAN: And I think what you said in your interview was that you only disclosed to the Oversight Committee a lump-sum contingency.

MS. POWER: Correct.

MR. HOGAN: So why doesn't the Oversight Committee know what each contingency is for each package?

MS. POWER: So, the number of people who know where we believe contingency will be used can be counted on both of my hands. And that's only because there's generation of transmission. It is the people in that meeting that sign it.

So besides that, we do certainly and the Oversight Committee is communicated not only the overall contingency. They, of course, have full access to our construction reports, our monthly reports, which are not public documents, but they certainly have them. So they would certainly know what the contingency is specifically for MF, for LIL, for LTA. What they publically report is just the whole number. All 3 added together. So they see that level of detail. They don't see a level of detail under that. And to be honest, it is – like, that information is incredibly commercially sensitive; we cannot have our contractors knowing that. And –

MR. HOGAN: No. There's no one – there's no contractors on the Oversight Committee.

MS. POWER: There are independents and stuff and – to be honest, too – they've also never asked. I have to tell you. For that –

MR. HOGAN: That was going to be my next question. Then, who made that decision not to disclose the breakdown?

MS. POWER: No. That's a discussion we've had back and forth for a long time, to be honest. And I've been part of that. Because, at one time, they publically released the MF, LIL and LTA. And they stopped doing that about, I don't know, probably a year ago. So we've had that discussion. I don't believe the Oversight Committee believes that they're not getting their required information.

So while I say, you know, we don't specifically – 'cause, I mean, if you go to what I'm talking about, you would have a package number and I would say, you know, say, there was \$20 million in contingency, I think I'm gonna spend on this package. Underneath that, it would actually list exactly what the \$20 million is for. It may not be one number that may be for four things. So we don't give them that detail, but what we do give them is on that risk side that we provide – and that is both generation and transmission – we

provide the key risks, and we do provide a range there, and they know that we have a contingency for that.

So I think for the key risks, they do get that level of detail. And, don't get me wrong, even that much release would be commercially sensitive, but I think we are comfortable with that. But I don't even think they want the level of detail that I have in that report.

MR. HOGAN: (Inaudible.)

MS. POWER: I think they – I believe they get sufficient detail, and I haven't gotten–

MR. HOGAN: We can ask them, but they haven't asked –

MS. POWER: Right. I think they're comfortable were we are today, and I think they've been comfortable for, you know, as long as I have been going, say, the last 18 months.

MR. HOGAN: Earlier this morning you said while you weren't there in 2014, you said you were told Astaldi said they would recover their schedule.

MS. POWER: No. So, I wasn't actually told that. One of the things that – sorry, I feel like I am not close enough – one of the things that I did look at – somewhat in preparation, and I had started the exercise of looking at the schedule – Astaldi's schedule actually, their formal, monthly schedule still said they were going to finish on time.

MR. HOGAN: So your review of the documents were Astaldi saying this?

MS. POWER: Yes. Yeah. So, to know – I think it's clear, and Astaldi were continuing to – when I say said, I mean they actually said in their official monthly report that they were going to recover and they were not moving their contract dates.

MR. HOGAN: Just a question on re-baselining

MS. POWER: Okay.

MR. HOGAN: – has the LIL schedule been rebaselined?

MS. POWER: Yes.

MR. HOGAN: How many times?

MS. POWER: I think three. But again, the most recent one, the entire project, all three assets and the overall was re-baselined in mid 2016. I believe there was – I think it was twice it was re-baselined before that, but in, I think, all cases, it was not on the critical path of the project throughout that time –

MR. HOGAN: Sorry. Did you say that the last time it was done you think was mid 2016?

MS. POWER: The entire project was –

MR. HOGAN: Re-baselined.

MS. POWER: – re-baselined in July of 2016. That was first when I took over. So, we have not re-baselined –

MR. HOGAN: Since then.

MS. POWER: – since then, yeah.

MR. HOGAN: Okay.

MS. POWER: Now that doesn't mean that, you know, our – I am sure it's – you know, it's known that we had anticipated being complete – the LIL and LTA – well, LTA, we basically are, but LIL, we had anticipated being complete and we aren't.

MR. HOGAN: Why hasn't it been rebaselined?

MS. POWER: Well, primarily –

MR. HOGAN: Clearly you're not going to meet the schedule.

MS. POWER: No, no, we're not. But, I guess, there is two things. So (1), at this point, our progress measurement is really based on construction and static commissioning; that's pretty much done, so we are 99 per cent; so I have nothing to re-baseline. We are at 99 per cent. The problem is, is that last one per cent is

taking considerably more effort and time than anyone ever anticipated.

So from – when we say re-baseline, I certainly am not gonna re-baseline the progress graph. There's nothing to re-baseline. It's at 99 per cent complete because dynamic commissioning was originally thought to be a very short duration activity and was never included.

So, from the perspective of our other reporting, I mean, we could re-baseline. But, to me, at this point – you get to a point where you're so far along, you're at building; you're not – it's not even re-baselining anymore. Everybody is aware we're behind. We're tracking the software development specifically, but there's a very finite amount of things left to happen on LIL. So, re-baselining just doesn't have any value at this point from my perspective –

MR. HOGAN: So –

MS. POWER: – to be honest.

MR. HOGAN: – this is probably a dumb question on that –

MS. POWER: Yeah.

MR. HOGAN: – how do you know when you're gonna be 100 per cent complete?

MS. POWER: That's an excellent question.

Well, no – we do. So from a – from our actual percentage that we report. Again, as I said, a decision made long before my time. But, to be honest, I wouldn't have argued with it.

We're only tracking progress of construction (inaudible) commissioning. So, both of those are pretty much done anyway. We will certainly know when those things are done, 'cause we have a specific list. We know exactly what's not done.

The problem is, is that 100 per cent – that still won't mean we're done, because we have to get everything fully tested and turned over.

So when will we know we're done? I mean, really, the ultimate will be the client or – Nalcor, to us, is still the client – will be Nalcor actually

being able to take over the fully tested assets. So that's really the end point, and that would apply to all of the assets.

So they have taken some of them, of course –

MR. HOGAN: Yeah.

MS. POWER: – but, you know, that's really our end point.

MR. HOGAN: Okay.

MS. POWER: Does that – I don't know if that helped.

So, I mean, if - I mean, we still update our forecast schedule every month.

MR. HOGAN: But it's not changing, or is it?

MS. POWER: No, no, no, no. The forecast – sorry, I didn't realize what you meant. The planned –

MR. HOGAN: (Inaudible) – okay.

MS. POWER: – dates. Okay, the planned dates or the baseline dates are in the past. Our forecast is updated every single month.

MR. HOGAN: Okay, fair enough.

MS. POWER: Sorry, yes. We continue to update our forecast every month. That is certainly part of what I do; it's a part of what we review in the monthly package. And the Oversight Committee –

MR. HOGAN: So re-baselining the whole thing doesn't make any sense –

MS. POWER: No, re-baselining is just re-baselining your plan. Our forecast has always been updated every single month –

MR. HOGAN: So where's the forecast –

MS. POWER: – since the beginning.

MR. HOGAN: – with the LIL now?

MS. POWER: The forecast right now as of the end of -I don't have end of May, 'cause I'm not there yet.

MR. HOGAN: Okay.

MS. POWER: End of April, we were still continuing to forecast the – so, during this fall, we'll have the initial version of bipole fully tested and that's the plan. In March of 2020, we will have the final software installed and tested. Now, again, that was what we knew at the end of that time frame.

I expect that, you know, we're continuing to monitor the forecast – or the progress, sorry – the actual progress on the software and so there is still significant risk, to be perfectly honest, around all of that. And, again, if you go to the Oversight Committee quarterly presentations, our forecast dates are in the presentation.

So the most recent one is — actually happens to be December, so I know it's a bit out of date. I think with the election they haven't gotten the March one up yet, but the March one will be up soon, but that is what it reflects. So what that means is, fundamentally, the transmission side of the project is now getting very close to the critical path of the overall project.

MR. HOGAN: With significant risk still –

MS. POWER: There's still risk on both sides. But, yes, there is, certainly, still risk that has been mitigated over the last number of months with GE's, I guess, reconfirmation. And we now have – and they agreed we have an independent third party who's an expert in software development who is now visiting every month and providing an update on progress. And so we're getting better visibility but, no, absolutely, there is still risk.

MR. HOGAN: Okay.

MS. POWER: Yeah.

MR. HOGAN: Sorry, I'm a little bit longer than

I said. This is my last –

MS. POWER: That's okay.

MR. HOGAN: – couple of questions, though.

Just on the management reserve ...

MS. POWER: Mm-hmm.

MR. HOGAN: I know Mr. Hiscock sort of talked to you about whether it should be included and keeping it separate, things like that.

MS. POWER: Yeah.

MR. HOGAN: How is it used and when is it used?

MS. POWER: So my – I'm going to, kind of, talk outside of this project and my previous experience.

Usually what I've seen is, you know, you'll have an overall estimate for a project. Management reserve is normally to address risk and I believe that's exactly how Westney categorized it in this situation.

And so, oftentimes, what you'll see is a client who will say to a project management team, a project director, a project manager: Here's your budget, go execute your project. But they know they have a reserve there.

MR. HOGAN: They know. The CEO does.

MS. POWER: The client does.

MR. HOGAN: Or the client, yeah, okay.

MS. POWER: Yeah, the client –

MR. HOGAN: Yeah.

MS. POWER: – in this case, right?

And so, then, when the project team is – comes back at some point and says: Okay, we're having problems. We're seeing pressures on our budget, we don't know if we can make it. Then, essentially, it would be similar to an AFE process, they'd have to justify, well, why I need more.

So that, to me, would be, you know, really, why management reserve is – I have often seen it set aside by a client, and then they control whether that is actually used in – and, really, it just – it

would have to be used as the project doesn't have enough money to complete.

MR. HOGAN: At the discretion of the client.

MS. POWER: At the discretion of the client. That would be the norm, yes, but I mean, obviously, at some – if they want to finish the project, unfortunately, they're going to have to keep funding or they have to stop the project. There's – that's only the two options, really.

MR. HOGAN: Depending on why there's more money being asked for.

MS. POWER: Certainly. But, I mean, if it's more money being asked for because you were adding scope and the client –

MR. HOGAN: Yeah.

MS. POWER: – can certainly say: No, you can't add that scope. If it's money in order to finish the project that you need done, then, yeah, you're going to obviously need that money if you're going to finish.

MR. HOGAN: Right.

That's all the questions I have.

MS. POWER: Yeah. Okay.

MR. HOGAN: Thank you.

THE COMMISSIONER: Thank you.

Nalcor Energy.

MR. SIMMONS: I'll be even quicker, Commissioner, and have no questions.

Thank you.

THE COMMISSIONER: Okay, re-direct.

MS. MORRY: No questions, Commissioner.

THE COMMISSIONER: All right, I just have one question just for clarification –

MS. POWER: Okay.

THE COMMISSIONER: – just so I understand this.

MS. POWER: Okay.

THE COMMISSIONER: So the \$10.1 billion now – number that we have now has contingency built into it for certain things, but that does not include any consideration of any IEAC recommendation that might be adopted or might not be adopted by government?

MS. POWER: Correct.

THE COMMISSIONER: And it does not include what might be the result of the Astaldi arbitration.

MS. POWER: Correct.

THE COMMISSIONER: Is there anything else it doesn't include?

MS. POWER: Yeah.

So, I guess, from the QRA that Westney did in 2018 they had indicated, which I know, as you're aware, impact from the Inquiry. So we have no specific budget for that but, of course, that's - it's hard to measure anyway.

And then the other one I should mention as well is we just briefly spoke about risk with – associated with GE. So if, for any reason, GE were unable to complete the software – and I'm not suggesting this is at all anything other than a very low risk – if for some reason we had to go a different path, that is also – has been clearly indicated that we would not be able to cover that in the current AFE. So that, again, it's a lower risk but it is one that we have flagged to oversight and to Mr. Marshall.

THE COMMISSIONER: Right.

So in – just to go back to the issue of the Inquiry - because I'm really struggling with this one are we talking about the actual cost of preparing for the Inquiry?

MS. POWER: No.

THE COMMISSIONER: What are we talking about there with regards to the impact of the Inquiry?

MS. POWER: So I was actually – while Westney were the ones who did the original analysis, right, I did spend time with them in Houston at that time. And, really, what – when they produced that range and the eventual number of the 135, I believe it was, what they were looking at, they – because, you know, it was interesting because I remember very specifically saying to them, well, this is probably going to push out our end date. And they said, no, it's not and I said, how?

Because to me, I thought – I honestly, I thought it would. And he said, no, no, you'll find a way – this is Keith Dodson who is speaking, just so you know. He's the senior person with that group. So Keith said to me – he said, no, you'll find a way to get first power done. His concern were a couple of things. One was that all the other things that should be part of the normal project business, I would say; so, like, close out of contracts, close out of all the documentation transferred to the client. He said what's going to happen is – he said – a lot of that is going to end up shifting because these things are not priority; they're not first power. So that was one of his views.

So he felt that part of his calculation would've – and I honestly don't know specifically what the amounts are because we just provided some input and Westney kind of took it from there. So part of his input, I understand, was the staffing plan having to go out well beyond full and – first and full power. So that was one factor that he indicated.

Another that they were concerned about was distraction and that, actually, some, of course, leads into what I just talked about on the close-out perspective. But the other one he was concerned about is what some of us may miss while we're, you know, thinking about something else, or as well and as mentioned – I think Mr. Power mentioned the other day – the opportunistic behaviours of the contractors.

So we've certainly seen on, you know, not only Astaldi we've talked about a lot of course, but we have other contractors who are very carefully scrutinizing anything that's being made public. And to be perfectly frank, that's not only the Inquiry, that's also ATIPPs or other reports that – and I've been thinking, I think all these things are interconnected.

Obviously, in the last couple of years the project has become very public. So there's been a few times now we've gotten letters from contractors – very, very upset contractors, to be honest – when something was released that they didn't want released.

THE COMMISSIONER: Okay.

MS. POWER: And, like I said, that's not only the Inquiry. So that's kind of what they were looking at, how we would ever measure it. To be perfectly honest it would be almost impossible.

We do measure the time – so, for example, obviously, there was significant time in transferring documentation. My document control team, obviously, spent a lot of time there; there was answering questions from Grant Thornton, there's been a number of things I've prepared. So some of it you can track but in all honesty, that's probably millions. Not even tens of millions, it would be millions.

THE COMMISSIONER: Right.

MS. POWER: Yeah.

THE COMMISSIONER: So, just to go back on that –

MS. POWER: Yeah.

THE COMMISSIONER: – and the reason – and there's a reason I'm asking you these questions.

MS. POWER: Okay.

THE COMMISSIONER: So at one stage – and you may not be familiar with it in the past –

MS. POWER: Right.

THE COMMISSIONER: – but just assume I'm right on this. At one stage one of the risks that was identified – I'm going to term it as political risk because this is a public project.

MS. POWER: Yeah. Yeah.

THE COMMISSIONER: Is there anything presently in the \$10.1 billion that reflects the issue of political risk?

MS. POWER: No, not – yes and no. So I mean for the most part I think that would not only – because the IEAC Recommendation 1, technically, that risk is actually termed not only IEAC, it's any government directives.

So I think, really, there's not really anything in there. At this point, it probably – short of some significant directive, like, for example, clearing of the reservoir or wetland capping or any other directive, I don't think politically there could be as much influence at that – at the – like, you know, negative influence, anyway, on the project.

I mean, we're at a point where, you know, we're obviously trudging along until the end, so our risks are declining, generally, anyway. So, short of – the only way, really, to me, that you could have any kind of political influence right now would be some kind of significant government directive.

THE COMMISSIONER: Right.

MS. POWER: So that's where that's covered, I guess.

THE COMMISSIONER: So the issue –

MS. POWER: And there's nothing in the 10.1, no.

THE COMMISSIONER: Okay.

So the issue of, for instance, the need to report to the Oversight Committee or – in particular, for instance –

MS. POWER: Mmm.

THE COMMISSIONER: – that's not caught – that's not considered to be an additional risk at this stage of the game.

MS. POWER: No, I don't think so. I mean at this point, you know, obviously, reporting to the Oversight Committee has been part of my role

for quite some time now and it hasn't fundamentally changed. That's just part of our staffing plan, I guess.

So you're really just talking at that point. We don't capture that type of risk, I guess, in that sense because that's really – it could mean, you know, maybe at one point I needed an extra person to help me, but it wouldn't be any kind of significant risk. Does that make sense?

THE COMMISSIONER: Yeah. No, no -

MS. POWER: Okay.

THE COMMISSIONER: – it does. Anyway, I have something in my mind and I'll deal with it later.

MS. POWER: Okay.

THE COMMISSIONER: All right, thank you very much, Ms. Power. I appreciate your time.

MS. POWER: Okay.

THE COMMISSIONER: All right?

MS. POWER: Thank you.

THE COMMISSIONER: We're adjourned then until Monday morning. And Monday, I believe, we're starting with the union panel, I believe, so 9:30 on Monday morning.

CLERK: All rise.

The Commission of Inquiry is concluded for the day.