COMMISSION OF INQUIRY
RESPECTING THE MUSKRAT FALLS PROJECT

Transcript | Phase 2 Volume 28

Commissioner: Honourable Justice Richard LeBlanc

Friday 3 May 2019

CLERK (Mulrooney): All rise.

This Commission of Inquiry is now open.

The Honorable Justice Richard LeBlanc presiding as Commissioner.

Please be seated.

THE COMMISSIONER: Good morning.

All right. Ms. Ding.

MS. DING: Good morning Mr. Commissioner.

Today we have witnesses from GE Grid Solutions, Mr. Thierry Martin and Mr. Laszlo von Lazar.

Madam Clerk, Mr. Martin would like to swear and Mr. von Lazar would like to affirm.

THE COMMISSIONER: I'd ask Mr. Lazar to stand up first please.

MR. VON LAZAR: von Lazar.

THE COMMISSIONER: von Lazar, sorry.

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?

MR. VON LAZAR: I do.

MR. T. MARTIN: I do.

CLERK: Please state your name.

MR. VON LAZAR: Laszlo von Lazar.

CLERK: Could you spell that for the record, please?

MR. VON LAZAR: L-A-S-Z-L-O and then small V-O-N and capital L-A-Z-A-R.

CLERK: Thank you.

MR. T. MARTIN: Thierry Martin.

THE COMMISSIONER: Mr. Martin.

CLERK: Could you stand please and hold the Bible in your right hand.

MR. T. MARTIN: Yeah.

MR. VON LAZAR: Better put this (inaudible).

MR. T. MARTIN: Sorry.

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

MR. T. MARTIN: Yes I do.

CLERK: Please state your name for the record.

MR. T. MARTIN: Thierry Martin.

CLERK: Could you spell it for the record as well?

MR. T. MARTIN: T-H-I-E-R-R-Y M-A-R-T-I-N.

CLERK: Thank you.

THE COMMISSIONER: All right, thank you.

Ms. Ding.

MS. DING: Thank you.

Mr. Commissioner, we would like to enter exhibits P-02985 to P-03019, P-03145 to P-03153, P-03199 to P-03232 and P-03241 and P-03242.

THE COMMISSIONER: All right.

Those will be added as numbered.

MS. DING: Thank you.

Mr. Commissioner, we have been made aware that there is an ongoing arbitration with Pomerleau and Grid Solutions, as well as Nalcor on some of the issues that arose during the civil works execution for package 0504. These documents have been filed as confidential exhibits.

THE COMMISSIONER: Okay.

MS. DING: We're also filing some confidential exhibits provided to us by counsel, outlining the initial agreement total and payments received by Grid Solutions on change orders to date. These will be supplemented by another confidential exhibit from GE on outstanding claims and their best estimate on the cost of these.

THE COMMISSIONER: Okay.

So those aren't ready yet to be entered or –

MS. DING: I don't believe I have numbers for those just yet.

THE COMMISSIONER: Okay.

All right.

Thank you.

MS. DING: Okay.

THE COMMISSIONER: Okay.

Go ahead.

MS. DING: Thank you.

Mr. Martin, can we start with a brief overview of your education and your work experience, please?

MR. T. MARTIN: Yes.

I am an electrical engineer. I started my career in Alstom GE and I am still in this company since 29 years. I started as a commissioning engineer and then move on project management, and then got the role management position, in project management as well, in operation, and I am today still in GE working for the power transformer group in charge of the project management group as well.

MS. DING: Okay.

And you were project director at Muskrat Falls from what time until what time?

MR. T. MARTIN: Yes, I was project director for the Muskrat project from November '14 to May '16.

MS. DING: Okay.

Thank you.

And what – sorry – and what is your role as project director?

MR. T. MARTIN: I was in fact – I went on this project when we have been awarded the project, the 0502, the 0501 has been awarded before. And when I came I was overseeing the two projects, 0501 and 0502 – driving the project, and my mission was to deliver the project.

MS. DING: Okay.

And as project director you would have various project managers reporting to you. Is that correct?

MR. T. MARTIN: Yes, that's correct.

MS. DING: Okay.

Mr. Von Lazar, can we start with a brief overview of your education and work experience, please?

MR. VON LAZAR: So, I went to – undergraduate school I went to Tufts, and then the Fletcher School of Law and Diplomacy.

I'm not an engineer. I went – from there I worked for Bechtel. I worked for Bechtel for about 27 years in project development, construction. You know, I was construction superintendent, field engineer. I worked in project controls and then project management and I ran projects in Bechtel for about 15 years as a project director.

And then I left Bechtel and went to work for GE, when GE acquired Alstom, in a role of – they basically set up a group to oversee projects and engage in terms of project management. It was called the project management organization.

MS. DING: Okay. And when did you get involved with the Muskrat Falls Project?

MR. VON LAZAR: So, I – the first time I started as part of the corporate PMO, I got engaged in the project in, I'd say, the April of 2016 time frame. And, eventually, in January of

2017, I was asked to run large projects in Grid. And, so then, this project – and the project director fell under me in terms of reporting structure, and that was started in January 2017.

MS. DING: Okay. And what was your role – I guess, what was your official title when you came on for January 2017?

MR. VON LAZAR: So, I'm a senior executive in GE, and I was the – responsible for large and complex projects.

MS. DING: Okay. Does that mean you manage a number of contracts or projects currently?

MR. VON LAZAR: Well, at that time, in Grid, there were about – we had a total of 2500 projects that would fall under my responsibility, but then there were certain projects that would – because of their large and complex nature, that I would focus on more than the whole – overall – all the total projects.

So this project was one of those that I focused a considerable amount of time on.

MS. DING: Okay. And which other projects do you have, currently, in your portfolio?

MR. VON LAZAR: Well, now, I have a different role, and – so, I haven't been involved in this problem – project since January of this year or December. And, now, I'm engaged in large gas projects.

MS. DING: Okay. I guess, at the time when you were senior executive, what projects did you have in your portfolio?

MR. VON LAZAR: All of the projects in Grid.

MS. DING: Who were the project directors on the project after Mr. Martin?

MR. VON LAZAR: The first one after Thierry was Scott Bianchi. And then after him was Tod Hubbard.

MS. DING: Okay. And who was the current –?

MR. VON LAZAR: Jean Polyne.

MS. DING: Okay.

And these people all would have reported to you as the senior executive. Is that correct?

MR. VON LAZAR: Scott and Tod.

MS. DING: Okay.

Are you still involved in managing the project?

MR. VON LAZAR: No

MS. DING: Okay.

And when did you stop?

MR. VON LAZAR: December time frame.

MS. DING: For some background as to the GE corporate history, Mr. Commissioner, I'd refer you to exhibits P-03149 to P-03151. And these exhibits will show that the packages for 0501 and 0502 were awarded in 2014 with Alstom Grid, and in June of 2014, the acquisition of Alstom by GE was announced. However, the completion of the GE acquisition wasn't until November of 2015.

Is that correct, to your knowledge?

MR. T. MARTIN: Correct.

MS. DING: Thank you.

I just wanted to note here that when we talk about Alstom or GE or Grid Solutions, what we're really referring to is Grid Solutions, which is the company that holds the 0501 and 0502 contracts. Is that correct?

MR. VON LAZAR: Correct.

MS. DING: Thank you.

Mr. Martin, from your perspective, did the acquisition of Alstom by GE affect your organization on the project?

MR. T. MARTIN: No, not at all. We (inaudible) conducting the project.

MS. DING: Okay.

And you agree with that, Mr. von Lazar?

MR. VON LAZAR: I do.

MS. DING: Okay.

And, I would also like to go over the Grid Solution's packages with you. Mr. Marshall has already done an overview of this back in September, but I'd like to refresh and talk about the physical (inaudible) and how they all worked together.

So, Madam Clerk, P-00136, please.

THE COMMISSIONER: So, are we –

MS. DING: And – it's not in the binders.

THE COMMISSIONER: Not in the binders.

MS. DING: And page 78, please.

Okay. So my understanding, Mr. Martin, is that package 0502 is the construction and – of the AC substation. Is that correct?

MR. T. MARTIN: Yes, 0502 is the AC yard. Yes, that's correct.

MS. DING: Okay. And the –

MR. T. MARTIN: This is switchyard that you can see.

MS. DING: Yes, and that's – this is a picture of the Muskrat Falls one, but there was also substations done at Churchill Falls, Muskrat Falls and Soldiers Pond. Is that correct?

MR. T. MARTIN: That's correct, three sites – right.

MS. DING: And then 0501 – scroll down to – would've been the converter and cable transmission compounds. Is that correct?

MR. T. MARTIN: That's correct. Yes, 0501 is HV converter project, I will say. So it's part – the converter building is part of that project. But we have an AC yard as well, converter building, transformer, harmonic filters, and DC yard.

MS. DING: Okay.

So just to digest that a bit, the – at Muskrat Falls, we take the low voltage AC, convert it to high voltage DC, it gets sent down the line to Soldiers Pond where the high voltage DC is then converted back to low voltage AC. Is that a good –?

MR. T. MARTIN: That's the principle.

MR. VON LAZAR: Yeah.

MS. DING: Okay, thank you.

And the power and control software, or the protection and control software would be part of the package of 0501. Is that correct?

Okay.

MR. VON LAZAR: Correct.

MS. DING: And then package 0534 is the synchronous condensers at Soldiers Pond. Is that correct?

Okay.

MR. T. MARTIN: Yes.

MS. DING: And I believe that this package was under GE Power and you wouldn't have had any involvement in that. Is that correct?

MR. T. MARTIN: No, we are not involved.

MS. DING: Okay. And neither of you would've had involvement in that.

Okay.

But just broadly, is it your understanding that the synchronous condensers are there to support and stabilize the operation of the grid?

MR. VON LAZAR: Correct.

MR. T. MARTIN: Correct.

MS. DING: Thank you.

And, Mr. Commissioner, our focus today will be on packages 0501 and 0502.

Also for your reference, there's a summary of the GE contracts at P-03152 on page 2, which provides the DG3 budget and the contract value up to December 2018.

Madam Clerk, please go to Exhibit P-03232, please. Thank you, and page 16.

Mr. Martin, Mr. von Lazar, that would be binder 3 and tab 78, for your reference.

So this is the Bid Evaluation and Award Recommendation for package 0502, and it's dated July 24, 2014.

Mr. Martin, from the award recommendation we get an indication that Alstom submitted an alternative to the AIS or air-insulated switchgear that was in the RFP. Was this alternative the gas-insulated switchgear?

MR. T. MARTIN: That's correct.

MS. DING: And that's –

MR. T. MARTIN: What we call GIS, yes. It's an alternative to air-insulated switchgear.

MS. DING: Okay. And that would be the design applied at both Muskrat Falls and Churchill Falls. Is that correct?

MR. T. MARTIN: That's correct.

MS. DING: Okay.

Can you explain the difference between GIS and AIS?

MR. T. MARTIN: In fact, GIS – so the AIS is air-insulated switchgear. It means that we have a circuit breaker (inaudible) and the conductor is, I would say, in the air, and the air is the insulation.

In the GIS, it's a conductor in the metal tube where, in fact, we have gas, which insulate. So the layout, the size is much smaller, in fact, in term of insulation. So we have a very compact, I will say, set up and installation and layout. But it requires to be indoor. So we have a smaller layout, but we have a building to accommodate – to feed the GIS.

MS. DING: Okay, so GIS would be in an enclosure indoors and AIS would be outdoors and exposed.

MR. T. MARTIN: Exactly.

MS. DING: Okay.

And in Soldiers Pond, they still used the AIS. Is that correct?

MR. T. MARTIN: Soldiers Pond was kept as AIS, yes.

MS. DING: Thank you.

My understanding of this document is that the – as you mentioned, GIS takes up less space than AIS, but in this document it says it requires more expensive equipment. Is that correct?

MR. T. MARTIN: More expensive?

MS. DING: The GIS is more expensive.

MR. T. MARTIN: Yes.

MS. DING: Okay.

What benefits did GIS have in terms of savings for Nalcor?

MR. T. MARTIN: In term of saving to Nalcor, in fact – so GIS being much more compact, it means that the plot is much smaller so you need – your site preparation was – will be much smaller, that we have a building but the building is not high cost. So this is a benefit, I will say, for Nalcor – this is a smaller plot. And, as well, the installation will be, we'd say, faster because it's – the installation is done in a building, so not depending of the weather. So in term of installation, as well, is something that we go – we do faster.

MS. DING: Okay. So there's schedule, and because of the smaller footprint that –

MR. T. MARTIN: Exactly.

MS. DING: – there would be less civil works that needed to be done. Okay.

Any advantages in terms of maintenance?

MR. T. MARTIN: In term of maintenance – so the maintenance is done indoor, so meaning you – we can do some maintenance, I will say, whatever the condition are, as the cycle of maintenance are more or less the same in term of cost –

MS. DING: Okay.

MR. T. MARTIN: – and periodicity.

MS. DING: Thank you.

Madam Clerk, please go to page 17, please.

Okay, so the award recommendation also says: As with CD0510 [sp. CD0501], Alstom proposed an alternative civil works contracting model for CD0502. Using the same approach applicable for both the base offer and the GIS alternative, the subcontracted amount for civil works could be deducted from Alstom's offer and the associated contracts would be placed directly by LCP.

I'll also take you to, Madam Clerk, Exhibit P-02993, please.

THE COMMISSIONER: Tab?

MS. DING: I don't have the tab.

THE COMMISSIONER: P-02993.

MS. DING: P-02993 would be binder 1, tab 10.

And page 4, please, Madam Clerk.

So this is the civil works contract plan. It's dated November 4, 2014. It says here that the – that a fixed amount, the civil works baseline, has been removed from Alstom's lump-sum contract price. Both LCP and Alstom will share 50/50 in any savings achieved upon the award of the civil works contracts. Alstom will be responsible for any costs exceeding the civil works baseline amount. And it says refer to exhibit 17.

Mr. Martin, I believe that negotiations took place around this before your time on the project, but perhaps you could confirm your understanding.

My understanding is that Nalcor and Alstom agreed to carve off the civil works scope of the Alstom packages. Is that correct?

MR. T. MARTIN: That's correct, yes.

MS. DING: Okay.

And the reward recommendation indicates that Alstom was the one who proposed the alternative. Is that correct, to your knowledge?

MR. T. MARTIN: Can you repeat, please?

MS. DING: That it was Alstom who proposed this alternative arrangement.

MR. VON LAZAR: It says it but we don't know that.

MR. T. MARTIN: We don't know.

MS. DING: Okay.

You can't confirm.

Do you know if this was an effort to work with Nalcor to find opportunities for cost savings before the contract was awarded?

MR. VON LAZAR: It appears to be, yeah.

MR. T. MARTIN: This is what we see, in fact, yes.

MR. VON LAZAR: Yeah.

MS. DING: To your knowledge?

MR. VON LAZAR: Yeah.

MS. DING: Okay.

And from information we've gathered from our interviews, the – separating the civil works into another package we believe is – it was largely a cost-saving measure to save the project about 15 per cent of your overhead and profit.

Is that correct?

MR. VON LAZAR: Yes, that's a correct statement.

MS. DING: Okay.

Do you recall the approximate value of the 15 per cent?

MR. VON LAZAR: I don't.

MS. DING: You don't know.

Okay.

Madam Clerk, I'll take you to P-03010, please. And that's binder 1, tab 25. And I'll take you to page 4, please.

So this is an internal Nalcor email discussing the approval –

THE COMMISSIONER: Actually, it's tab 27.

MS. DING: Sorry.

THE COMMISSIONER: (Inaudible.) All right.

MS. DING: This is an internal Nalcor email discussing the approval of project change notice 630. On page 4 it does say that the 15 per cent on Alstom's overhead and profit is approximately 27 million.

Is that familiar to you at all?

MR. VON LAZAR: Yup.

MS. DING: Does that sound about right?

MR. T. MARTIN: I think so, yes.

MS. DING: Okay.

Madam Clerk please go to exhibit P-02993, please. And again that's binder 1, tab 10, and we'll go to page 9.

So this is where the civil works contract plan talks about exhibit 17 and how the civil works piece would be managed by Nalcor and Alstom. It seems like the arrangement is – that for any change order requests or requests for compensation there was a joint evaluation process in place.

Is that correct, to your knowledge?

MR. T. MARTIN: Yes, that's correct.

MS. DING: Okay.

Mr. Martin, did this arrangement of – this arrangement cause any difficulties for you on site?

MR. T. MARTIN: Yes, the process of change has caused some delay and some disruption of the project because I will say, the whole step, in fact, on the change – in fact, the first was to submit the change then to submit as well the impact of the change.

So there was first a set of technical discussions regarding the validity of the change, and then to get that approved. And then the second discussion was more on the impact, meaning dollar and time. So there was the whole step of discussions, which I will say disturbed the project, yes.

MS. DING: Okay, so you were experiencing delays – I'm hearing from you, you were experiencing delays in handling those change requests and change orders.

MR. T. MARTIN: Yes. Yes.

It delays, I will say – the decision, I will say, of the change has delayed, how we say, part of the works to be done, yes.

MS. DING: Okay, could you give us a sense as to how much delays you were experiencing?

MR. T. MARTIN: It depend of the change – some change – it's – in any case it's days and weeks, sometimes months is –

MS. DING: Okay.

MR. T. MARTIN: – something that's – of the change.

MS. DING: Okay. Thank you.

And having encountered those difficulties, would it have been your preference to have stayed with a more typical arrangement of having a subcontractor under Alstom?

MR. T. MARTIN: Yes, it's – in fact if you are speaking about the civil work, yes. Usually, we have the subcontractor. We manage directly the subcontractor, and we manage the change directly. So, we have not this second layer, I will say, to – which delays the decision, yes.

MS. DING: Okay.

Mr. von Lazar, my understanding is that in April 2016, the remaining civil works scope was transferred back to Grid Solutions. I believe you were on the project when that was done, is that correct?

MR. VON LAZAR: That's correct.

MS. DING: Okay.

And that remainder of the civil work would be the Pennecon work?

MR. VON LAZAR: It was – yeah, it was Pennecon and Locke and – those were the two main people who were doing it – primarily Pennecon, though.

MS. DING: Okay, so, the –

MR. VON LAZAR: Yeah.

MS. DING: – H. J. O'Connell and the Pomerleau work had already been finished at that point?

MR. VON LAZAR: That's correct.

MS. DING: Okay. Thank you.

And, Mr. Commissioner, for your reference, that's – that project change notice is at Exhibit P-03008.

Mr. Von Lazar, what were your reasons for taking the civil works scope back under Grid?

MR. VON LAZAR: Well, because fundamentally the structure of having the contracts directly with the – with Nalcor, but then us having to manage the contracts led to misalignment and we couldn't execute the work successfully. So we wanted to be able to control the work, be able to execute more productively, execute to a schedule, and make it clear who direction and responsibility was for the performance of the work.

So, we wanted certainty of outcome, from that point forward, because this situation was not productive, and if we continued with it, the delays would've kept occurring on the project.

MS. DING: Okay.

Have you encountered this type of arrangement before, in your experience?

MR. VON LAZAR: Never in a lump-sum project.

MS. DING: Okay.

MR. VON LAZAR: So – but, yeah, I mean, it's – really, from my perspective, for 30 years, I've never seen this type of structure on a lump-sum project. For a cost-reimbursable job, I've seen it, but it's a different arrangement, different risk arrangement. So, I've never seen it.

MS. DING: Thank you.

Mr. Martin, from my understanding a large portion of the package, the civil works package 0504, was awarded to H. J. O'Connell for Soldiers Pond, and then the other would be Pomerleau at Churchill Falls and Muskrat Falls. Is that correct?

MR. T. MARTIN: That's correct, yes.

MS. DING: Okay. And there were some issues at Soldiers Pond, but there were more issues with Pomerleau on their scope of work. Is that correct?

MR. T. MARTIN: In terms of execution, yes, that's correct.

MS. DING: All right.

Can you tell me what the issues were with Pomerleau and what you were experiencing when you were managing them?

MR. T. MARTIN: In fact, in term of issues with Pomerleau, in fact they started – their mobilization was very slow to start with, so in term of people, material and equipment. Second,

in term of schedule management as well, they have difficulties, I will say, to proper, I will say, set all the sequence of works and to maintain, I will say, the contracts schedule. And then as well, issues with the site management, especially in Muskrat Falls and to be able as well to ramp up in term of resources and have the necessary resource to execute the works.

MS. DING: Okay. Did you have any – did you experience any quality issues on site?

MR. T. MARTIN: Any –?

MS. DING: Quality issues?

MR. T. MARTIN: Yes, we got some quality issues, of course, all this – some minor one, but we got the major one which was the GIS building in Muskrat Falls.

MS. DING: Okay. And maybe we can bring up an exhibit, Madam Clerk.

P-03005, please, and that's binder 1, tab 22. And we'll go to page 7.

So this is just a picture of some of the quality issues you were seeing on site. Can you explain a little bit of what's happening here?

MR. T. MARTIN: Yes. So just to start with, so we have two GIS building; one in Muskrat Falls, one in Churchill Falls. Same design. So we experience that problem when we remove, how we say, the formworks. So the issue that we got – so it was only on part of the pillar of the GIS building. So the issue that we have, it's the pour and the vibration of the concrete has been poorly, I will say, made and it result on that.

So we got, in fact, two issues on the GIS building. So the pillar, I will say, with this void and, as well, the flatness of the slab as well. So we got two issues on this.

MS. DING: Okay.

MR. VON LAZAR: What you're looking at here is a column that supports a –

MR. T. MARTIN: Table –

MR. VON LAZAR: – tabletop, which the equipment sits on, just so everybody has some – can understand what they're looking at. So if you think of a tabletop up here with concrete – which is concrete then these are the legs that are holding up the tabletop, if you think of it from that perspective.

MS. DING: Okay. And what were – I guess, what is your opinion as to the reasons for the quality issues?

MR. T. MARTIN: The reason of that – so we have clearly, I will say, defined the root cause. The root cause is clear. So this is the lack of – I will say insufficient quality control and competence of people as well.

MR. VON LAZAR: This is a skill of the craft issue, that when you're pouring concrete like this going down into a column and you're – basically, you're – you agitate the concrete to move it down and it would be obvious to the people working that the concrete is not going down. So it's the people actually performing the work would – should note –immediately identify, know and understand what's happened.

MS. DING: Okay. Thank you.

Mr. von Lazar, so we're aware that there's ongoing arbitration with Pomerleau and Grid Solutions. Does that arbitration involve Nalcor?

MR. VON LAZAR: Yes.

MS. DING: Okay. Thank you.

And, to your knowledge, is there any potential cost exposure to Nalcor as a result of the arbitration?

MR. VON LAZAR: I believe so.

MS. DING: I want to turn to camp facilities. So we've seen a few documents on the issue of the Muskrat Falls site not having enough camp facilities for the workers coming in and I'll pull up one of them now. Madam Clerk, P-03012, please, and that's binder 1, tab 29.

So this is a letter from Mr. Martin to Darren DeBourke on May 18, 2016, confirming that you received the notification that the camp facilities

were at full capacity in May 2016. And in your letter, Mr. Martin, you note that despite the notice provided by Nalcor, your – you were instructed to continue mobilization.

Is that correct?

MR. T. MARTIN: Correct, yes.

MS. DING: Okay.

And we'll go to page – page 3 there's a letter – you attach a letter from Pomerleau to you. And in Pomerleau's letter it says here in this paragraph: "Despite the fact that we raised our concerns consistently since the notice was received, no contingency … plan, nor instruction was provided in order to address the situation."

Is that your recollection?

MR. T. MARTIN: Yes, that's correct. Yes.

MS. DING: Okay. Can you give us some explanation and context for the issues you are having with the camp facilities?

MR. T. MARTIN: So we have – so at Muskrat Falls we've got, we'll say, some issues on Muskrat Falls. So there was – so it started a little bit before we got some issues on Muskrat Falls in term of condition. So, first, it was accommodation, number of beds, as well, condition of the camps, because there was two camps. So we got already some issues that we wanted to be solved so it was not – so we ended up by having some issues with the personnel, with the people, yes.

MS. DING: Okay. And what alternative arrangements did you have to make for the people who didn't have beds at the camp facilities?

MR. T. MARTIN: So they cannot – so it means that we have to book hotel, to book as well, buses to have them come to the works. So impact in term of labour, of course, and duration, and it impacts the works at the end.

MS. DING: Okay.

Mr. von Lazar, do you have anything to add?

MR. VON LAZAR: I would say that this situation went on for quite a while, and we had cases where we had buses of crafts show up and then got turned around at the gate and we had to fly them back home. So I think that – and if you think about this whole process, also, the – what happens when the craft or the people who are overseeing the work – we had people, management in the town, means that they would have to drive from the town, spend an hour to get to the job site and then go back.

So it's – this is an important issue for the effectiveness and the safe performance of the work of the people in the field.

MS. DING: Okay.

And, Mr. von Lazar, the letter talks about providing preliminary forecasts. Would you have submitted forecasts to Nalcor prior to getting that notice that there wasn't enough room?

MR. VON LAZAR: Yeah. We would submit monthly forecasts of what the craft loading was for the performance of the work. And that's typically the way you would do it on a camp job; you submit forecasts, this is the amount of craft we're going to have at the job site.

And then, in a situation like this, then, the responsibility would be for Nalcor to come back and say, okay, with this contractor you have this many, this one you have this many. So you don't get a situation where you have craft flying in, landing, you know, going to the job site and then getting turned around.

MS. DING: Okay, thank you.

Can you expand on the kinds of cost that would've been incurred because of this?

MR. VON LAZAR: So what Thierry talked about: the cost of providing the transportation to and from the job site, the cost of the housing in the town and the time, of course, that the people

are taking to go to the job site and then back from the job site.

MS. DING: Okay, thank you.

MR. VON LAZAR: And then, you know, there's a – then there's a ancillary cost, which is the fact that you're taking people who – as opposed to being 10 kilometres from the job site or, you know, three times that distance, and the travel was quite a bit of time. So then there's a productivity impact of the people who are working on the project because they're not going to be as productive and it's gonna be – everybody's gonna have to get up an hour earlier, and they get home an hour early – later as well. And that eventually impacts your ability – or your performance in the field.

MS. DING: Thank you.

Do you know what the cost impact for – or the cost impact has been for 0501 and 0502 due to the extra accommodations needed?

MR. VON LAZAR: I think it was about $1.6 million, if I remember correctly.

MS. DING: Is that strictly just the accommodations cost?

MR. VON LAZAR: I think it's probably the transportation and accommodation cost.

MS. DING: Okay.

But that wouldn't include the other impacts you were talking about?

MR. VON LAZAR: No.

MS. DING: Okay.

Mr. von Lazar, have you had issues like this on your other projects?

MR. VON LAZAR: Well, what I would say is that I was a project director for a project where we had 9,000 beds, and this was always – managing the beds was always one of the most important things on a project. And we would run into situations where we knew that all our subcontractors or our direct-hire beds – which would be people that we were directing – we would have more work than we could perform based on the number of beds.

But the – what I would say is the last thing you can be is in a situation where you have to turn around workers because that sends a message to the – to all the workforce. So it – we – when – the last job I was running where we had this (inaudible) – we never had that situation. I've never had that situation where we've had to turn around people, if that's what you're asking.

MS. DING: Thank you.

And what steps, if any, could Nalcor have taken to mitigate the issue?

MR. VON LAZAR: I think a little bit is what I said. You have to look and try to prioritize the work and then be able to go back to the contractors in advance with enough time to say: This is how many beds you're gonna be allocated. Tell me what the cost and schedule impact is to the project, right?

So that it's clear. It's all – it's transparent. You know: Hey, there's not enough. Let's face up to it. You tell me what the impact is, and then let's – and we'll go forward, right? That's the – or you add more beds, right? So …

MS. DING: And that's what Nalcor ultimately did. Is that right?

MR. VON LAZAR: That's correct.

MS. DING: Okay, thank you.

So I wanna talk a little bit about the protests in 2016 and the effects of the protests on the execution of your work. And specifically I wanna ask you about the converter transformers.

So, Madam Clerk, I'll – can you bring us to P-00136 again, at page 82.

Okay so, the picture's just to get a sort of a scale of the size of the physical components. Mr. von Lazar, my understanding is that the shipment of the converter transformers was delayed due to the protest at Muskrat Falls in 2016. Is that your recollection?

MR. VON LAZAR: That's correct.

MS. DING: Can you give us some context around what had to happen?

MR. VON LAZAR: So the transformers would move by barge from Newfoundland over to Cartwright. And then once they were off-loaded there, then they would be transported by, basically self-propelled, multi-axle trailers. So you'd have a large trailer with six axles that can handle a heavy load that would move these and take them from there to the – from Cartwright to the job site.

And – so what happened was we were directed not to ship the transformers, and we kept 'em in Bay Bulls. And then – and this was in the fall of 2016. And then in the spring, there was the issues with the protests, and there was a – I would say a series of plans that were put together that we – we worked with Nalcor and with our subcontractor, Mammoet, which was responsible for transporting the transformers and eventually – and it just so happened that at that year was the heaviest sea ice, so we weren't able to eventually move the transformers until July.

And then we stuck with – eventually we went to the original plan. So it was multiple plans that were put in place and changes and everything like that, but we eventually went to the original plan of how we were going to move them and what the order was. And we successfully moved them to the job site in July, but, of course, it was a delay of over half a year.

MS. DING: Okay.

Can you give a sense of the cost impact of that delay?

MR. VON LAZAR: I think the total impact was around $5 million.

MS. DING: Okay. Thank you.

Madam Clerk, Exhibit P-03016, please, and that's binder 1, tab 33.

So this is a letter dated October 20, 2016, from Darren DeBourke to Scott Bianchi regarding the current project – protests at Muskrat Falls site.

Mr. von Lazar, do you – can you read that second paragraph for me, please?

MR. VON LAZAR: Yeah, so I think that – just, this is – I think – I believe this is from Scott to Darren.

MS. DING: Yes. Correct.

MR. VON LAZAR: Okay. All right.

"For the matter of clarity, Contractor disagrees that blocked access to the Site is a Force Majeure event. Indeed, as previously highlighted by Contractor, the local population's resentment against Company has been increasing for some time, has not been appropriately managed by Company and is adversely impacting Contractor's execution of the Work as per the Agreement."

MS. DING: Okay, thank you.

I do – I note that this is Scott Bianchi words in this letter, but would you be able to provide some insight into why GE felt that Nalcor was not appropriately managing the local resentment?

MR. VON LAZAR: Yeah.

I think it's hard for me to say that they didn't – to say what Scott said here: they didn't appropriately manage it. What strikes me about this, is that the issue was how do you keep the job site open, how do you get equipment in and how do you do it safely?

And Nalcor's focus here was to say it's a force majeure. So all they're concerned honestly is – to me, okay? This is Laszlo looking at – is to argue the contractual issues rather than focusing on the fact that this is something that's been known for months. Everybody knew about it. There's no one that didn't know about it and – so they were trying to take a contractual position rather than focusing on how do we do this safely and make sure nobody is hurt and that we keep the job site going.

MS. DING: Okay. So your – I guess, your concern was over what their concern – what their focus was?

MR. VON LAZAR: Yes.

MS. DING: Okay.

And, Mr. von Lazar, if the protests were deemed a force majeure event, would that affect GE's claim for any compensation caused by the protests?

MR. VON LAZAR: Yes.

MS. DING: And how so?

MR. VON LAZAR: We wouldn't be compensated.

MS. DING: Okay.

What other impacts, if any, did the protests have on GE's work?

MR. VON LAZAR: There were times when they – as we talked about before, we didn't have the people – all the people on the job site, so when the protests occurred you weren't able to get in the gate or to get equipment or material inside the project. So that would delay and impact the performance of the work on the job site.

MS. DING: Okay, thank you.

I'm going to talk a bit about Grid Solutions' execution team and some concerns that have been raised in some interviews that we've done.

Mr. Martin, so based on our interviews, one of the things that have been raised is that Grid Solutions had very frequent changes in the organizational chart, and so there would be many changes in the key management positions in the execution team, as well as people on site. Do you have a response to that criticism?

MR. T. MARTIN: Yes, in fact, we got some change – some requests for change of key personnel. So just to recall the process of sanction, so the key personnel has to be, how we say, presented to Nalcor to get it approved, and then we say move on the project.

So we got – during my period of time, we got the request of Nalcor management to remove two project manager, so Cyrille Boussuge – André – Denis Jazé and Cyrille Boussuge, because Nalcor believed that they were not performing. So we had to manage that, I will say, and finally we had to replace them.

MS. DING: Okay. So you're saying that Nalcor contributed to those changes because they asked you to remove some of your project managers, is that right? And you said Mr. Boussuge and Mr. Jazé?

MR. T. MARTIN: Denis Jazé, oui.

MS. DING: Okay. And you said it was because they – Nalcor deemed them not performing?

MR. T. MARTIN: This is the view of Nalcor –

MS. DING: Okay.

MR. T. MARTIN: – and they requested us to change them.

MS. DING: And in your view were they performing?

MR. T. MARTIN: They was performing, yes.

MS. DING: Okay. But even though you didn't agree, you removed them?

MR. T. MARTIN: Yes – okay, we challenge them, but we have been pushed a lot to get them removed, and with the management, we decided to change them.

MS. DING: Okay.

And compared to your experience on other projects, is this a normal level of asking people to be removed or did this reach a level that was unusual?

MR. T. MARTIN: During this phase of the project, I will say no. I will say not totally, because it was a design and starting. So we may have some change in the project execution, but usually no.

MS. DING: Okay.

Mr. Lazar, do you have anything to add?

MR. VON LAZAR: Well, I would say a couple things.

One, with respect to your statement about the number of people there were in the role, the way I kind of look at a project is it's – if you think of

a baseball game, right, you've got a starting pitcher, you got a middle reliever and you have a closer, right. And so when I came on the job I knew that we had to – like we talked about the civil works – we had to turn it around, right.

And so I – we needed someone who was a good, strong middle reliever in there to kind of – to give us a shot to getting it done. And so we put the right person in and we went from 1 per cent progress a month to 4 per cent, and turned it around. And then, eventually, you get to the job where you're closing and you want someone in that role. And, you know, the middle reliever was Scott. He had experience, he had run jobs for Bechtel up in Labrador. And then we brought Tod in and he was the finisher. He was the guy to make sure we got the project through the commissioning phase and into the testing.

And I'd also say that I experienced what Thierry experienced in terms of: We don't think this person is good. We don't think that person is good. And, you know, that happens on projects. It was more than I've – I'm used to. And the most important thing was to just say no, right. If you wanna remove that person, well then, you know, you're telling me that you wanna choose the pitcher who's gonna pitch for my team, right. You can't be effective doing that. You're gonna lose. So you have to say no. I'm – and if you want to pick my pitcher, well then, you know, you're gonna have impacts and those impacts are gonna be the game is gonna be longer and we're probably not gonna do as well.

MR. T. MARTIN: Hmm.

MS. DING: Okay. So your – in your experience it was unusual to have that many people removed?

MR. VON LAZAR: Yeah, it was.

MS. DING: And, Mr. von Lazar, I'm just looking to get your response on this. I'm looking at the Grid project directors, there was Mr. Martin, Scott Bianchi, Mr. Hubbard and Jean Polyne.

MR. VON LAZAR: Yes.

MS. DING: That's four directors in five years. Can you comment on that?

MR. VON LAZAR: Well, I mean, it goes to what I just said before, right. You want to put the right person in the right place to make the job successful. And Scott was the right person for the time, and then it was – you know, there was a timely transition on to Mr. Hubbard and it allowed us to be successful. You know, in the end we got the work done per the date that we had committed to, and so that's what – I think that helped us.

MS. DING: So that rotation, was that planned for this project initially?

MR. VON LAZAR: No, it's not planned going in, okay, you've got to assess the situation and how you're doing and what kind – what skill set you need at that point in time, what …

MS. DING: Okay, thank you.

Mr. von Lazar, in your interview you indicated that there were sort of three phases in the execution and in Nalcor's management, in your view. Can you explain what you meant by those three phases?

MR. VON LAZAR: Yeah.

So there was – I guess when I first got there it was a period of conflict and misalignment. And that was initially with Thierry and Darren DeBourke managing the project. Nalcor then brought in – in, I'd say, in the December time frame of 2016 – Greg Fleming and Steve Follett and we were able to get alignment. And the key for any project is for the customer and the contractor to be aligned. And at that point in time we got aligned in terms of what the goals are, when we're going to get done, how we're going to do the work. And it – so there was, I would say, a period of a lot of progress. And that lasted through 'til, I'd say, about May, June of 2018 when we got misaligned again, I would say, between Nalcor and ourselves with respect to the monopole and whether or not we are complete.

MS. DING: Okay, thank you.

I just want to go back to that first phase where you indicate there was a lot of conflict and misalignment. Who was the management for Nalcor during that period?

MR. VON LAZAR: Well, the project manager was Darren DeBourke.

MS. DING: Darren DeBourke. Okay, thank you.

And what changed, in your view, between management under Mr. DeBourke and then Mr. Fleming and Mr. Follett?

MR. VON LAZAR: I think that, like I said, that we were able to work together, set up – make clear goals for the project and be aligned in terms of how to pursue and get them.

Now, I'd say the other thing is we set up – there was supposed to be a progress of steering committee meetings set up at a management level as well, and so we reinstituted those. And so the normal conflicts and issues that happen on a project, we would take those and address those on a management level in the steering committees. And it allowed us to understand what things to resolve, how to resolve them, or what things we might need to put aside and resolve in a different way.

MS. DING: Thank you.

Mr. Martin, in your interview you also indicated there was a lot of conflict and, particularly, issues with communications between you and Mr. DeBourke. Can you elaborate on that?

MR. T. MARTIN: Yes.

So, in fact, yeah, we got some issues and some conflicts, so it's – I will say it's normal in term of project execution. But where, in fact, it was a little bit different here, it was that I got some unrespectful, I would say, communication; I was verbally threatened as well.

So it's a different way and this is something that's (inaudible) to be managed, so I manage it, I will say, as I should, I will say, speaking to my core team saying, okay, this is a fact and speaking to my management and move forward and continue to work to deliver the project. But it's affecting, of course, the relationship, of course.

MS. DING: Okay so you said disrespectful communications. Can you provide any examples of what you mean by that?

MR. T. MARTIN: So, in fact, this is – in terms of (inaudible), this is – we'll remove you, will be out of the project, things like that, yes.

MS. DING: Okay. So I believe in your interview you described the communications, particularly one phone conversation, as threatening. Is that still accurate?

MR. T. MARTIN: Yes, it is – it was a one-to-one communication, with no witness. It did happen, I will say, two or three time.

MS. DING: Okay, thank you.

Mr. Martin, you indicated you left the project in May 2016. Why did you leave the project?

MR. T. MARTIN: I'm sorry?

MS. DING: Why were you taken off – or left the project at Muskrat Falls?

MR. T. MARTIN: I don't know. You have to ask to my management. I have been replaced so …

MS. DING: Okay, you've just moved on to a different project?

MR. T. MARTIN: I just don't know. If it has been a request from Nalcor, or if it would have been something else, I don't know.

MS. DING: Okay. Thank you.

I want to move now to the protection and control software and I have some questions on that. My understanding is that the protection and controls software controls, I guess, the pieces of equipment and switches and controls and other parts that, sort of, bring power through the converter station at Muskrat Falls down the line and through the converter station at Soldiers Pond. Is that correct?

MR. T. MARTIN: Yeah.

MS. DING: That's an accurate summation?

MR. T. MARTIN: I view, in fact, that this is – it's a consequence or a function, I will say, to drive the energy and to ensure an (inaudible) – so it's a protection to drive the energy, yes.

MS. DING: Okay. Thank you.

Mr. Martin, can you provide maybe a high-level description of the difference between monopole and bipole, please.

MR. T. MARTIN: Okay so, in fact, in this project we have a bipole, meaning physically we have two lines driving power down from Muskrat Falls to Soldiers Pond. So the monopole is transmitting power on only one line and not using the second line. So in term of power you have limited power because you have only one line and you have no other (inaudible) as you have an issue on one line.

MS. DING: Okay.

And it might be helpful – Mr. MacIsaac always uses the analogy of a two-lane highway. Is that accurate?

MR. T. MARTIN: That's correct.

MR. VON LAZAR: Yes.

MS. DING: Okay. Thank you.

So I understand that having two poles is really for redundancy and reliability, so that one pole can take on the traffic if there are any interruptions.

MR. T. MARTIN: Yes, but it means as well when you have a problem on one pole you have less power because you can use two lines in parallel as well, so – yeah.

MS. DING: Thank you.

So Grid develops the software and does the work to install and commission the software. Is that correct?

MR. VON LAZAR: Correct.

MS. DING: Okay, thank you.

And what is factory acceptance testing? We hear a lot about that.

MR. VON LAZAR: FAT?

MS. DING: Yeah, FAT.

MR. VON LAZAR: Okay, it's basically – could be testing any piece of equipment in the factory and the witnessing of that testing, figuring out what corrections, bugs arise and then putting together a plan to address it. And then that equipment would, once those bugs or punch list items are addressed, it would be issued.

MS. DING: Okay and that's at – I'm sorry.

MR. T. MARTIN: And just to complement you a little bit –

MR. VON LAZAR: Yeah.

MR. T. MARTIN: – Laszlo, it is in fact – the factory example is to test all the function that the software should perform, I will say, and make sure – and we are doing that in GE with the equipment. So being – we use the equipment to test the software and, as you said, I will say to make sure that it's working properly and to correct any anomalies and to be sure that the software is ready to be used on site and to limit, in fact, the works to be done on site.

MS. DING: Okay.

And your testing facility for the FAT testing is in Stafford, England?

MR. VON LAZAR: Correct.

MS. DING: Thank you.

And GE, I understand, also provides completion support and site services to the project?

MR. VON LAZAR: Correct.

MS. DING: Thank you.

I want to talk a bit about Growler Energy. Now, I understand Growler Energy was brought on in November of 2016. Mr. von Lazar, what's your understanding of Growler's role?

MR. VON LAZAR: So Growler's role was to work with us in terms of developing the – basically, the test plan, the – at the – that we would go through, sitting and engaging with us through the FAT and coming up with what the punch list items would be, the snags. And then working through the incorporation of the fixes and the approval of those before the software would be issued.

MS. DING: Okay. And were you ever informed as to why Growler was brought on?

MR. VON LAZAR: No.

MS. DING: Okay.

So Growler was working alongside GE. Did they add any value to your work?

MR. VON LAZAR: Yes. I think that that they – so, again, when you look at it from the – from a schedule perspective, the work with Growler – we got the software done for the monopole in time in order to bring electrons down from Muskrat Falls.

And I would say that there was an interface – a couple of interface issues that led us to be – have a schedule – a great deal of schedule pressure with respect to the preparation of the software. Some of those were GE issues, some of them were the fact that Growler – there was a group of – they had competent people who knew what they were doing, and they would work with us in terms of developing the testing, what the snags were.

And then they would end up going back to Nalcor, and there would be some, I guess, conflict or disagreements between them, and it would cycle back to us. But I would say that Growler helped us in terms of performing and producing a quality product with respect to the software.

MS. DING: Okay.

I want to peel that back a bit. Does GE work with other – on their other projects, does GE work with other companies similar to Growler?

MR. VON LAZAR: Not in that type of relationship –

MS. DING: Okay –

MR. VON LAZAR: – okay?

MS. DING: – what's the difference?

MR. VON LAZAR: I'm sorry?

MS. DING: What's the difference between Growler and those other companies?

MR. VON LAZAR: So another job that I oversaw, we had a third party – what I would call a third party entity come in. And they basically would provide a cold eyes review of where we stood in our schedule and where – and how we were performing against it. But the engagement that Growler had with us on this project was really with respect to the working of the software, right, and as much deeper level than in other projects.

MS. DING: Okay. Did – and you had mentioned that it took longer because of that?

MR. VON LAZAR: Yes.

MS. DING: Okay.

I just want to go back and maybe get you to explain a little – in more detail. Did that added interface between you and Growler and Nalcor create any other issues beyond delay?

MR. VON LAZAR: Well – I mean, I think there's two different phases where there was this – the impact of this. One was for the monopole, and then there was a period after the monopole. The biggest impact of both, though, was delay.

Now, with the monopole, even though we had that impact and delays, we were still able to be moving the electrons in May of last year.

MS. DING: Okay.

MR. VON LAZAR: Okay.

MS. DING: And just to be clear, what was creating the delay?

MR. VON LAZAR: Well, I think what was creating it was the – the interface between us and Growler, and then the interface between

Growler and Nalcor. So the – Growler and us, we were basically in Stafford, working at the test equipment, going through everything. And so – and that impact created some delay, okay? But again, in the end, those delays – we were able to still get done, right?

But then there was the interface between what the experts at Growler were saying and – you know, these were really competent people – and coming back to Nalcor and maybe disagreements between them and then how that gets resolved between us. If we have an approved test plan, we have an approved test plan. But if someone is now saying, wait a minute, why did you – how did you approve the test plan, then that creates churn and a lot of confusion.

MS. DING: Okay, thank you.

MR. VON LAZAR: Okay?

MS. DING: Yeah.

I wanna go over, briefly, amending agreements 5 to 7, and we'll get into the details of the disputes within these amending agreements.

Madam Clerk, can you please go to Exhibit P-03017, please? And this is binder 2, tab 34.

MR. VON LAZAR: (Inaudible) number five.

MS. DING: Okay, so this is amending agreement 5, which is dated April 13, 2017. And I understand that amending agreement 5 introduces the phased approach to completion. Is that correct?

MR. VON LAZAR: That is correct.

MS. DING: And can you tell us what the phased approach means?

MR. VON LAZAR: So the – basically the phased approach was one where – we're in a situation where we knew that we couldn't get done according to the original schedule, okay? And this was – the concept here was let's commission and run the monopole – one line, basically, as Thierry referenced – and set a date for having that and focus on getting that done so that Nalcor can be moving electrons down from Churchill Falls, knowing that the dam is late, everything else is delayed.

So they can bring electrons down from Churchill Falls and power. And so basically – and then, at the same time, take all the change orders that Thierry was talking about and reach an agreement on those. And so then – set up a new endgame or goal that we – both us and Nalcor – are aligned to. Okay, so the – up here, what our goal was: let's get aligned; let's be going for the same goal now.

Because at this point in time, you know, this change order rolled in, I think, 29 – or this amendment rolled in 29 change orders, right? So all those change orders and all the delays and everything that had been festering but wasn't getting resolved, wasn't getting – you know, wasn't being dealt with, this was an attempt to do that and make us – both us and Nalcor successful.

MS. DING: Okay, thanks. And just to summarize, I think, so before amendment 5, you're working towards getting the bipole online. Is that correct? And then amendment 5 introduces the idea that you could get the monopole working and still be working on the bipole but getting the monopole working first. Is that –?

MR. VON LAZAR: Yeah, get the monopole working first, and it moved the date for the bipole out.

MS. DING: Okay. And your understanding is – as to why Nalcor wanted the monopole first is to take advantage of that recall power coming from Churchill Falls. Is that right?

MR. VON LAZAR: Right.

MS. DING: Okay, and were you aware of the amount of the benefit of that recall power?

MR. VON LAZAR: No.

MS. DING: Okay.

And just –

MR. VON LAZAR: I mean, I don't –

MS. DING: Sorry.

MR. VON LAZAR: – again, I don't – when you say of the amount – I mean, I know how much power that they could move, and I know how much power they ended up moving, if that's –

MS. DING: Yeah, can you provide those numbers?

MR. VON LAZAR: So this allowed for, ultimately, the transmission of, I think, 225 megawatts. And the most that we moved down was – or Nalcor did; it's not us. They decide how much they wanna move. It was 150 megawatts, I believe.

MS. DING: One-fifty, thanks.

And just so that we have the dates for the amending agreement 5 right, the date set out for dynamic commissioning of the monopole in the agreement is December 31, 2017. Is that right?

MR. VON LAZAR: That's correct.

MS. DING: And then for the bipole, that was for January 31, 2019, in amending agreement 5.

MR. VON LAZAR: That's correct.

MS. DING: Okay, thank you.

And then we get to amending agreement 6 in December of – December 15, 2017.

And, Madam Clerk, if you could bring up Exhibit 03018, please. And that's binder 2, tab 36.

So, Mr. von Lazar, what's contained in the amending agreement 6?

MR. VON LAZAR: So this agreement did a couple of things. We talked about the transformers and what happened there. So, again, there was a series – another number of change orders, and this rolled up all those change orders that hadn't been dispositioned and reflected the schedule impact that it happened – that we talked about.

So, this amending agreement moved out the monopole date from December 31, I think to March 31, basically.

MS. DING: But bipole – the date for bipole stayed the same?

MR. VON LAZAR: I believe so. Yes.

MS. DING: Okay. Thank you.

And, Madame Clerk, Exhibit P-03153, please. And that's binder 2, tab 44. So, this is amending agreement number 7.

Mr. von Lazar, what's the purpose of amending agreement number 7?

MR. VON LAZAR: The purpose, okay – so, when we completed the monopole, GE and Nalcor disagreed about whether or not we were done with it. Okay? And so that, again, goes to what I was talking about before – we became misaligned. Okay?

So, the – we're saying: We're done. Nalcor says: You're not done. And all of a sudden, everybody gets focused on that rather than executing the work. So, all the people who are supposed to be doing the software are sitting down across from each other, arguing about why we're done or why you're not done. Right?

And very unproductive – led to a very unproductive period where progress wasn't being made. And so, the purpose of this agreement was, again, do the same thing, let's put something down that will be the plan the project will execute to until the end which, again, the goal – which was the goal with amendment 5 also – have a plan, have a goal, and then go execute to that.

MS. DING: Okay. So, this is essentially going back to the original plan of focusing on bipole. Is that correct?

MR. VON LAZAR: Yeah. So, because we couldn't agree on the monopole, it basically says: Okay, here's a new date for the bipole; go get it done.

MS. DING: Okay. And I'll just note that. And can you confirm that the agreement moves the bipole dynamic commissioning date from what was previously January 31, 2019 and it's now pushed out to October 31, 2019?

MR. VON LAZAR: That's correct.

MS. DING: So nine months.

MR. VON LAZAR: Yeah.

MS. DING: Okay.

And I wanna go back and dig into, a little more, that misalignment and the arguments you were having with Nalcor.

Madam Clerk, can you go to page 21, please. Oh, that's the wrong – actually, Exhibit 03017, please. So this is –

THE COMMISSIONER: Which is tab 34.

MS. DING: Tab 34. So this is going back to amending agreement 5, and page 21, please.

So this is amendment 5 and it's talking about the differences between priority 1 items and priority 2 items. And I'll just read it just for – so people are aware. Priority 1, it says here, is: "Any Work" – that – "is critically required for Pole 1 operation (Monopole) (i.e., Pole 1 operation cannot be achieved without the Work)."

And priority 2 is: "Any Work" – that – "is not critically required for Pole 1 operation, but provides increased system redundancy, efficiency," – and – "performance, etc., or any Work which presents a concurrent construction opportunity with Work associated with Pole 2. Concurrent construction opportunities may exist where it is more feasible to complete non-Priority 1 Work at the same time as Priority 2 Work due to constructability issues, logistic opportunities, safety concerns, etc."

So is there anything you wanna add to the difference between priority 1 and priority 2?

MR. VON LAZAR: No, I mean, I'd just point out that it says there: Pole 1 operation cannot be achieved without the work, which is the priority 1 work. And we've been – and Nalcor's been – and ourselves have been operating pole 1 since – basically since May of last year.

MS. DING: Okay.

And in terms of providing a little bit more background, my understanding is that from the phase approach, we currently have monopole running and there's two lanes within that pole. Is that correct?

MR. VON LAZAR: That's correct.

MS. DING: Okay.

And up until just recently, we're running version 15 of the software that only allows for manual switching between those lanes. Is that right?

MR. VON LAZAR: That's correct. I'm not sure if it's 15, but that's correct.

MS. DING: But a version of the software that –

MR. VON LAZAR: Yes.

MS. DING: – only allows for manual switching.

MR. VON LAZAR: Yes.

MS. DING: Okay.

And this manual lane switching – my understanding is that it can sometimes lead to interruptions or trips because if there's an issue with one lane, you would have to manually switch to the other lane as opposed to automatic switching, which might be instantaneous.

MR. VON LAZAR: That's correct.

MS. DING: Okay.

MR. VON LAZAR: Almost instantaneous.

MS. DING: Okay, thank you.

So – and manual switching might take time, which would create a blackout or a trip. Okay.

So, Grid developed a version of the software that allows for automatic lane switching. Is that correct?

MR. VON LAZAR: That is correct.

MS. DING: Okay.

And that would make the operation of the monopole more reliable?

MR. VON LAZAR: Yes.

MS. DING: Yeah.

So the dispute between Grid and Nalcor in 2018 was about whether that automatic lane switching was a priority 1 item or a priority 2 item. Is that –?

MR. VON LAZAR: Yeah, there was a few functionalities that were (inaudible) that were part of the dispute.

MS. DING: Okay.

MR. VON LAZAR: That's correct.

MS. DING: But automatic lane switching being one of those?

MR. VON LAZAR: It was part of it. It was one of them, yeah.

MS. DING: So Grid – my understanding is Grid is saying that automatic lane switching is a priority 2 item, meaning that it's not critically necessary to operate the monopole. Is that correct?

MR. VON LAZAR: That's correct.

MS. DING: And what are your reasons for that?

MR. VON LAZAR: Well, it's – because it wasn't – the agreement says: These are the things that are priority 1 and things are the things that are priority 2. And the test plan says: These are the things that we're gonna test and do as part of the FAT. And all of those things were agreed to. So the discrepancy – the argument came after the pole 1 was actually in operation. And so the issue is, well, we don't like what we agreed to, right?

And so then we said: Okay, well let's, you know, we can come up with a plan to get you what you think is important that wasn't in priority 1 and we can do that, and then do other things, then, you know, reprioritize our work, work to support you in terms of what you want. However, I would say that the – we were impacted because what Nalcor kept saying they wanted first or wanted as a second priority or a third priority kept changing.

MS. DING: Okay.

So just so I have it clear, are you saying that Nalcor could send down the 224 megawatts down the monopole line if they wanted to?

MR. VON LAZAR: Yes.

MS. DING: Okay.

And is it your understanding that Nalcor is saying that the automatic lane switching is a priority-one item, that's their argument?

MR. VON LAZAR: I believe they said that. I don't –

MS. DING: Okay.

MR. VON LAZAR: – I mean, they – the arguments about it, from my perspective, it's – either it's priority one or priority two. Their argument, at that point in time, was – well, we can't send more than, I think it was, 90 megawatts down without it.

So, it wasn't the discussion about priority one or priority two. It became – well, we just can't – unless we have it, we can't send the megawatts down; so you're not done.

MS. DING: Okay.

MR. VON LAZAR: Right.

MS. DING: So, they believed that the lane switching – automatic lane switching – was critically necessary to be able to send any more power down the line. Is that –?

MR. VON LAZAR: Well, at first they said more than – I think it was 90 megawatts and – or, maybe it was 60; I can't even remember. And then: Oh well, no, we can actually move more

down, you know, and then it – the amount of megawatts that they kept saying was a limit – that they had to have lane switching, automatic lane switching in place for, kept going up, you know, as time went on. So –

MS. DING: Okay.

What are the issues you believe GE had with getting that version 15 or the manual lane switching software running? 'Cause we know that there was some delay in doing that. What were the issues that you saw?

MR. VON LAZAR: I don't understand the question. Sorry.

MS. DING: Sorry, I can rephrase. We know that – if we go back to the software that was currently running all winter, which was the monopole with manual lane switching –

MR. VON LAZAR: Right.

MS. DING: – what were the issues from GE on getting that going? There were bugs in it and there were – there was trips caused by it. Is that correct?

MR. VON LAZAR: Oh, okay. So, you're wondering why – what – so because that's the software that we've been using since last year.

MS. DING: Right.

MR. VON LAZAR: Right.

MS. DING: And so getting up to that point and testing that and having issues with that – I'm wondering –

MR. VON LAZAR: That's all the – well that was all the part with Growler. Right?

MS. DING: Yeah.

MR. VON LAZAR: When we went through in terms of the – is that what you're –

MS. DING: Yes. Yeah.

So, you're saying Growler – the issues you were having with Growler and the back and forth between Nalcor on the – on approving the design, that was the issue with version 15?

MR. VON LAZAR: No.

I'm really not grasping what you're saying. We – this software we've basically been using since last year. Right? We put it into use and it's what's been running the system since then. The issues are – I'm not sure what issues you're referring to.

MS. DING: Okay.

So, since the software has been running, as you say –

MR. VON LAZAR: Okay, since – okay.

MS. DING: Yeah, there have been trips –

MR. VON LAZAR: Yes.

MS. DING: – and a number of them.

MR. VON LAZAR: Right.

MS. DING: Can you explain why?

MR. VON LAZAR: I don't know why they tripped. I know that – I can say this – that I know that there's been some due to, I would say, our cooling system, or something like that. There's been some due to telecommunications issues, which are on the Nalcor side.

But I know that – and if it's – that we've had – overall in the system, there's been 20 trips, okay, since May of last year, and that of those, I think, if we – we have a software right now that we – that does provide for automatic lane changing. But Nalcor didn't want us to put it in because they wanted to move power down. And of – if we had put that in, it would've, I think, addressed about 16 of the trips.

MS. DING: Okay, so –

MR. VON LAZAR: And that would provide the automatic lane changing.

MS. DING: And what version of the software was that?

MR. VON LAZAR: I think it's 17.

MS. DING: Seventeen?

MR. VON LAZAR: I'm not sure, though, okay?

MS. DING: Okay.

When was version 17 made available to Nalcor?

MR. VON LAZAR: In December, I believe.

MS. DING: December of 2018?

MR. VON LAZAR: Yes.

MS. DING: Okay.

And why was it not installed right away?

MR. VON LAZAR: I think because it would've taken about two and a half weeks to install, and then – so, they didn't – I believe. This is – I don't know this, but – so, that – they didn't want to be down for the two and a half weeks to take the time to install the software, then, and –

MS. DING: Because they wanted the recall power during that time?

MR. VON LAZAR: Right.

MS. DING: Okay.

When is version 17 getting installed?

MR. VON LAZAR: Now.

MS. DING: Now. So –

MR. VON LAZAR: Yes.

MS. DING: – just recently?

MR. VON LAZAR: As we speak.

MS. DING: As we speak, okay. And how long do you anticipate the installation of version 17 to take?

MR. VON LAZAR: About five weeks.

MS. DING: Okay, and –

MR. VON LAZAR: It's longer now than it was then, because in December we had more resources on the site to perform the work.

MS. DING: Okay, and the Labrador-Island Link has to be taken off-line for that to happen?

MR. VON LAZAR: Yes.

MS. DING: Okay.

And after installation, how long is – how long will testing take, or is that five weeks also?

MR. VON LAZAR: It's five weeks, yeah.

MS. DING: Okay.

And when is the bipole set to be ready, to be available?

MR. VON LAZAR: October.

MS. DING: Okay.

Is there – how long do you anticipate the installation and testing for the bipole to take?

MR. VON LAZAR: Two months, maybe, 2½ months.

MS. DING: In getting the bipole commissioning running, do you anticipate similar issues that you experienced with the monopole?

MR. VON LAZAR: No, I expect less issues because the physical work is done, most of the static commissioning is complete, a lot of the dynamic commissioning is performed. So it should take a shorter period of time.

MS. DING: Thank you.

Are you currently seeing any major issues with the bipole commissioning work?

MR. VON LAZAR: So, I haven't been involved with the project since January. I don't know of any extraordinary issues that, I would

say. When you say major issues – there's always issues on a project. There's never not issues.

I think the focus and the critical path is the completion of the bipole software.

MS. DING: Okay, thank you.

So, I think for the province the ideal situation is to have that bipole up and running by the time the Muskrat Falls turbines come online, I believe, in the fall. But if the bipole software is not ready, for whatever reason, and, say, even the first unit comes online in the fall, which would be about 206 megawatts, will we be able to send down that power reliably down the line using just the monopole?

MR. VON LAZAR: I believe so.

MS. DING: Okay, thank you.

And is that something Nalcor would agree with? Or is this an area where you might differ?

MR. VON LAZAR: I don't know.

MS. DING: Okay, thank you.

And if two units come online, would we really need the bipole to take advantage of that 412 megawatts coming down the line? Is that correct?

MR. VON LAZAR: I believe so. What do you –?

MR. T. MARTIN: I believe so –

MR. VON LAZAR: Yeah.

MR. T. MARTIN: – yes, because monopole is limited.

MS. DING: Okay, thank you.

Madam Clerk, can we go to Exhibit P-03019, please?

THE COMMISSIONER: Tab 38.

MS. DING: Yeah. Tab 38, binder 2.

So, this is a presentation from Nalcor titled Transmission Link Project; GE Global Performance. The date itself is not on the document, but the filename for this document on our system dates the document in October of 2018. And it seems like Nalcor prepared this document leading up to the amending agreement 7 in January of 2019.

The presentation provides a number of descriptions on some of the major GE projects around the world, first being SouthWest Link in Sweden, the Champa-Kurukshetra project in India, DolWin in Germany and Rio Maderia in Brazil.

Mr. von Lazar, did you have any involvement in any of these – in managing any of these projects?

MR. VON LAZAR: I – yes. The answer is yes. And some to a greater degree than others, but the answer's yes. Primarily DolWin, SouthWest Link and Champa.

MS. DING: Okay.

So it says here on the slide that SouthWest Link is more than four years behind schedule. Do you have any response or comment to – as to why that is?

MR. VON LAZAR: Can we get a bio break? Would that be all right?

THE COMMISSIONER: I'm sorry?

MR. VON LAZAR: Can we get a bio break or …?

THE COMMISSIONER: Yes, okay.

MS. DING: Okay.

THE COMMISSIONER: We can – yes, take a break right at this stage, if you wish.

MS. DING: Sure.

THE COMMISSIONER: Did you want to just answer this question –

MR. VON LAZAR: Sure. What's –

THE COMMISSIONER: – before we do?

MR. VON LAZAR: – what was the question?

MS. DING: Do you have any comment as to why the SouthWest Link is four years behind schedule?

MR. VON LAZAR: I would say the two most important things is this is a – first of all, it's different technology than here. It's VSC technology. This was a first of a kind at – so this was a new product initiative, basically, on this project.

And then there is some issues that the customer has in terms of harmonic issues on their grid and some cable issues with ABB cable on that one. But I'd say the most important thing is that it was a first-of-a-kind technology. It's the same technology we're using on DolWin, which is now in – operating, which is moving –

MS. DING: So you're saying the VSC technology and the LCC technology aren't comparable?

MR. VON LAZAR: They're different. That's right.

MS. DING: Okay, thank you. We'll go for a break.

THE COMMISSIONER: All right. Let's take 10 –

MR. VON LAZAR: Thank you.

THE COMMISSIONER: – minutes for a break, then.

CLERK: All rise.

Recess

CLERK: All rise.

Please be seated.

THE COMMISSIONER: All right.

Ms. Ding, when you're ready.

MS. DING: Okay, thank you.

I just want to confirm what we were speaking to before the break, Mr. von Lazar.

So you're saying that the VSC technology on the SouthWest Link in Sweden and the LCC technology that was used in Muskrat Falls are not comparable?

MR. VON LAZAR: That's correct. They're different, yeah.

MS. DING: Okay.

So the delays that you experienced on the SouthWest Link wouldn't necessarily be the same delays you'd experienced on Muskrat Falls?

MR. VON LAZAR: That's correct.

MS. DING: Okay.

And DolWin in Germany – I think that's page 7 – the slide notes that the project system is now in operation with little issue but that there were delays. And you're saying that Germany also used VSC?

MR. VON LAZAR: On this project, yeah, it was VSC.

And to go to the question that you asked on SouthWest Link, for this project – the key issue on this project was that the shipbuilder who builds – these are – this project is – it takes wind power that's generated offshore in the North Sea in Germany. It connects the two different wind farms and converts the power on a topside, basically.

It's like a – think of an oil rig, except that instead of having mechanical equipment in it, it primarily has electrical and it's like a big box, right. And so the big issue here on this project was that the shipbuilder who was building the topside, think of it as the rig, they went – basically went bankrupt, and that was the big, big schedule driver on that project.

MS. DING: Okay, and that wouldn't necessarily translate to Muskrat Falls?

MR. VON LAZAR: No.

MS. DING: Okay.

MR. VON LAZAR: There's always a chance contractors or subcontractors are gonna go bankrupt, but it wouldn't –

MS. DING: Okay.

MR. VON LAZAR: – it's not comparable.

MS. DING: Thanks.

The Champa project in India – the presentation notes that the dynamic commissioning was six to seven months late, and that there was a significant number of outages in the first year. And then on page 5 it says that the bipole is not fully functioning and there are regular trips. Do you have any comment on this project?

MR. VON LAZAR: Yeah, I believe we're past that point in time with this project. Now, this project had a – what's called a burn-in period, which is like a period to run the system and to go through issues and problems and everything like that. And in that period you're expected to have – you're trying to get through these issues, you're trying to identify them, experience it and get through it. That's about all I – about everything on Champa.

MS. DING: Okay, thank you.

And the Rio Maderia project in Brazil, the presentation indicates that the Rio 2 line was delivered two years late. Do you have any comment on this project?

MR. VON LAZAR: No, that was before – that project was before me.

MS. DING: Okay, so you wouldn't be able to comment on why it was two years late?

MR. VON LAZAR: No, I don't know about that project.

MS. DING: Thank you.

The presentation also talks about the LIL, and this presentation is from October 2018, and it says here that: "GE continues to miss delivery dates, extending the schedule 3-5 months each time; GE is in a loss position on this project and is using schedule delays and claims to increase contract value; Nalcor has provided resources to help GE finish but is losing confidence that GE has the ability to complete Bi-pole."

Do you have any response to their comments on GE on this slide?

MR. VON LAZAR: Well, I would say, first of all, in the first bullet the – if change orders are not getting processed, right, if someone is saying – if you submit a change order and you submit the cost and schedule impact of the change order and then it doesn't get approved, then when you get all these change orders and, you know, if it's a – if they say: No, we don't like what your price is, we're not going to – or the cost is – we're not going to approve the change order; it should be nothing, or whatever.

Then the only way that you're going to end up reflecting the impact to the schedule is three months, or three to five months at a time in amending agreements, right. Then the normal course of a project should be that you should expeditiously process change orders and then the schedule increments aren't as much.

MR. T. MARTIN: Yeah.

MR. VON LAZAR: Right? And so I'd say that, yeah, we were extending the schedule three to five months at a time because it wasn't working the way it was supposed to, right. So the – I'd also say – "GE continues to miss delivery dates …." I'm not sure what they're talking about there, so I can't –

MS. DING: So you haven't been missing any delivery dates?

MR. VON LAZAR: Oh, sure. It happens all the time. It happens on every project. They aren't – I can't say there is any project I've ever been on that where a date hasn't been missed. But at the end, we got done, to our commitment, by the date for the monopole. So that – you know, the endgame we got done – we got done on time.

This – are there dates that are missed incrementally and beforehand? Yeah. There's also things that get done early, right. I don't see that on here. But – so I'm not sure what it's

referring to, but it's kind of a frustrating thing to read.

MS. DING: Okay.

Do you have any comment on the second and third point there?

MR. VON LAZAR: I would say that the schedule delays are impacts and if you don't – I'd say with respect to that – if you don't expeditiously process change orders, the scheduled delays are going to end up being greater. And claims and change orders do increase the contract value.

MS. DING: Okay. And that's all the comments you have?

MR. VON LAZAR: I think the third bullet is correct. Nalcor did provide resources and we worked together to, again, try to get to the end.

MS. DING: Okay.

Do these other projects that are listed in this presentation raise any issues with GE's ability to complete the Labrador-Island Link and the software involved with that?

MR. VON LAZAR: I don't believe so.

MR. T. MARTIN: I don't think so.

MS. DING: Okay.

Thank you, Mr. Martin and Mr. von Lazar. That's all the questions I have.

MR. VON LAZAR: Okay.

THE COMMISSIONER: All right, cross-examination then.

First of all, Province of Newfoundland and Labrador.

MR. LEAMON: No questions, Commissioner.

THE COMMISSIONER: Thank you.

Nalcor Energy.

MR. SIMMONS: No questions for these witnesses.

Thank you, Commissioner.

THE COMMISSIONER: Okay.

Concerned Citizens Coalition.

MR. HISCOCK: Good morning.

MR. T. MARTIN: Morning.

MR. HISCOCK: Good morning, Will Hiscock with the Concerned Citizens Coalition.

Just in the discussion of change orders that's recently come up, as I read the transcript most of the change orders were on the civil side of the scope of work. Would you say that's correct? Or was it as well on the software side and …?

MR. VON LAZAR: So in amendment 5 a large number were civil –

MR. HISCOCK: Mm-hmm.

MR. VON LAZAR: – components. In amendment 6 it was, I would say, transformers, protests and also work that Nalcor was supposed to do that we had to perform for them.

MR. HISCOCK: Okay.

MR. VON LAZAR: So it was just amendment 5.

MR. HISCOCK: Can you –

MR. VON LAZAR: It's primarily amendment 5.

MR. HISCOCK: Okay. Can you give me some examples of work that you had to take over for Nalcor?

MR. VON LAZAR: One example was they were supposed to prepare the site with gravel and then stone, okay –

MR. HISCOCK: Yeah.

MR. VON LAZAR: – prepare the whole site. And then they did it in the fall and when we

showed up in the spring it was all gone and so that we had to do it again to – because the way they performed it didn't work, right.

MR. HISCOCK: Okay.

MR. VON LAZAR: It all disappeared. So that was – that's, you know, an example.

MR. HISCOCK: Is this like stone on a bog or how – where did this –

MR. VON LAZAR: On the site.

MR. HISCOCK: On site.

MR. VON LAZAR: So you're putting stone down on site so you can work off the site.

MR. HISCOCK: Right.

MR. VON LAZAR: Work safely and work productively on the job site.

MR. HISCOCK: Where would the stone have gone, though, over the winter?

MR. VON LAZAR: Well, if you don't do it right it will go – it will disappear into the dirt.

MR. HISCOCK: Okay, all right.

MR. VON LAZAR: Yeah.

MR. HISCOCK: Yeah.

And were most of the civil work order changes that were involved – were they with the – Pomerleau, is that the name of the company?

MR. T. MARTIN: Pomerleau.

MR. VON LAZAR: Pomerleau.

MR. HISCOCK: Yeah.

MR. T. MARTIN: Pomerleau for Muskrat Fall and Churchill Falls, yes.

MR. HISCOCK: Sorry?

MR. T. MARTIN: Pomerleau for Muskrat Falls and Churchill Falls.

MR. HISCOCK: Yeah.

MR. T. MARTIN: And O'Connell for Soldiers Pond.

MR. HISCOCK: And eventually management of that contract was taken over by Nalcor, was it? Of their contract?

MR. VON LAZAR: It was always with Nalcor and it still is.

MR. HISCOCK: Okay.

Do you know the value of that contract?

MR. VON LAZAR: Of the Pomerleau?

MR. HISCOCK: Yeah.

MR. VON LAZAR: I don't.

MR. T. MARTIN: I don't recall the value – maybe roughly $60 million, something like that.

MR. HISCOCK: Sixty million or something? Okay.

MR. T. MARTIN: Yeah.

MR. HISCOCK: Did the number of change orders seem excessive relative to the size of the contract? Nalcor's approach around issuing change orders, was that a problem that permeated your contract with Nalcor as well?

MR. VON LAZAR: Can you – was the amounts, or the number of change orders?

MR. HISCOCK: Well, either. Perhaps you can speak to both of those; the number I guess is particularly what I was thinking of.

MR. VON LAZAR: I mean, from my experience it's not an abnormal number to expect.

MR. HISCOCK: Okay.

In terms of Mr. DeBourke's management style, you obviously had issues with it – and, Mr. Martin, this question I guess is particularly for you. In terms of Nalcor's management, did you have that same problem of the management style

and a lack of construction understanding, which I understand from your interview you found with Mr. DeBourke? Did you find that with other management as well within the Nalcor team?

MR. T. MARTIN: I will say technically, no. I think the technical responsible was quite competent, yes.

MR. HISCOCK: But you did take issues with Mr. DeBourke's not only management style, but also his construction understanding. Correct?

MR. T. MARTIN: The way he understood that, yes.

MR. HISCOCK: Okay.

And you've noted as well that the change process at Nalcor was very heavy; you first need to elaborate the change request, which will be discussed forever and so on.

MR. T. MARTIN: Yeah.

MR. HISCOCK: I assume that you were implying that Nalcor was very slow signing on the change orders, as you've spoken about, and that affected the pace of construction. That's correct?

MR. T. MARTIN: That's correct, yes.

MR. HISCOCK: Yeah.

Did you attribute the slowness just to the overwhelming bureaucracy? Or was it also the case that the people charged with making those decisions didn't seem to understand the design issues that were the source of that problem?

MR. T. MARTIN: In fact, just a point, the change order are not only for construction, they are also for the project for engineering, hein. So it's the overall.

MR. HISCOCK: Okay, it's the overall.

MR. T. MARTIN: Don't forget that.

MR. HISCOCK: Yes, okay.

MR. T. MARTIN: The point that, yes, technical people was in fact – each change was discussed first to understand if it's a change or not, so it was challenged at that time already. And, in fact, later on it was discussed, I will say, in term of cost and delay.

MR. HISCOCK: Yes.

MR. T. MARTIN: But the people in charge was challenging, I believe, for reducing the cost.

MR. HISCOCK: Okay.

And earlier there was a discussion of your guys work with Growler and their then interactions with Nalcor. Did you feel that there was a lack of technical understanding on Nalcor's side that made for some of those interaction problems, where you were interacting with Growler and then Growler going to Nalcor?

MR. VON LAZAR: Yeah the – Growler had a – the people in Growler had a greater technical competency. Now, that's not to say that the people in Nalcor didn't. So – and some of the issues could be just their disagreements between the two of them.

MR. HISCOCK: Okay.

During the period that you were having a poor relationship with Nalcor, did you ever feel that your contract would be cancelled? Or was there concerns over that?

MR. VON LAZAR: There were times at the end where I thought it could have been because we discussed it. But the – if Nalcor does that, they do it, right?

MR. HISCOCK: Yeah.

MR. VON LAZAR: You just got to keep going, right?

MR. HISCOCK: Sure.

Mr. Lazar, in – I noted on page 42 of your interview that you spoke about the fact that if your monthly reports contained something that Nalcor disagreed with, you were forced to revise it or not get paid.

MR. VON LAZAR: Right, correct.

MR. HISCOCK: Could you give me some examples of what those items were that you were forced to change?

MR. VON LAZAR: It was all, you know, critical issues, cost of the change orders, all kinds of issues we'd have to change. I mean fundamentally, the – that was kind of strange to me because, well, if – the purpose of a monthly report is to say this is what's important on the job, right? This is what we see. These are the issues, concerns, change orders: everything that's important so that it's – no, I'd never been in a situation where we were forced to edit our monthly reports in order – or we don't get paid.

MR. HISCOCK: Right.

And what could possibly be the rationale because those monthly reports wouldn't – my understanding is that they don't have a particular contractual or monetary value attached to them. They're something – aren't they just for the – basically to keep the project up-to-date in terms of what's going on, or is that not the case?

Why would there have been so much resistance to what you were writing in a monthly report and asked for the revisions to it?

MR. VON LAZAR: Well, I mean, the – look, I don't know what their intent was but I would say either to make yourselves look better –

MR. HISCOCK: Yeah.

MR. VON LAZAR: – or to, you know –

MR. HISCOCK: But it would be –

MR. VON LAZAR: – be less transparent –

MR. HISCOCK: Yeah. It's –

MR. VON LAZAR: – about what's going on.

MR. HISCOCK: – a lack of transparency, yes. Okay.

Mr. DeBourke – was that the person who was making those threats to you around the monthly reports? Was it –?

MR. VON LAZAR: Well, they weren't threats. We weren't – we actually weren't getting paid.

MR. HISCOCK: Oh, so it wasn't if you don't change the reports, you won't get paid. You weren't getting paid anyways.

MR. VON LAZAR: Yeah.

MR. HISCOCK: Oh.

MR. VON LAZAR: They were withholding a portion of what we should have been paid in order to change the monthly reports.

MR. T. MARTIN: Yeah, because the monthly reports need to be approved as part of the payment process.

MR. HISCOCK: Right.

Well, if not a threat – you certainly made it clear that he wanted these reports changed or you wouldn't get paid – whether that's a threat or not – but was it Mr. DeBourke who was the person –

MR. VON LAZAR: It was not a threat 'cause they did it.

MR. HISCOCK: Right. Okay.

So, was it Mr. DeBourke who was the person, though, requesting these changes?

MR. T. MARTIN: I think it's coming from the project, so we don't know who was doing the comments, I will say, on the project side from Nalcor, I say as a project manager. So we don't know.

MR. VON LAZAR: Yeah.

MR. HISCOCK: Okay.

Were other managers with Nalcor aware that this problem was being experienced? You know, if it was DeBourke, for example, was his management aware and was this – did this seem to be approved and condoned broadly within Nalcor? Or did you get the sense it was an isolated, individual kind of problem?

MR. VON LAZAR: So, when I got engaged, I brought in a couple of individuals to try to

change the way that we were being impeded and to fix these issues. And so we talked about it in a management level, you know, I talked about this with Greg Fleming and John MacIsaac and, you know, they took steps to fix the process, I mean, and – I think they were committed to not letting this continue, okay?

And it was just hard because the, you know, the organization had been behaving one way for awhile and so to turn it around, you know, I knew I had to have one specific person to be really tough and really hard to keep – to get that change.

MR. HISCOCK: Right. Okay.

MR. VON LAZAR: So I think they tried –

MR. HISCOCK: (Inaudible.)

MR. VON LAZAR: – to change.

MR. HISCOCK: They tried to change.

And when would you say – if you were to pick a time frame or something when you thought that that change kind of started or that started to turn around, when would you say that that started –

MR. VON LAZAR: The –

MR. HISCOCK: – to improve?

MR. VON LAZAR: – spring of 2017.

MR. HISCOCK: Okay.

The cost of storing the transformers at Bay Bulls – you spoke about that in your interview, I believe. And I think it was $7.8 million for the 57-days delay when it was stored out in Bay Bulls. How much of that amount went to storage only? You know, were they also asked – and I think it was Pennecon who did the storage, was that correct?

MR. VON LAZAR: I think so.

MR. HISCOCK: Yeah.

You know, would there have been large-scale security concerns, or what – I guess, you know, almost $8 million to –

MR. VON LAZAR: I don't think most of that was for storage. I don't know the – I can't remember the details to be honest but, you know, some was storage, some was the transport, and all the changes we had to do the transport. So Mammoet, our subcontractor – there's a component of cost that's – that was tied to all the changes in the transportation plans and, you know, going to get equipment and then releasing it off of contract when we went back to the original plan. And so there were costs – those costs also.

MR. HISCOCK: Is that –

MR. VON LAZAR: And then there was a cost also of having to do more work in parallel in the field, right? When you dress out a transformer, you bring in a specific crew to dress it out. You know, you run your oil, all of that. Those are additional costs as well that the project would incur because, you know, you have less time to perform the work; you can't do it in sequence; you have to do it in parallel. Things like that.

MR. HISCOCK: Okay.

The $7.8 million to – for storage for less than two months seems excessive from an out – from a layman or perhaps, you know, somebody without the knowledge – the background knowledge. Did it strike you as a very high sum, the 7.8 million?

MR. VON LAZAR: I don't think the 7.8 is just for storage and –

MR. HISCOCK: Yeah, it's for storage and transportation. You –

MR. VON LAZAR: It's for all the costs associated with the transformers –

MR. HISCOCK: Okay.

MR. VON LAZAR: – I believe. But – and it wasn't for two months 'cause they were stored from October, I believe, until July –

MR. HISCOCK: Okay.

MR. VON LAZAR: – or June.

MR. HISCOCK: It was a 57-day delay.

MR. VON LAZAR: The delay is 57 days. So the storage –

MR. HISCOCK: Okay.

MR. VON LAZAR: – was how long it was in Bay Bulls, right?

MR. HISCOCK: Yeah.

MR. VON LAZAR: The delay was because it gets moved out, well then the transformers get moved into the critical path and then that delay ends – pushes the whole project out.

MR. HISCOCK: Okay.

MR. VON LAZAR: Because that may – that meant that our static and dynamic commissioning got pushed out; (inaudible) can start doing that.

MR. HISCOCK: Yeah.

Did your company consider shipping the transformers through Quebec and Western Labrador via the Churchill Falls road, and store it on site to avoid the double-handling? Was that considered?

MR. VON LAZAR: No.

You mean directly, shipping it –

MR. T. MARTIN: No.

MR. VON LAZAR: – I wouldn't – you would have –

MR. T. MARTIN: No. In term of road survey, no, it was not possible to do that, as well.

MR. HISCOCK: Okay.

MR. T. MARTIN: Because of the bridge. Because of the weight to go. It wasn't possible.

MR. HISCOCK: Okay.

Mr. Lazar, Nalcor has given the clear impression that GE is causing them reliability problems on the LIL. You, obviously, have a different view on it. Is it still your position that Nalcor has failed in its obligation to provide GE with the full opportunity for the testing of your software?

MR. VON LAZAR: I don't think Nalcor didn't allow us to test our software.

MR. HISCOCK: Okay.

I'm just going to go to – back to something – I just want to read out something you said in your interview –

MR. VON LAZAR: Yeah.

MR. HISCOCK: – and maybe you can perhaps put it in context for me?

MR. VON LAZAR: Yeah.

MR. HISCOCK: And it was around this reliability issue. It's on page 57 of your interview.

You stated that – quote – that – we say we're done and – per the amending agreement – and Nalcor says we aren't. One of their arguments was: Well, the reliability run; you haven't done it consecutive days and running the whole time. And our response is: Well, you shut us down every night. And because of issues up at Churchill Falls with Hydro-Québec, you should have included software that we're saying was in phase 2.

Now, that was my understanding that that was – that, basically, you were saying that Nalcor hadn't given you the proper opportunity to test out the software and that's where their issues had arisen from, not from any delay on GE's part.

MR. VON LAZAR: No.

So what that was in reference to was that once you're done with the dynamic commissioning you go into a reliability run.

MR. HISCOCK: Hmm.

MR. VON LAZAR: Okay? And in the reliability run, it – the equipment is supposed to

run just – you just, like, basically, hands-off. Go run for 20 days, right?

And so what happened was that we would run in the day but then we'd have to shut off at night. And so Nalcor was saying that it was because of Hydro-Québec, okay? It had nothing to do with us. I don't think it had anything to do with Nalcor either.

MR. HISCOCK: Yeah.

MR. VON LAZAR: But Nalcor was saying, well, you're not done. You keep shutting down every night and we're saying we shut down because you told us to shut down. Right?

So, that shouldn't not allow us to do – and the – not allow us to complete our reliability run. Okay? So it was like a physical thing.

The other comment there was because this – well, they're having issues and it would be great if this functionality was put in. But it – that wasn't the agreement, right?

MR. HISCOCK: Right.

MR. VON LAZAR: So, we can't put it in. And that's what we talked about doing at that point in time. Let's prioritize the functionalities. If you want certain things that aren't part of the monopole, we'll do those first. We can do that. So that's what that was in reference to.

MR. HISCOCK: Okay. I think I understand there.

Thank you very much. Those are all my questions.

MR. VON LAZAR: Yeah.

THE COMMISSIONER: All right, Edmund Martin.

MR. CONSTANTINE: No questions.

THE COMMISSIONER: Kathy Dunderdale.

MS. E. BEST: No questions, thank you.

THE COMMISSIONER: Former Provincial Government Officials '03-'15.

MR. J. KING: No questions, Commissioner.

THE COMMISSIONER: Julia Mullaley, Charles Bown?

MR. FITZGERALD: No questions, thank you.

THE COMMISSIONER: Okay, I don't think Robert Thompson is here.

Consumer Advocate.

MR. PEDDIGREW: Good morning, gentlemen. My name is Chris Peddigrew; I'm representing the Consumer Advocate who represents the ratepayers in the process –

UNIDENTIFIED FEMALE SPEAKER: Your microphone.

MR. PEDDIGREW: Oh, okay, on there now. Thank you.

Just a couple of questions for you here this morning, just following up on a couple of things you were asked earlier.

The example you gave of, I guess, workers being brought in to do a piece of work and not being enough beds, is that something that happened more than once or was that just one occasion?

MR. VON LAZAR: It happened more than once.

MR. PEDDIGREW: About how many times, do you know?

MR. VON LAZAR: I can't remember how many times, I'm sorry.

MR. PEDDIGREW: Okay. Was it a regular occurrence that happened, like –

MR. VON LAZAR: No.

MR. PEDDIGREW: – multiple times in a row, or …?

MR. VON LAZAR: Well, it was – it happened a few times when we started with Pennecon, and that's – I don't know about earlier.

MR. T. MARTIN: No. I don't know.

MR. PEDDIGREW: Mr. Martin, you're saying you're not sure?

MR. T. MARTIN: Yeah.

MR. PEDDIGREW: Not sure, okay.

And so who at – was it someone at Nalcor that you addressed that issue with? Did you, you know, call somebody and explain to them what happened or who – I guess, what was your (inaudible)?

MR. VON LAZAR: I – that wasn't me but the project manager would engage with the project manager of Nalcor, right? And the – it really came down to recognizing the issue and addressing it, you know.

MR. PEDDIGREW: But it happened more than once, I guess. It wasn't necessarily addressed the first time.

I guess the cost repercussions from something like that – so you get these workers who – up to the site and get turned away. So is that a cost that GS had to eat, or was that a cost that got passed back to Nalcor?

MR. VON LAZAR: It was part of our claims to Nalcor.

MR. PEDDIGREW: Okay.

And the workers that were brought in and were turned away, were they craft labour through the – or were they specialized labour that you had brought in to do …?

MR. VON LAZAR: It was craft. So they were out of the local and –

MR. PEDDIGREW: In the building trades.

MR. VON LAZAR: Yeah. And so they were – you know, had to fly back home.

MR. PEDDIGREW: Okay.

And then the only other question – or, I guess, the area I wanted to ask you a couple questions about was the – I think you mentioned the steering committee. And – so was the steering committee established at the beginning of the relationship between Nalcor and GS?

MR. VON LAZAR: Yes. I think it was part – was it part of the agreement or –?

MR. T. MARTIN: Which one?

MR. VON LAZAR: The steering committee?

MR. T. MARTIN: Yes, it was part (inaudible) at the beginning, yes.

MR. PEDDIGREW: Okay and were the representatives from Nalcor and Grid Solutions on the steering committee?

MR. T. MARTIN: So I was part of the steering committee and there was a – my management was part and the management of Darren was – so Darren was part as well – and the management of Darren, so there was Paul Harrington and – I don't recall all the name.

MR. PEDDIGREW: Okay so, yourself. Anybody else from Grid Solutions?

MR. T. MARTIN: Yes, of course. My management was here.

MR. PEDDIGREW: Okay, and were there regular meetings? Did you meet …?

MR. T. MARTIN: So steering committee was happen, I will say, during my time only three time. It was supposed to be, I will say, quarterly or when needed.

MR. VON LAZAR: Yeah, we started doing it – because he's right, it was only three or four times –

MR. T. MARTIN: Yes.

MR. VON LAZAR: – that – over years. And so what – we started doing it on a monthly basis.

MR. PEDDIGREW: And when did that monthly basis steering committee meeting process, I guess, recommence?

MR. VON LAZAR: Well, the first one was in either November or December of 2016; it – it

was a terrible meeting. And then from that point on we had it just every month.

MR. PEDDIGREW: Okay. I'm sorry, did you say terrible meeting? The first –

MR. VON LAZAR: Yeah, it was a terrible – it was a terrible meeting.

MR. PEDDIGREW: Okay, and what do you mean by that?

MR. VON LAZAR: I mean it – I felt that the – and I said it – I felt that they're – we couldn't work together, right? I asked them, what – you know, why do you hate us so much, right, because I want to know, right? And so – and I've never, you know, felt that before I could say.

MR. PEDDIGREW: And who – who from Nalcor was present at that meeting?

MR. VON LAZAR: Well, this was the steering committee, so it was Scott Bianchi and myself and Patrick Plas, who is from Paris. And then it was John MacIsaac, Darren DeBourke and Trina –

MR. T. MARTIN: Troke, Troke.

MR. VON LAZAR: Yeah.

MR. T. MARTIN: Trina Troke.

MR. VON LAZAR: Yeah, those are the people.

MR. PEDDIGREW: Okay.

And so you say that was – that meeting in December 2016?

MR. VON LAZAR: It was either November or December.

MR. PEDDIGREW: November or December, okay, and that was a bad meeting. Did it improve after that?

MR. VON LAZAR: Yeah.

MR. PEDDIGREW: Okay.

MR. VON LAZAR: It – they became very effective.

MR. PEDDIGREW: And so do you know why the steering committee meetings were – I mean, how long did you go in between – what was the period of time that you went – or where there were no steering committee meetings?

MR. T. MARTIN: I'm sorry; you can repeat your question?

MR. PEDDIGREW: Just – sorry, wondering how long – so you – I think you said there were steering committee meetings very early in the process, and then you went for a period of time where there were no steering committee meetings.

MR. T. MARTIN: Yes.

MR. PEDDIGREW: I'm wondering how long you went between – or how long was the period of time where there were no steering committee meetings?

MR. T. MARTIN: I will say something like six, eight months, then there was no more steering committee, and then it started again after.

MR. PEDDIGREW: Okay.

MR. T. MARTIN: As Laszlo said.

MR. PEDDIGREW: And –

MR. T. MARTIN: On my time, it was that way – on my time.

MR. PEDDIGREW: But somewhere in that range, okay.

MR. T. MARTIN: (Inaudible) yes.

MR. PEDDIGREW: And so I guess, from your point of view, the steering committee meetings were a chance for the management of both companies to get together and have a conversation about the issues and try to resolve them.

MR. VON LAZAR: Yeah.

MR. T. MARTIN: Yes.

MR. PEDDIGREW: Correct?

MR. VON LAZAR: Right.

MR. PEDDIGREW: And you found them useful?

MR. VON LAZAR: Absolutely.

MR. PEDDIGREW: Okay. Thank you.

THE COMMISSIONER: All right. Innu Nation is not here.

Former Nalcor Board Members.

UNIDENTIFIED FEMALE SPEAKER: No questions (inaudible).

THE COMMISSIONER: Thank you.

Newfoundland and Labrador Building and Construction Trades Council. Not here.

Dwight Ball, Siobhan Coady. Not here.

All right. Grid Solutions.

MR. GREEN: We have one or two clarifying questions, if you don't mind.

THE COMMISSIONER: All right, yup.

MR. GREEN: Sure.

THE COMMISSIONER: (Inaudible), just for the record, if you could just identify yourself, please.

MR. GREEN: Certainly. Good morning, Mr. Commissioner. I'm Patrick Green, representing GE Grid Solutions, and I just have one or two clarifying questions.

In terms of terminology: a trip, exactly what is a trip?

MR. T. MARTIN: Okay – let's go.

MR. GREEN: (Inaudible.)

MR. T. MARTIN: A trip is when your equipment is disconnected from the network.

MR. GREEN: Okay, that causes – it causes the – in this particular instance, it causes the inability to transmit energy across that particular line. Is that right?

MR. T. MARTIN: Yeah, that's (inaudible).

MR. VON LAZAR: That's correct.

MR. GREEN: It's a localized effect on that particular line, and it's just your equipment at that point.

MR. VON LAZAR: Right.

MR. GREEN: Is that right?

MR. T. MARTIN: That's correct.

MR. GREEN: Now, the other slight clarification. You were asked when a bipole would be available, and I think you answered October of 2019. Is that correct?

MR. VON LAZAR: Correct.

MR. GREEN: And you were also asked a question about the testing period, and I think you answered two month – a two-month period. Is that correct?

MR. VON LAZAR: Yeah, 2½ months, roughly.

MR. GREEN: Right. But that would be – that's a period that occurs before October 2019. Is that right?

MR. VON LAZAR: That's correct.

MR. GREEN: Okay.

Those are all my questions. Thank you.

THE COMMISSIONER: Thank you.

Redirect.

MS. DING: No questions.

THE COMMISSIONER: Okay, thank you.

All right, thank you, gentlemen, I appreciate your time.

All right. So that's it for today, I guess. We don't have any other witnesses on deck. We have Jason Kean, I believe, on Monday?

Right. So, we'll be starting again at 9:30 on Monday morning.

All right. We're adjourned.

CLERK: All rise.

This Commission of Inquiry is concluded for the day.