

Ottawa Light Rail Commission

Justin Bulpitt
on Tuesday, May 10, 2022



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4	OTTAWA LIGHT RAIL COMMISSION
5	ALSTOM TRANSPORT CANADA INC. - JUSTIN BULPITT
6	May 10, 2022
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13	--- Held via Zoom Videoconferencing, with all
14	participants attending remotely, on the 10th day of
15	May, 2022, 1:00 p.m. to 3:52 p.m.
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1 COMMISSION COUNSEL:

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3 Carly Peddle, Commission Counsel Member

4 Emily Young, Commission Counsel Member

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6 PARTICIPANTS:

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8 Justin Bulpitt - Alstom Transport Canada Inc.

9 Michael Valo, Esq. & Charles Powell, Esq.,

10 Glaholt Bowels LLP - Counsel for Justin Bulpitt

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12

13 ALSO PRESENT:

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15 Carissa Stabbler, Stenographer/Transcriptionist

16 Benjamin Bilgen, Virtual Technician

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I N D E X

WITNESS: JUSTIN BULPITT

I N D E X

INDEX OF EXHIBITS

NUMBER/DESCRIPTION

PAGE/LINE NO.

(NONE MARKED)

1 -- Upon commencing at 1:00 p.m. --

2 CARLY PEDDLE: Good afternoon,
3 Mr. Bulpitt. My name is Carly Peddle, and I'm
4 Commission Counsel on the Ottawa Light Rail Transit
5 public inquiry, and I'm joined by my colleague
6 Emily Young.

7 The purpose of today's interview is to
8 obtain your evidence under oath or solemn
9 declaration for use at the Commission's public
10 hearings.

11 This will be a collaborative interview
12 such that my co-counsel, Ms. Young, may intervene
13 to ask certain questions. If time permits, your
14 counsel may also ask follow-up questions at the end
15 of the interview.

16 This interview is being transcribed,
17 and the Commission intends to enter this transcript
18 into evidence at the Commission's public hearings,
19 either at the hearings or by way of procedural
20 order before the hearings commence.

21 The transcript will be posted to the
22 Commission's public website, along with any
23 corrections made to it after it is entered into
24 evidence. The transcript, along with any
25 corrections later made to it, will be shared with

1 the Commission's participants and their counsel on
2 a confidential basis before being entered into
3 evidence.

4 You'll be given the opportunity to
5 review your transcript and correct any typos or
6 other errors before the transcript is shared with
7 any other participants or entered into evidence.
8 Any non-typographical corrections will be appended
9 to the end of the transcript.

10 Pursuant to Section 33(6) of the Public
11 Inquiries Act, 2009, a witness at an inquiry shall
12 be deemed to have objected to answer any question
13 asked of him or her upon the ground that his or her
14 answer may tend to incriminate the witness or may
15 tend to establish his or her liability to civil
16 proceedings at the instance of the Crown or of any
17 person, and no answer given by a witness at an
18 inquiry shall be used or be receivable in evidence
19 against him or her in any trial or other
20 proceedings against him or her thereafter taking
21 place, other than a prosecution for perjury in
22 giving such evidence.

23 As required by Section 33(7) of that
24 act, you are hereby advised that you have the right
25 to object to answer any question under Section 5 of

1 the Canada Evidence Act.

2 Mr. Bulpitt, if you need to take a
3 break at any point during the interview, just let
4 me know, and we can stop the recording, and we can
5 take a break. Okay?

6 JUSTIN BULPITT: Thank you.

7 CARLY PEDDLE: I just want to make sure
8 you can hear me okay.

9 JUSTIN BULPITT: Thank you.

10 JUSTIN BULPITT: AFFIRMED.

11 CARLY PEDDLE: You work at Alstom
12 currently?

13 JUSTIN BULPITT: Yes, I do.

14 CARLY PEDDLE: How long have you been
15 with the company?

16 JUSTIN BULPITT: I joined Alstom in
17 March of 1996.

18 CARLY PEDDLE: What's your current
19 role?

20 JUSTIN BULPITT: Currently I'm
21 responsible for business development for services
22 division in North America.

23 CARLY PEDDLE: Are you still involved
24 at all in the Stage 1 of the Ottawa Light Rail
25 Transit project?

1 JUSTIN BULPITT: Directly, no.

2 CARLY PEDDLE: When did your
3 involvement end in that project?

4 JUSTIN BULPITT: December 2019. That's
5 when my direct involvement ended.

6 CARLY PEDDLE: Were you indirectly
7 involved after that?

8 JUSTIN BULPITT: Well, the Ottawa
9 project is within the same division that I'm
10 responsible for business development, so I have
11 been kind of giving my experience, if you like, to
12 the project team members, but that's as far as my
13 involvement goes.

14 CARLY PEDDLE: So if you could please
15 just provide a brief overview of your role as it
16 does relate to the Stage 1 Ottawa Light Rail
17 Transit project.

18 JUSTIN BULPITT: Okay. So my
19 involvement started with a bid, so I was
20 responsible for the submission of the LRV
21 maintenance bid in 2012-13. That was one and then
22 signed in February 2013.

23 I was also responsible for the --
24 developing the bid for the -- changing the scope
25 from the LRV maintenance to the systems

1 maintenance, which was signed in September 2016.

2 And then also from September 2016, I
3 had operational responsibility to manage the
4 project manager for the maintenance activity, who
5 was -- the project manager was on-site in Ottawa,
6 and so I had operational responsibility from
7 September 2016 through to December 2019.

8 CARLY PEDDLE: Who were the key members
9 of your team?

10 JUSTIN BULPITT: So Alban Houssin was
11 the project manager for Ottawa, and he was a
12 project manager in fact from September 2016 all the
13 way through to September 2019, but in February of
14 2019, Alban took long-term leave for sickness. So
15 between February and September, he was -- he was
16 absent.

17 And then in June of 2019, Richard
18 France was appointed project manager, and he took
19 over the project management responses from --
20 responsibilities from June of 2019.

21 So they were really the two key, key
22 people that -- they reported to me, and then they
23 managed their teams.

24 CARLY PEDDLE: Okay. So from February
25 2019 to June 2019 when Mr. France began with

1 Alstom, were you essentially in that project
2 management role?

3 JUSTIN BULPITT: Yes. We also -- we
4 also brought over someone called Nicholas Flix who
5 acted also as kind of an interim project manager,
6 but I took much more of a hands-on role from that
7 time in February of 2019 to June 2019, and I was
8 still quite involved physically even through to
9 November of 2019.

10 CARLY PEDDLE: Now, your past
11 experience, prior to joining Alstom in 1999, did
12 you work in any other areas related to this -- the
13 work you did in this project?

14 JUSTIN BULPITT: No, I joined Alstom
15 pretty soon after finishing college.

16 CARLY PEDDLE: Do I understand
17 correctly that Alstom's maintenance group and the
18 rolling stock group are organizationally separate?

19 JUSTIN BULPITT: Yes. We -- so Alstom
20 is primarily like a matrix organization, so whereas
21 we report regionally -- so we would report into the
22 North America region or now actually Americas
23 region.

24 In fact, we're also structured by
25 product line, so whereas I report into the services

1 business in North America, there is a rolling stock
2 business in North America, and they're managed
3 quite separately.

4 CARLY PEDDLE: And I'm correct that
5 the -- both groups, the rolling stock group and the
6 maintenance group, were involved in this project?

7 JUSTIN BULPITT: Correct.

8 CARLY PEDDLE: Did that present any
9 challenges given the organizational structure of
10 Alstom?

11 JUSTIN BULPITT: No. I mean, it's
12 quite a normal event. Many times Alstom will win a
13 contract to build the rolling stock and then
14 maintain the rolling stock after delivery.

15 In one sense, the organization is
16 structured to create a -- kind of a tension
17 because, you know, the rolling stock team are
18 delivering the vehicles to us as maintenance, and
19 we are expecting them to be delivered complete and
20 to attain, you know, a level of reliability and to
21 provide us with the training that we need.

22 So there are expectations on our side,
23 and so, you know, there's a normal, I would say,
24 kind of tension because of -- because of that but
25 not unusual.

1 CARLY PEDDLE: So the first thing you
2 mentioned you were responsible for was the LRV
3 maintenance bid?

4 JUSTIN BULPITT: Yeah.

5 CARLY PEDDLE: Can you tell me just a
6 bit about your involvement in that?

7 JUSTIN BULPITT: Yeah, so at that time,
8 I was the bids director for Alstom services in
9 North America. So we -- under a turnkey bid
10 director -- so the turnkey bid director is
11 responsible for that whole bid submission, being
12 both the rolling stock and the maintenance.

13 And at that time, also during the bid,
14 we were also offering signalling services and
15 construction of the TPS, of the traction power
16 substation and the OCS. So the bid itself was more
17 than just what we ended up winning, which was the
18 LRV maintenance and supply, supply and maintenance.

19 So under that turnkey bid, I was
20 responsible for the team that provided the
21 narrative and the pricing and then eventually with
22 the legal support, the contract for the maintenance
23 aspect of the vehicles.

24 CARLY PEDDLE: Were there any major
25 challenges when you were undertaking that work?

1 JUSTIN BULPITT: I mean, it's a big and
2 I guess a complex bid, so we started in February.
3 We had -- so the journey itself to being selected
4 was, you know, up and down because we submitted our
5 bid to -- we had initially submitted a bid to the
6 VINCI group, and we were not selected by the VINCI
7 group.

8 And then we offered our bid to the RTG
9 group, and that was in February of 2012. And then
10 in March of 2012, we were told that CAF had been
11 selected instead of Alstom.

12 And then in July -- late in July of
13 2012, we were told that we were back with an
14 opportunity to bid, but by that time, it was quite
15 late on in the bidding process because the
16 submission of the narratives and the pricing was, I
17 think, in end of September, maybe beginning of
18 October of 2012.

19 So we really had quite a constraint --
20 you know, restricted amount of time or constricted
21 amount of time from being -- reentering into the
22 bid in July of 2012 to actually submitting our
23 offer and making sure that it was aligned with the
24 RTG group back in September.

25 And in particular, some of the

1 challenges that we faced were that by that stage,
2 the MSF had been developed from a bidding, you
3 know, design for the CAF vehicles, and so there was
4 some work to look at how that could be adapted to
5 fit the Alstom vehicles, because the CAF vehicles,
6 I think, were 30-metre vehicles, and we had a
7 48-metre vehicle.

8 And we had some different maintenance
9 strategies that we wanted to adopt, so we wanted to
10 kind of apply the different tracks in a different
11 way.

12 So those -- from a technical
13 standpoint, the adoption of the MSF and the fact
14 that everything was short in terms of time, those
15 were the two biggest issues.

16 CARLY PEDDLE: Did the compressed
17 schedule have -- what impact, if any, did that have
18 on the bid?

19 JUSTIN BULPITT: In the end, it
20 forces -- it forces you to be more on a high level
21 and not to be able to dive into as much of the
22 details, I guess, that you may do. But in terms of
23 optimization, they're less able to optimize the
24 solution that you have.

25 Probably more specifically, you don't

1 have as much time to think through all the risks,
2 all the -- you know, the things that you haven't
3 thought of.

4 In a longer time where you're working
5 with the construction group, you get more
6 visibility of the way the bid is being developed,
7 and therefore, when things come up, you're able to
8 reflect through those things to say, okay, how does
9 that impact me? How do I respond to that? How do
10 I mitigate any risk?

11 All of that exercise has been complete
12 by the time we join, so there was much less of an
13 ability to kind of reflect on potential things that
14 we hadn't thought of.

15 CARLY PEDDLE: Your bid -- when you
16 were advised that you had another opportunity to
17 bid in July of 2012, was -- the signalling and the
18 overhead catenary system, was that also included?

19 JUSTIN BULPITT: Just the -- no, just
20 the rolling stock and the rolling stock
21 maintenance.

22 CARLY PEDDLE: Okay. What was your
23 understanding of why that was?

24 JUSTIN BULPITT: I did not have any
25 firsthand knowledge. In a sense, the rolling stock

1 group led the exercise because it's the rolling
2 stock that was wanted, if you like.

3 So, you know, the sense I got was that
4 at the -- that RTG had said we want the Alstom
5 vehicle, and so that's the one -- you know, that's
6 the one that we're now going to choose, and so
7 that's the vehicle we have to now provide the
8 maintenance.

9 CARLY PEDDLE: Now, you mentioned that
10 the MSF -- and is that maintenance storage
11 facility?

12 JUSTIN BULPITT: Yes.

13 CARLY PEDDLE: -- was designed for CAF.
14 What -- can you just explain the impact of that?

15 JUSTIN BULPITT: Yeah, I mean, it's not
16 so drastic that you have to throw away this whole
17 big design and start again from scratch, but it's
18 really with regards to the -- there are -- I think
19 there were six, if I remember right, something like
20 six maintenance tracks, heavy maintenance tracks.

21 So the layout in terms of two light
22 maintenance bays and a wash bay and six maintenance
23 tracks, that had all been decided. And the
24 length -- and, you know, CAF had obviously decided
25 what they were going to do in each of the bays. So

1 they may want one bay for washing and one bay for
2 heavy maintenance and one bay for something else.

3 So really, it was about trying to
4 change how -- first of all, there was a length
5 issue because our vehicles were longer, and then
6 secondly, it was changing what we wanted to do in
7 each of the bays.

8 So it was then thinking through how we
9 would do the maintenance, what we wanted, and then
10 what equipment, like, if we wanted any jacks, if we
11 wanted a pit, if we wanted, you know, line side
12 bins or vending machines to be next to it, things
13 like that.

14 CARLY PEDDLE: Were there any
15 modifications to the MSF that Alstom felt was
16 necessary that were either not approved or were
17 physically impossible?

18 JUSTIN BULPITT: Yeah, there -- yes,
19 there was -- one of the things that we were quite
20 strong in requiring or wanting was that the storage
21 shed would be covered, and that was a hard
22 requirement for us. And in a sense, it was -- the
23 bid was approved, and they agreed to have a
24 storage -- a covered shed.

25 Although when it came into execution --

1 and, you know, if you've been, you'll see that
2 there is a roof, there are walls, but there's a
3 huge gap at the top where -- which allows the snow
4 and the cold, you know, to come in.

5 And so it -- that itself, although we
6 wanted it to be fully covered so that there would
7 be a better ambient temperature so that we would
8 get protection from the weather or elements, in
9 reality that didn't happen. That was really the
10 main -- the main thing.

11 CARLY PEDDLE: Okay. And so I'm
12 assuming that makes work more challenging for
13 Alstom employees?

14 JUSTIN BULPITT: Yeah. Yeah.

15 CARLY PEDDLE: Is there anything -- are
16 there any other impacts of the storage facility not
17 being fully covered?

18 JUSTIN BULPITT: Not really. The worst
19 thing is it makes it less pleasant for the people
20 working in terms of working conditions. It can
21 have an impact in terms of energy usage. That
22 doesn't directly affect Alstom because we're not
23 responsible for the energy, but there will
24 obviously be more energy drawing when they're
25 heated.

1 There is a potential for more wear over
2 time because you're keeping the trains running for
3 longer so that all the electric systems are working
4 harder than they would be otherwise in a covered
5 shed. But it's hard to say over a 30-year period,
6 you know, how material that is.

7 I mean, it's a little bit like having,
8 you know, a car in a garage. It's better to have
9 your car in a garage. It's safer. It's more
10 protected. It's kind of nicer. I don't know if
11 you can quantify what is the impact of your cars
12 outside of the garage. It's painful when you have
13 to wipe the snow off in the morning, but, you know,
14 that's the kind of image.

15 CARLY PEDDLE: So it may affect the
16 long-term reliability of the vehicles; is that
17 fair?

18 JUSTIN BULPITT: Potentially, yes.
19 Yeah. Definitely the biggest impact is on the
20 people doing the work, but there can be a long-term
21 impact on the electronics. Harder to prove exactly
22 how much, though.

23 CARLY PEDDLE: Were there any other
24 modifications that Alstom felt necessary that were
25 not completed?

1 JUSTIN BULPITT: As part of the
2 Stage 1, I don't recall there being any.

3 CARLY PEDDLE: Just moving on to the
4 second aspect that you said you were involved in,
5 which is the bid for the change of scope and to add
6 systems maintenance, if you could just explain what
7 that involved.

8 JUSTIN BULPITT: Yeah. So in the
9 spring of 2015, so the contract had been awarded,
10 obviously that the MSF was in the stage of being
11 built, you know, we were, I guess, two years into
12 the project, and RTM issued an RFP for quotes for
13 people to respond to the systems maintenance.

14 So they had three packages of work:
15 The track inspections, the OCS inspections and
16 maintenance, and the traction power substation
17 inspection and then maintenance of the
18 communications and signalling -- some pieces of the
19 signalling because Thales was still responsible for
20 the components.

21 And so we -- the initial RFP was for a
22 period of five years, and we made an offer saying
23 that we would be willing to enter into a 30-year
24 term. And then that was in the -- so that was
25 around about June of 2015.

1 And then from then to the end of 2015,
2 we were in discussions with RTM about the scope and
3 about -- yeah, about the bid.

4 And then in December -- around December
5 2015, RTM said that they selected us, and we
6 started having discussions how the contract would
7 be amended to incorporate that.

8 CARLY PEDDLE: Were there any
9 significant challenges in this process?

10 JUSTIN BULPITT: Yes, in that -- I
11 mean, obviously with the vehicle, it's our vehicle.
12 Even though it's not been built, it's our vehicle,
13 so we understand how it's been designed and built.

14 The construction is not done by Alstom,
15 so we -- and it's not built yet, so we're relying
16 quite a lot on the information that we're provided
17 by RTM in order to -- in order to bid.

18 In particular, we had a number of
19 discussions over the agreement that they had with
20 Thales and what was included, what Thales was
21 already responsible to provide on the RTM
22 subcontract with Thales, and then just getting a
23 sense of scope in terms of quantities, quantities
24 of cameras, quantities of, you know, track and so
25 forth.

1 In terms of the bidding, I think those
2 were the main things. Yeah, in terms of design --
3 just trying to think. I think that we wanted to
4 have more involvement or we were asking to be more
5 involved in -- because, again, at that time, the
6 design was pretty complete, but we wanted to see
7 how much involvement we could have in monitoring
8 the construction. So that was a topic of
9 discussion.

10 CARLY PEDDLE: You say you wanted more
11 involvement. Did that -- was that a formal
12 request?

13 JUSTIN BULPITT: I don't know. I'm
14 not -- I'm not sure.

15 CARLY PEDDLE: You mentioned that you
16 were relying on the information provided by RTM to
17 bid. So is it fair to say that -- let me rephrase
18 that question.

19 Was there any information you found out
20 later that would have affected the bid you
21 submitted? Now, let me be clear. That you would
22 have had access to. Like, essentially was there
23 any information that you didn't get that you should
24 have?

25 JUSTIN BULPITT: Hard to answer for

1 sure thinking back. I don't remember anything in
2 particular. The one area where I remember that was
3 a bit unclear -- but I'm not sure in terms of
4 timing, whether that was something that happened
5 after we submitted our bid and before we actually
6 came on board or it was afterwards.

7 That was in terms of track inspection
8 because the layout of the track, if I remember,
9 was -- as part of the design review, OLRT had
10 agreed with the City that the standard was lower,
11 but it would mean a more frequent inspection. They
12 had to inspect the track two times a week as a way
13 of passing the design.

14 We -- to my knowledge, we did not know
15 that when we bid. We had bid under the assumption
16 that the track layout would require one inspection
17 per week. And that change -- as I said, it could
18 have come at the same time; it could have come
19 after.

20 That's what sticks in my mind as being
21 the main difference. Other than that, there was a
22 lot of information which was in the background
23 information, which was -- which was like a disk
24 that was given to us just before the contract
25 signature, and, you know, it had a lot of

1 information that was difficult to read everything
2 in the short space of time.

3 So that may have carried some
4 information that we weren't really aware of, but I
5 don't recall anything else really that was a major,
6 oh, we really should have had that, and we didn't.

7 CARLY PEDDLE: Now, you mentioned OLRT.
8 When you say that, do you mean OLRTC, the
9 constructor?

10 JUSTIN BULPITT: Yes. Yes.

11 CARLY PEDDLE: What did you mean that
12 the standard was lower on the track?

13 JUSTIN BULPITT: What I recall is that
14 there are -- I don't recall exactly what that means
15 in terms of the quality or the strength or the
16 characteristics of the track.

17 My understanding is there are classes
18 of track, and depending on the class of track,
19 depends upon the speed that the trains can go and
20 the inspection criteria.

21 What I'd understood was that for
22 whatever the criteria normally, you would inspect
23 once a week, and as part of the design process, it
24 was agreed that the track could be -- was okay but
25 would need to be inspected twice a week. But I

1 can't -- I don't know in terms of the specifics of
2 what that means in terms.

3 CARLY PEDDLE: No, that's fair.

4 JUSTIN BULPITT: I should probably add
5 also that I'm an accountant by trade, not an
6 engineer, and so my bid experience is much more
7 from kind of a practical management rather than an
8 engineering kind of experience or expertise.

9 CARLY PEDDLE: Okay. Thank you. And
10 so you said starting in September '16, you took on
11 operational responsibilities?

12 JUSTIN BULPITT: Yes, so within the
13 services group, because we now signed both the
14 maintenance of the LRV and the systems, within the
15 services group, the -- there was one project, so we
16 were bidding for other projects in Canada for
17 maintenance, but this was the only one that we had
18 won.

19 So for that period of time, I was
20 responsible -- the project manager reported to me,
21 and I reported to the MD of services. So -- yeah,
22 so the project manager who actually executed and
23 did all the work, he reported to me.

24 CARLY PEDDLE: Okay. What was your
25 view as to the readiness of the system for revenue

1 service availability from a maintenance perspective
2 when you took over operational responsibility in
3 2016?

4 JUSTIN BULPITT: Well, when -- at that
5 point, the MSF was just at the point of being
6 completed, so it was in the condition that the
7 offices were -- you know, the project manager then
8 had a house in the -- in the office in the MSF.

9 So that would have meant that Alstom
10 rolling stock -- I can't remember if it had already
11 started manufacturing in the site or it was just
12 setting up to manufacture, but they were present.

13 So at that time, it was still, you
14 know, nearly two years out of -- at that time,
15 revenue service should have been May 2018. We were
16 still quite a long ways away from it occurring.

17 So I don't think I had any really
18 strong feelings. Obviously it seems as nearly
19 every construction project, they were probably
20 behind but not so behind as to a -- at -- even at
21 that point saying this is never going to go live in
22 May of 2018.

23 CARLY PEDDLE: Now, if you have a view
24 of this, what was your perspective on whether the
25 City had done everything it needed to by that

1 point?

2 JUSTIN BULPITT: At that time, I had no
3 interaction with the City. Yeah, it was still
4 quite early.

5 CARLY PEDDLE: Am I correct that OLRTC
6 was responsible for maintaining the infrastructure
7 prior to revenue service?

8 JUSTIN BULPITT: Yeah, our
9 responsibility was to take over at the point of
10 revenue service. So, yes, they were responsible to
11 maintain it prior to revenue service.

12 CARLY PEDDLE: Did you have any view as
13 to the status or the quality of the maintenance
14 upon taking ownership of the vehicles or taking on
15 that responsibility?

16 JUSTIN BULPITT: Yeah. So I guess two
17 things come to mind: The first one is that there's
18 kind of a little bit of a mismatch between the
19 contractual responsibility and operationally or
20 pragmatically what is going to happen, because at
21 the same time as OLRTC being responsible for the
22 maintenance, the maintenance organization is trying
23 to get ready. And part of getting ready means it's
24 got to, you know, start taking maintenance
25 responsibilities and learn how to do it.

1 So there's a little bit of a disconnect
2 there, but we -- you know, we could still shadow
3 and do training and practice in theory. So that's
4 the first bit.

5 The second bit is in practice, there
6 was on the infrastructure -- I guess two things:
7 One, of the things that they had built, there was a
8 lack of maintenance, and it, in some areas, became
9 very evident.

10 The point machines were one example
11 where clearly there was no maintenance. They had
12 not been regularly oiled. At some point in time,
13 and I'm thinking, guessing from memory, it was more
14 like November, December of 2018.

15 We started to be asked to take on
16 responsibility on their behalf to do some
17 inspections because they had a lot of experience of
18 the motors being dry and then burning out and
19 needing replacement.

20 But, no, that was just one clear
21 example that they -- from what we could see, it was
22 unlikely that there was any maintenance that had
23 been done on the track or the OCS.

24 At the same time, there was some parts
25 of the system that wasn't -- weren't really

1 complete until even after substantial completion,
2 like the SCADA and the network management system.

3 If that was completed, that was, like,
4 at the end of August, beginning of September, and
5 even going on, there was still work being done.

6 So it's more electronic, so I guess
7 there's less kind of maintenance, but, you know,
8 there was no kind of hand-over for us to do any
9 maintenance or do that.

10 There was also a lot of replacement of
11 the track and the OCS ongoing at the end, and that
12 was -- could be in part because of a lack of
13 maintenance.

14 But that's a long-winded way of saying
15 no, I don't believe that they did any maintenance
16 on the system beforehand.

17 CARLY PEDDLE: Okay. Did you receive
18 any information from OLRTC or documentation about
19 the maintenance that was expected of them?

20 JUSTIN BULPITT: From OLRTC about what
21 maintenance they expected to do?

22 CARLY PEDDLE: Sorry, let me -- let me
23 rephrase.

24 JUSTIN BULPITT: Yeah.

25 CARLY PEDDLE: Did you receive any

1 documentation from OLRTC about what they -- about
2 maintenance, about what they had actually
3 undertaken?

4 JUSTIN BULPITT: Right. No. No, it
5 was a source of -- it was a source of frustration,
6 and part of us being ready is that we -- obviously
7 we need the facility, the infrastructure to
8 actually be handed over.

9 We need to be able to have access to
10 inspect and to start preparation, but we need
11 documentation on drawings and tests, you know, test
12 documentation. We need to be trained.

13 None of that was forthcoming, and we
14 were -- especially as we got closer and closer and
15 closer to the different times where revenue service
16 was supposed to start, our level of anxiety was
17 going higher and higher and higher because we
18 didn't have the documentation.

19 And even then, there were no main --
20 even -- as far as I recall, when the -- when we
21 finally got some information on the drawings and
22 the test information in May or June of 2019, there
23 were no maintenance records handed over.

24 So there would have been a maintenance
25 manual that would have said this is what you're

1 supposed to do, and the -- we probably would have
2 seen a draft of that manual, but no detailed
3 maintenance documentation and no records of what
4 they did.

5 CARLY PEDDLE: Did you request
6 maintenance records?

7 JUSTIN BULPITT: Yes. Yeah, it's part
8 of the overall documentation that we asked for.

9 CARLY PEDDLE: And what was their
10 response?

11 JUSTIN BULPITT: It would have been --
12 so the general response -- and this -- it's hard to
13 be really specific because, you know, this was
14 something that would have -- we would have started
15 the process probably in the summer of 2017.

16 As we were getting ready to be ready
17 for revenue service, we would have been asking for
18 all this documentation. And frequently, there was
19 a comment or a statement or email from OLRTC, You
20 have it. You have the documentation. It's in
21 4P. You need to go look for it. It's there.

22 And often there was, you know, like, a
23 back and forth, No, it's not. Yes, it is. Where
24 is it? You need to show me. I haven't got time.
25 That was their most typical response: Go look for

1 it.

2 As we got closer to the summer of 2019,
3 we did start to get some more -- the other --
4 sorry, the other thing that we got often, either
5 preliminary drafts, so, you know, a document that
6 said -- you know, even sometimes a blank document
7 with a draft, you know, this is a placeholder for
8 the maintenance manual, or this is the first draft
9 of the maintenance manual would be more complete
10 as, you know, the design develops, or this is a
11 preliminary design review.

12 CARLY PEDDLE: When you say you
13 requested maintenance records, who were you
14 requesting them from?

15 JUSTIN BULPITT: So directly, we would
16 have asked RTM. So RTM was our customer. Things
17 were, I guess, a bit more complicated because you
18 had these two silos, OLRTC and the rolling stock
19 provider, RTM and Alstom.

20 So we would ask RTM who would ask OLRT.
21 Even sometimes for vehicle information, we would
22 ask RTM, who would ask OLRTC, who would ask Alstom
23 or instruct to provide to OLRTC.

24 CARLY PEDDLE: And would the general --
25 would the response -- the general response you just

1 spoke of, would that come from OLRTC or from RTM?

2 JUSTIN BULPITT: So the general
3 response that I -- I'm thinking of some emails that
4 we would have got or some comments that came
5 directly from OLRTC, either emailing to RTM or
6 comments directly in the document.

7 CARLY PEDDLE: Were you told by any of
8 the partners, the parties involved their views as
9 to the readiness at that time?

10 JUSTIN BULPITT: From RTM.

11 CARLY PEDDLE: From RTM. I suppose you
12 didn't -- you said you didn't have any contact with
13 the City, so any of your contacts in the other
14 organizations?

15 JUSTIN BULPITT: Yeah. So my only
16 contact with the City was really close, like, May,
17 June of 2019. So generally with RTM -- RTM was my
18 customer, so I had most interaction initially with
19 Grant Bailey, and then he left in July, I think, or
20 August of 2017.

21 Then for about a year, there was no
22 general manager for RTM, and Tom Pate (ph) was
23 acting as a maintenance and general manager.

24 And then when Claude Jacob arrived, I
25 think was in the summer of 2018, I had contact with

1 him. So Claude and I would often have a kind of
2 off-the-record discussion of what we felt.

3 And also in a couple times in April of
4 2019 or May of 2019, I was invited to some meetings
5 with the RTM executives. You know, and, again, we
6 were able to kind of share frankly what we -- how
7 we felt the readiness was.

8 So I got their view, and they were
9 concerned -- they were as concerned as we were that
10 the system -- that OLRTC wasn't -- you know, when
11 we were asking for information, they were trying to
12 assure us. It's not that we've got it, and we're
13 not giving it to you. We haven't got it. We're
14 asking for the same information. We see the same
15 things that you see. We have the same concerns
16 that you have.

17 And some of the executives I work with
18 on terms -- on the bidding, so I knew them from
19 bidding either on the Ottawa or other projects. So
20 I had at least enough of a relationship that it was
21 more than just an (indiscernible).

22 So, you know, we were able to say, you
23 know, this isn't ready compared to, let's say,
24 another project. We're supposed to go live in two
25 or three months and look what's missing.

1 CARLY PEDDLE: What were the most
2 significant aspects that were missing in your view?

3 JUSTIN BULPITT: Yeah. So it depends
4 on the time frame, but let's say when -- let's say
5 May or June of 2019 because that was really the
6 last time -- after the last deadline that was
7 missed.

8 We were still at a point in June of
9 2019 where the MSF 2 hadn't been handed over to us,
10 wasn't working. We -- either in May or June, we
11 finally got documentation.

12 We still hadn't got training on -- that
13 we had wanted. We had got general training. We
14 had got kind of PowerPoint training, but because
15 some of the systems, particularly the
16 communication-type systems like the gates and the
17 pits and the SCADA hadn't been completed, so we had
18 not had kind of direct training even at that time.

19 The fact that there were so many --
20 the -- each of the systems were not in the mature
21 state. And when I say "systems," I'm talking -- so
22 first of all, the vehicles, the CBTC signalling,
23 you know, the communications, you know, the SCADA
24 wasn't finished. The network management wasn't
25 finished.

1 The OCS and the track that -- we had
2 not been given access to be able to do an
3 inspection at the end of May. We had been asking
4 for inspect -- to be able to inspect and have our
5 own assessment of the condition, and we hadn't been
6 given that, and that was at the end of May of 2019.

7 So all those things to us were strong
8 indications that the system was quite a ways away
9 still from being ready.

10 And the lack of systems integration was
11 a big concern because it's one thing to have all
12 the systems complete, but if they don't kind of
13 play together, then you don't know how they
14 interact, all the different systems interact and
15 what may come out.

16 CARLY PEDDLE: I think you said that
17 each of the systems -- and you said vehicles, CBTC,
18 which is computer-based train --

19 JUSTIN BULPITT: Train control.

20 CARLY PEDDLE: -- control were not
21 mature. Is that what you said?

22 JUSTIN BULPITT: Yeah.

23 CARLY PEDDLE: What do you mean by
24 that?

25 JUSTIN BULPITT: So what I mean -- and

1 I'm thinking specifically now in the time period of
2 the end of May, beginning of June where trains were
3 leaving, so trains were being released into service
4 or into -- on the line as a simulation service.
5 The signalling system was the train to make it work
6 in the automatic train operation.

7 And just the volume of failures
8 basically. I mean, I remember in kind of
9 preparation, I looked at a period of time, end of
10 May, beginning of June where, you know, the zone
11 controllers weren't working. There were switch
12 failures of being disturbed. The -- there were
13 door failures. There were brake failures on the --
14 on the vehicles. The GIDS wasn't -- the intrusion
15 device wasn't working or was being constantly set
16 off because there was movement or it wasn't, you
17 know...

18 So all these problems were being
19 reported in IMIRS. As an example to show that they
20 weren't mature, you know, they weren't in the state
21 where you wouldn't want to have passengers get on
22 them and, you know, drive safely, if you like.

23 CARLY PEDDLE: So essentially there
24 were bugs in the system?

25 JUSTIN BULPITT: Yeah, yeah, yeah,

1 that's right. That's a better way of putting it.

2 CARLY PEDDLE: And when would you
3 typically expect these bugs to be worked out?

4 JUSTIN BULPITT: Well, from my view --
5 and maybe as a different example, we're on -- we're
6 trying to finish the first phase of the REM project
7 in Montreal. So the construction of the first
8 phase or the first element is pretty complete now,
9 and it's May, and I think they have an aspiration
10 of going into revenue service in a few months'
11 time, so five or six months' time.

12 So to me, three to six months from the
13 time you say I've completed my build to actually
14 testing it and experiencing those bugs and working
15 on them and changing, I don't think that's an
16 unreasonable period of time. I think that's -- you
17 know, for me that would be a typical period of
18 time, three to six months.

19 Whereas in Ottawa, the reality was that
20 in June, there was still -- you know, we went
21 from -- we finished -- we think we finished
22 constructing to we're in trial running, like,
23 overnight almost.

24 CARLY PEDDLE: Now, you mentioned --
25 before I do that, those examples that you gave of

1 the things that had not been done that were the
2 most concerning, were those all completed prior to
3 revenue service?

4 JUSTIN BULPITT: I'm just trying to
5 remember now. What were the examples that I gave
6 you.

7 CARLY PEDDLE: So I have training.
8 You've requested training that had not been
9 provided, documentation for systems, system
10 integration, the maintenance facility not being
11 handed over.

12 JUSTIN BULPITT: Right. So maybe take
13 the last one. Maintenance facility, yes, it was
14 handed over by trial running. There were still
15 some things that were not working properly.

16 The washing machine is an example. The
17 sanding equipment had some bugs. I think the
18 washing machine had some bugs occasionally.

19 On the far side, there was a problem
20 with the power -- the lockout tag-out wasn't
21 possible because of -- it was either on or it was
22 off. You couldn't switch it off and still work.

23 I'm trying to remember exactly what --
24 there was a problem anyway with our lockout-takeout
25 that required you either had to switch the whole

1 power off or the whole power on. You couldn't
2 isolate certain sections, from what I remember.

3 So by and large, the facility was
4 handed over. There were still bugs that needed to
5 be worked out.

6 From a -- from a documentation
7 standpoint, I think probably we had got all the
8 documentation. The difficulty was because we got a
9 data dump, I think, somewhere either at the end of
10 May or the beginning of June where we got all the
11 documentation that they had, and it took us over a
12 week just to download the documents.

13 So I'm pretty sure that we didn't
14 have -- you know, we wouldn't have had the time and
15 didn't take the time to review everything to make
16 sure that we got everything.

17 In terms of training, I think we had a
18 reasonable level of training on some of the systems
19 for the vehicles obviously. The signalling was at
20 a relatively reasonable level.

21 Things like SCADA and GIDS and PIDS,
22 no, because that was -- like I said, that -- and
23 network management system, that was just handed
24 over at the end, at the very, very, very, very end.

25 And even with the signalling system, we

1 required kind of the hand-holding from Thales when
2 they -- because they were working on their
3 adaptations and upgrades right to the very end, so
4 some of the troubleshooting we relied on them to
5 support.

6 CARLY PEDDLE: Who was responsible for
7 systems integration?

8 JUSTIN BULPITT: Well, OLRTC -- well,
9 in my view, it is the construction company, OLRTC,
10 that should be responsible for systems integration.

11 CARLY PEDDLE: Now, you just mentioned
12 that the -- in May or June of 2019, there was
13 insufficient systems integration. Why was that
14 your view?

15 JUSTIN BULPITT: It's because -- well,
16 just as an example, like I said, all the systems
17 were being upgraded, so Thales was working on the
18 CBTC and making its software upgrades. Alstom was
19 working on the vehicles and making its software
20 upgrades.

21 Let's say they completed their
22 upgrades. There wasn't a period of time then to
23 test. Did -- the upgrades that Thales made, did it
24 have any impact on the Alstom train?

25 I mean, the train works with the

1 signalling system, so there wasn't a period of time
2 where they tested to say, okay, now we finished the
3 upgrades on the Thales system. How has that
4 affected the train, or how has the upgrades on the
5 train CCMS affected the signalling working as an
6 example.

7 You know, you could say the same even,
8 which bled into revenue service, of the cameras.
9 Part of the system required for the train when it
10 arrives in the station to be able to view the
11 cameras to make sure that it's safe to leave. That
12 relies on the TCMS. It relies on the train, and it
13 also relies on the signalling system.

14 You know, there wasn't a period of time
15 where you could say, okay, everything is updated.
16 Let's see if the two things work together and what
17 bugs might we have when the -- you know, all of
18 them working together. That's what I mean.

19 You could say the same with the rails
20 and the wheels. I think that probably would be
21 less direct because the impact is seen over a
22 longer period of time.

23 But the signalling and the TCMS
24 upgrades are key. I mean, even things to the point
25 of -- I remember -- and this must have been in June

1 or July where they had to -- there was a
2 requirement to meet the run time, the journey time,
3 and the journey time obviously then requires the
4 signalling system to tell the TCMS how fast to go
5 and when to accelerate, when to brake.

6 So in order to meet the journey time
7 that had been developed, there seemed to be a
8 requirement on the train to perform really to the
9 max, to accelerate as hard as you can and to brake
10 as hard as you can in order to meet the journey
11 time.

12 That's another example really of just
13 saying, you know, we didn't know what were the
14 implications of that, and there should have been a
15 period of time to say, okay, now we know what the
16 implications are. That's not good. We need to
17 make some more revisions.

18 CARLY PEDDLE: Do I understand you
19 correctly that the Thales -- for the computer-based
20 train control system, Thales was doing updates to
21 revenue service, into revenue service?

22 JUSTIN BULPITT: Yeah. You know, to a
23 degree, that's not so unusual that there are some
24 updates that carry on, and the same thing from the
25 TCMS, that there are software patches after revenue

1 service, but the extent of those upgrades, yeah,
2 they were working into -- well into revenue
3 service.

4 CARLY PEDDLE: What were the
5 consequences from a maintenance standpoint of this
6 lack of integration?

7 JUSTIN BULPITT: I would say that there
8 were -- there are short-term and there are
9 long-term implications. The longer-term
10 implications start to become more, let's say,
11 speculative in terms of what are the -- you know,
12 because obviously since revenue service, there are
13 a number of big events that have occurred.

14 You know, there was a TCMS failure
15 right in October. There was the pantograph in the
16 OCS in beginning of 2020. There were some wheel
17 flats in track -- where the wheel rail interface.

18 So those are kind of longer-term
19 effects that -- hard to sit here now in -- with
20 hindsight and say this was directly because of that
21 lack of integration, but the short -- that we
22 weren't ready, but the short-term -- the short-term
23 implications are, one, entering into service means
24 that there are many, many more risks that have to
25 be mitigated.

1 So a lot of the times that things were
2 not in a full working condition but there may be
3 work-arounds, and in and of itself that work-around
4 is maybe quite possible, but when you start to add
5 up all the work-arounds that you have to have, it
6 just increases the -- it increases the stress on
7 the system basically and increases the likelihood
8 of there being a problem in revenue service.

9 Some examples are there were
10 transponders that are in the yard that are part of
11 the signalling system to help the system know where
12 the train is, so one of the things that I recall
13 where there were insufficient transponders -- part
14 of the Stage 2 were these extra transponders. They
15 hadn't done enough, so it was -- it created
16 difficulties in coupling the trains.

17 And sometimes if you look at some of
18 the reports, you know that loses position. There
19 were lots of problems of train losing position, and
20 train -- in the course of train losing position was
21 because the one -- in the yard was because there
22 were insufficient transponders that wasn't picking
23 up where the train was.

24 And so sometimes when we had to couple
25 the train, we had to do it in a specific track in

1 order to -- because we knew that there were
2 sufficient transponders. We knew that the train
3 had got position, and then we could send it to the
4 dispatch to leave.

5 But it means that you have to juggle
6 the train around. I mean, the fact there was no
7 UTO and we were in manual operation with
8 Hostlers is a work-around. It adds to the
9 problems. Yeah, those are two examples.

10 CARLY PEDDLE: What does "UTO" stand
11 for?

12 JUSTIN BULPITT: Sorry, un -- it's
13 train operations. Unattended train operation.

14 CARLY PEDDLE: Thank you. So leading
15 up to revenue service, you said you had concerns
16 about readiness, and given the lack of systems
17 integration, you just said it creates potentially
18 more risks.

19 What steps did Alstom take to ensure
20 that they had done everything they could to ensure
21 they were ready for service?

22 JUSTIN BULPITT: When you say "Alstom,"
23 you mean Alstom Alstom or Alstom specifically to
24 maintenance.

25 CARLY PEDDLE: Maintenance.

1 JUSTIN BULPITT: Okay. So it's a
2 difficult -- thank you. It's hard to really answer
3 in hindsight and also to know what we could have
4 done. You know, it's a question that I've asked
5 myself a lot: What could I have done differently?
6 How could I have done things differently.

7 I would say that we tried to -- I mean,
8 first of all, we are -- we are a subcontractor in
9 this process, so our customer is RTM, so we can
10 request something of RTM. RTM can request it of
11 RTG or OLRTC, and they would go to the City. We're
12 quite away removed from being able to actually do
13 something and influence something.

14 So there was a lack of -- like I said,
15 there was a lack of documentation on the system.
16 We asked to inspect the line. It was something
17 that we had asked consistently and got some
18 traction within RTM to be able to have access to
19 the line to do some inspections.

20 But even when we were -- it was agreed
21 with OLRTC that we could inspect the line. Often
22 now our permit was taken away at the last minute,
23 so we weren't able to do an inspection. We wanted
24 to get a third-party audit of the -- of the
25 assessment, and OLRTC refused to allow us to.

1 So the message that we -- let me back
2 up. The message from RTM was OLRTC has said no,
3 you're not able to do an inspection.

4 We did bring people from Systra with us
5 to be our experts, and they guided us -- that was
6 in June -- to give an assessment of some parts of
7 the line that they had access to.

8 But, you know, that was what we
9 tried -- you know, tried to get was our own
10 assessment of the condition. We tried to -- we
11 wanted to bring people. We brought people from --
12 I think it was in Egypt to train people how to do
13 catenary inspections, but, again, we needed to --
14 so we had some expertise.

15 Because it was an area where there was
16 a lack of skill because most of -- in Canada,
17 there's not so many catenary systems, so there were
18 not so many people trained to operate or maintain
19 them.

20 So we had found -- we had hired --
21 someone from Alstom came to be the expert, but also
22 we had hired skilled electricians, but we needed to
23 train them how to maintain -- you know, what to
24 look for and how to do good maintenance on the OCS.

25 And we brought people -- or we wanted

1 to bring people from Egypt to do that training, but
2 then finding the right time and finding time when
3 they would be -- have access to the line to be able
4 to do that training was difficult. And I remember
5 we were -- we were constantly pushing to the right
6 as we were trying to find time to do that.

7 We tried hard at the beginning
8 especially to kind of be formal in terms of writing
9 letters and kind of put some, I guess, contractual
10 pressure to say, Hey, we're missing this
11 documentation. These are the implications.

12 As we got closer and closer and the
13 pressure built up, we got less good at writing
14 those letters. What else?

15 CARLY PEDDLE: Why is that?

16 JUSTIN BULPITT: Why? I think, you
17 know, my -- I think at a certain point in time,
18 there was a decision that we're going to go live in
19 September and all hands to the -- you know, all
20 hands to the deck.

21 And it was a bit of a message coming
22 from RTM, you know, let's work on fixing the issues
23 together and, you know, not worry about the
24 contractual piece, but let's focus on fixing the
25 issues.

1 But also the pressure from everyone
2 coming from the City, the City on the Alstom
3 rolling stock side, the OLRTC, RTM, everybody had
4 this focus that we have to go live, and we were
5 spending all our time of all our day getting ready
6 to go live and not really, you know, writing
7 letters.

8 CARLY PEDDLE: What explanation, if
9 any, were you given for not getting access to the
10 line?

11 JUSTIN BULPITT: The explanation was --
12 I mean, you have to remember also that OLRTC has a
13 lot of construction that they have to do, so
14 typically it was we need -- we're doing repairs on
15 this area of the land, so we take priority. That
16 was probably the overwhelming reason.

17 CARLY PEDDLE: Would that -- was that
18 overlap between the construction and when
19 maintenance would need access to the line, was that
20 contemplated in the initial schedule, or was that
21 due to the compression of the timeline?

22 JUSTIN BULPITT: It's due to the
23 compression because typically you would build --
24 you would build the line, and then you would have
25 that period of testing.

1 During that period of testing, you
2 know, there's no more construction. You have that
3 opportunity to do inspections and training and
4 preparation in the three to five months beforehand.
5 But when OLRT are also trying to finish the
6 construction at the same time, that's -- that
7 compression is what created it.

8 CARLY PEDDLE: Why did you need access
9 to the line? What information would that have
10 given you?

11 JUSTIN BULPITT: It would -- by
12 visually inspecting the line, it would give us --
13 it would give us access to the condition -- to
14 understand the condition, to understand what --
15 well, first of all, it would -- it would help us
16 have an understanding of is this line in a good
17 condition, has a good chance of running
18 successfully? That's the first -- that was the
19 first criteria.

20 The second having access -- I mean,
21 one, it helps our guys train because now -- you
22 know, it's one thing to have a PowerPoint, but now
23 if you've actually got access, you can inspect.
24 You can actually see physically, okay, this is what
25 it means. This is -- you know, today we're going

1 to do maintenance of a switch, and we can all --
2 you know, we can all have a -- if you've got no
3 access, you can't actually do that. Those are
4 probably the main -- the main points.

5 CARLY PEDDLE: It may be difficult to
6 say, but can you speak to any impact that had on
7 maintenance activities?

8 JUSTIN BULPITT: Not having access.

9 CARLY PEDDLE: Yeah.

10 JUSTIN BULPITT: Yeah. It certainly
11 makes it -- I mean, it's frustrating. That's the
12 first -- the first feeling. I think what it did
13 was it prevented some of our people getting trained
14 as well as they could have done. I think it did
15 impact our training. I think it certainly didn't
16 help from a level of trust because it -- you know,
17 for us it's, well, why aren't we getting access?
18 What are they trying to hide.

19 I think it impacted us that if we had
20 been able to inspect the line properly, I think we
21 would have been -- especially from a track
22 standpoint. You know, there -- clearly there were
23 deficiencies to the track.

24 And I say that because even before
25 revenue service, OLRTC did a lot of track

1 replacement, so when we were trying to get access
2 in, say, May or June or March, you know, and we
3 weren't allowed, that was coming through our minds,
4 and there was a lot of track replacement in July
5 and August, which kind of confirmed what we were --
6 and even after.

7 So maybe there -- you know, maybe any
8 track replacements in 2020 or 2021, that was the
9 same thing, but even before revenue service, there
10 was a lot of track work that was being done.

11 And having had access, we would have
12 known better, okay, this is a condition of the
13 track. These -- you know, this is what we need --
14 we can prepare for that. There's time to prepare
15 as well.

16 CARLY PEDDLE: What was Alstom's
17 approach to staffing and maintenance team?

18 JUSTIN BULPITT: It -- so in terms
19 of -- let's start with a bid. So in the bidding
20 standpoint, we had a plan that we would have some
21 key management positions in -- starting with the
22 project manager in 2016.

23 Typically, you would maybe start to
24 staff a year before revenue service, but we chose
25 to staff with the project manager in two years

1 because, you know, it was a big project. We wanted
2 to -- we wanted to get it right.

3 And then I think in the first year, we
4 have good management, the key management roles that
5 were hired, and then probably from around July,
6 August of 2017, we started the process to hire the
7 maintenance technicians.

8 We sized the maintenance technicians
9 and the team according to the -- according to
10 one -- according to our experience on other
11 projects, but always in view of a normal operation.

12 And in a sense that was important
13 because the reality was, you know, the start of
14 service wasn't a normal operation.

15 So we didn't initially staff to manage
16 all these work-arounds. We didn't staff expecting
17 a high level of -- we didn't plan initially our
18 staffing expecting a high level of problems and
19 bugs. That would need to still be worked through.

20 We also -- in the infrastructure, we
21 had initially planned to have a 24/5 operation, 24
22 hours a day for 5 days a week, and be on call for
23 2. It was clear when I took more hands-on in,
24 like, March that that wasn't going to work, and so
25 we increased the number of staffing from 20 to 28

1 for the system.

2 It was also clear that we needed more
3 management reinforcement, so as well as Richard
4 France, hired a deputy project manager, hired an
5 operations manager from the UK to bring more
6 experience, hired some mainten -- we didn't plan to
7 have a dedicated maintenance supervision per shift
8 per type.

9 So we had an LRV and a systems
10 supervisor on shift three shifts a week for the --
11 each for seven days. So we ended up having, I
12 think, four supervisors for LRV and four
13 supervisors for infrastructure. That wasn't
14 contemplated initially.

15 CARLY PEDDLE: And when were those
16 roles added?

17 JUSTIN BULPITT: Probably somewhere
18 between May and -- or progressively from, I think,
19 May until September.

20 CARLY PEDDLE: Of 2019.

21 JUSTIN BULPITT: Of 2019, yeah, for the
22 supervisors, yeah. And for the extra eight
23 technicians, yeah, May to August of 2019.

24 CARLY PEDDLE: Were all of these
25 positions added prior to revenue service?

1 JUSTIN BULPITT: The only ones that
2 maybe weren't were we may have not fully staffed
3 the supervisors by revenue service. I don't recall
4 exactly. We certainly had some, but we may not
5 have had all of them.

6 CARLY PEDDLE: How did your -- how --
7 if it did, how did your staffing level change over
8 time up until you finished your role in December
9 2019?

10 JUSTIN BULPITT: Well, from -- what
11 kind of time should we start? Maybe if we say --
12 well, let's back up a little bit because some of
13 the -- some of the -- because we didn't know when
14 revenue service would start, you know, we had
15 planned to start six months before revenue service
16 hiring.

17 So the first time in May 2018 -- like I
18 said, in the summer of 2017, we started the process
19 to hire, and maybe we hired a few people, and then
20 when it was clear that the contract was going to be
21 delayed, we stopped hiring people, and we started
22 hiring them again.

23 I think there was a decision for the
24 November 2018 that we were going to hire a full
25 complement of staff, and I think RTM asked us to

1 because there was such uncertainty of when
2 substantial completion would occur.

3 So it was like -- even if it's unlikely
4 in November 2018, we want you to staff fully, and
5 we'll pay you the fee for, like, less than six
6 months or less than one month of notice.

7 So we had a staffing level that was
8 almost -- that felt almost complete, let's say, at
9 Christmas of 2018. And then we went through a
10 really bad winter where we saw that the effects of
11 the snow were severe, and we needed to reenforce in
12 terms of temporary labour, in terms of
13 subcontracting labour for snow clearance, because
14 we had agreed to support OLRTC in the snow
15 clearance during -- before revenue service.

16 In terms of major staffing in events,
17 there was maybe more requirement on the rolling
18 stock side because of the deficiencies in terms --
19 to mitigate for the cameras, to have somebody on
20 the stations to mitigate for doors, to have
21 somebody on the train.

22 So that was a significant hiring that
23 they had to do. That kind of crossed over into the
24 maintenance piece so that we kind of managed.

25 There was a significant number of --

1 you know, on the rolling stock side, they had a
2 significant number of modifications. People -- you
3 know, retrofit technicians that they had to hire.

4 We had -- they had a significant number
5 of commissioning and warranty technicians, and the
6 number increased and increased and increased.

7 From a maintenance standpoint, I think
8 that we -- like, we reenforced some positions. I
9 don't think we drastically at that time had a
10 significant increase in the number of people
11 because there was a heavy compensation from the
12 rolling stock.

13 No, that's not true. We did have -- we
14 were asked to provide additional guideway
15 technicians so that they could sit by the switches
16 in case the switches got disturbed to support the
17 start of revenue service.

18 So I think on both the east and the
19 west, we were having to put extra technicians. And
20 that was jointly done with RTM, so I think RTM
21 actually hired some people, and we managed the
22 staff.

23 CARLY PEDDLE: After revenue service,
24 did Alstom add any additional staff to the
25 maintenance team?

1 JUSTIN BULPITT: I'm sure they did.
2 After I left, I'm sure they did. I don't have
3 really direct -- in the one or two months
4 afterwards, after -- between start of revenue
5 service and when I stopped being involved in the
6 project, if we hired, maybe it was one or two
7 people. It wasn't a lot of people.

8 CARLY PEDDLE: I'll ask you one more
9 question, and then it might be a good time to take
10 our break.

11 Do you recall anyone from RTM, OC
12 Transpo, any of the other organizations suggesting
13 that Alstom needs a far greater number of staff
14 members on the maintenance team prior to revenue
15 service?

16 JUSTIN BULPITT: Yes. It was -- there
17 was some concern raised by the RTM executives.

18 CARLY PEDDLE: Who in particular?

19 JUSTIN BULPITT: So the person who I
20 remember the most saying it was Mario Guerra, but
21 it may be there were others on the executives that
22 made similar comments. And this would have been at
23 the end of July, beginning of August, that kind of
24 time frame, as we were starting trial running.

25 And also I do remember -- I remember

1 John Manconi making the comment. I just don't
2 remember if it was in August or in September but
3 around that -- or even maybe in early October,
4 around that kind of time frame, he also had made --
5 expressed a statement that there needed to be more
6 Alstom technicians, Alstom maintenance.

7 CARLY PEDDLE: And what was your view
8 as to that suggestion?

9 JUSTIN BULPITT: I think -- I guess I
10 have -- two or three things come to mind. So the
11 first -- the first one is, you know, we had staff
12 for normal activity, which is what I said, and so
13 we were sure -- so, sorry, let me structure my
14 thoughts.

15 The first thing, I don't think that --
16 you know, with the different Alstom entities, so
17 I'm not sure that they really took into account the
18 fact that there was a whole retrofit team from the
19 rolling stock people that was supporting the
20 maintenance. I'm not really sure that that was
21 taken into account because the maintenance activity
22 was in the MSF 2, and all the retrofit activity was
23 in the main MSF.

24 So often, especially in that early
25 stage, they were looking at the maintenance team,

1 and they weren't looking at the wholistic team. I
2 think that was part -- that was my first reaction.

3 My second reaction is that -- that's
4 where I was going to at the beginning where -- you
5 know, we're staffed for normal activity, so in the
6 normal activity in a particular shift, you know,
7 for 34 vehicles, you may only have -- I think we
8 had 20 maintenance technicians roughly speaking.
9 I'm thinking from the top of my head.

10 So 20 maintenance technicians over a
11 seven-day period over three shifts means on any one
12 shift, you might only have three or four
13 technicians and maybe two cleaners.

14 So it's not uncom -- you know, it would
15 be typical to staff, to have two or three
16 maintenance technicians and one or two cleaners at
17 any one shift.

18 So if you can imagine on a day where
19 something has gone wrong and, you know, have this
20 big picture of, you know, some -- a couple of times
21 that John Manconi had made comments, you know, I
22 walked through the Alstom maintenance facility on a
23 Sunday afternoon, and there were nobody there, and
24 it's -- you know, you guys are not serious and
25 blah, blah.

1 You know, that -- I can understand why
2 someone would -- you know, if you're only planning
3 to have two or three technicians and one or two
4 cleaners in a -- in a massive -- you know, it's a
5 big facility when you count the storage shed plus
6 the maintenance facility. It may not look like you
7 have many people there, but that's a normal --
8 that's a normal activity, and it doesn't take into
9 account all the retrofit people.

10 Clearly, on the weekend, we were a bit
11 understaffed, and clearly when there were
12 problems -- and typically in those early days of
13 July and August, problems occurred on a Sunday as
14 everyone is getting ready for the pressure of
15 Monday morning, and that was -- you know, we had to
16 change our staffing shift to kind of reenforce
17 that. There was an element of understaffing.

18 The other thing is -- you know, it's
19 not like you can walk down the street and collect,
20 you know, four, five, six, ten maintenance experts
21 as you walk down the street, especially warranty --
22 you know, especially at this time we're, you know,
23 troubleshooting technicians. Really we're looking
24 for commissioning and warranty technicians, so
25 we're troubleshooting experts.

1 Even if you took somebody from a
2 different project and brought them over to Ottawa,
3 you would still need two or three or four weeks of
4 familiarization on the product in order to be
5 useful.

6 So, you know, you can make the
7 statement at the beginning of August that you don't
8 have enough people. It doesn't mean the next day
9 you're going to be able to find, you know, ten
10 experts in order to come and solve the issue.

11 There. So, again, maybe too much of an
12 answer, but...

13 CARLY PEDDLE: No, that's great. Thank
14 you. Did Alstom, to your knowledge, make any
15 efforts to hire more commission or warranty
16 technicians or to fill those roles given the
17 challenges that were presented early on?

18 JUSTIN BULPITT: Yeah, absolutely.
19 Absolutely. I mean, we tried -- I mean, I would
20 say, you know, maybe some have worked for Alstom
21 now for 26 years, so, you know, Alstom is -- stood
22 behind its project. It stands behind its product,
23 and it brought resources to solve the problems.

24 So maybe I take a step back. The
25 initial plan that we had with the rolling stock

1 group was that the testing -- the testing
2 technicians of the rolling stock would -- and the
3 experts in the rolling stock would then transition
4 to become commissioning and warranty technicians
5 for the maintenance. That was the planned
6 progression.

7 So also, as the build compressed and
8 they were finishing the build and then doing the
9 retrofits, it meant that the people that we were
10 relying on to become commissioning and warranty
11 technicians were still being used to be -- they
12 were test technicians. So that caused a problem,
13 and we were late in staffing because of that.

14 Then as we saw -- and I'm thinking
15 really in terms of the February through May time
16 frame. As we started to have trains go out and
17 align and needing to have warranty and
18 commissioning technicians, we -- our staffing
19 levels -- our staffing plan increased.

20 So we -- I think we initially maybe
21 thought we would need 4, and then we said 8, and
22 then we said 12, and then we said 16. And maybe
23 there was more than 16 by the time we got to
24 revenue service. I don't -- I don't recall, but I
25 remember us going 4 to 8 to 12 to 16 in shift

1 coverage.

2 So we were always looking for more
3 people, and we were looking not only within the
4 rolling stock arena, we were looking outside in the
5 Ottawa region. We were looking across, you know,
6 Ontario. We were looking on other projects.

7 At one time, we brought people in from
8 other Alstom entities within the U.S., from
9 New Jersey, from New Castle. We brought a
10 commissioning and warranty manager across who spent
11 pretty much most of his time from January of 2019
12 through to maybe March of 2020 in Ottawa.

13 So, yes, we responded to the need, and
14 we tried to hire as quickly and efficiently as we
15 could, and when there were specific problems on the
16 different systems like TCMS, like CBS, we hired the
17 people -- we brought the people, the experts from
18 the different rolling entities to kind of solve the
19 issue.

20 So I think we did respond. You know,
21 there was -- there was never a time when I was told
22 you can't hire anybody. The difficulty for me was
23 knowing what the need would be, and then when the
24 need turned out to be really great, it's how
25 quickly can you get them and where can you get them

1 from.

2 CARLY PEDDLE: Okay. I think now is
3 probably a good time to take a break. Why don't we
4 take a break for 15 minutes, so you can come back
5 at about 12 to 3. Does that work?

6 JUSTIN BULPITT: Yeah. Okay.

7 -- RECESSED AT 2:33 P.M. --

8 -- RESUMED AT 2:47 P.M. --

9 CARLY PEDDLE: I just want to clarify
10 one aspect of what you said earlier. So you were
11 talking about access to the track for Alstom
12 employees. You're talking about the actual line;
13 right?

14 JUSTIN BULPITT: Yeah. Yes.

15 CARLY PEDDLE: Was there another -- a
16 test track that you're aware of?

17 JUSTIN BULPITT: No. No. From what I
18 remember, the -- no, it's a short word. I mean,
19 there's the yard that people could use, but, no, on
20 the line, there's not a separate test track.
21 Eastbound I think they were using initially as a
22 testing area, but no.

23 CARLY PEDDLE: At the time of
24 substantial completion, were you aware of a
25 document called the Minor Deficiencies List?

1 JUSTIN BULPITT: No. So let me --
2 yeah, I'm trying to -- no, I mean, there should --
3 I'm aware that there should have definitely been a
4 Minor Deficiencies List. I'm not -- I'm pretty
5 sure we weren't given a copy of it.

6 So maybe that -- you know, that's maybe
7 a clearer answer. Yes, I'm aware there should have
8 been a list. I wasn't -- I'm pretty sure that we
9 didn't get a copy of it.

10 CARLY PEDDLE: Okay. Did you have any
11 role in trial running?

12 JUSTIN BULPITT: I was present during
13 the trial running phase. My role that I -- at
14 least that I saw was to support my team and to kind
15 of run a bit of interference, if you like, with --
16 because, I mean, if you can picture that this is a
17 time of great stress; it's a time of great focus.

18 And so in the -- in the yard control
19 centre, the YCC, where the launch is kind of
20 reviewed, especially at the beginning of the trial
21 running, there would be the normal people. Like,
22 the maintenance supervisor would be there, and the
23 YCC people would be there.

24 But also, at the beginning, there
25 was -- RTM was there. The RTM executive were

1 there. The OLRT executives were there. The City
2 had representatives there. They had advisors who
3 were present.

4 So I saw my role really as being there
5 to kind of train -- take some of the focus, answer
6 some of the questions if there were any from those
7 kind of executives, management and try and give
8 enough space for my team to do what they were
9 supposed to do.

10 CARLY PEDDLE: So you were present
11 during trial running, but you were not tasked with
12 evaluating?

13 JUSTIN BULPITT: No, that's correct.
14 That's correct. I wasn't.

15 CARLY PEDDLE: What level of input did
16 you have as to how -- if any, as to how maintenance
17 issues were characterized during trial running?

18 JUSTIN BULPITT: No -- yeah, I don't
19 think I had any influence as to how the evaluation
20 was made.

21 CARLY PEDDLE: Did you have any
22 awareness that some aspects of trial running were
23 demonstrated through pretrial running?

24 JUSTIN BULPITT: No. No, that's --
25 that's news to me.

1 CARLY PEDDLE: What information was
2 available to you heading into trial running
3 regarding potential issues that may arise during
4 trial running from a maintenance perspective?

5 JUSTIN BULPITT: In terms of -- I don't
6 think anybody was saying, Oh, by the way, you guys
7 need to be aware of this.

8 I mean, obviously from -- in terms of
9 performance, from what I recall, obviously the
10 first starting point was getting the required
11 number of trains out in the morning. That was
12 the -- that was the first and main focus.

13 And I would say generally, if you were
14 able to get all 15 trains out in service, then it
15 was much more likely to be a good day. So that was
16 the first focus, and really that was -- yeah, that
17 was the first objective.

18 So obviously all -- a lot of the issues
19 that were present before were concerns during, so
20 communication of the train, you know, loss of
21 communication, interaction with the VOBC, that was
22 a major concern. The zone controller, that was a
23 concern. The brakes and the doors of the vehicle
24 were a concern.

25 The -- I don't recall if in trial

1 running the GIDS system was actually operating or
2 switched off, but it would have been an area of
3 concern because there were lots of guide or
4 intrusion kind of either errors or, you know, false
5 errors, if you like, false positives. So that was
6 an area of concern. The SCADA was an area of
7 concern.

8 These are more operational concerns
9 rather than actual, you know, concerns about doing
10 maintenance. You know, these -- you know, these
11 are concerns affecting performance.

12 Does that make sense, that distinction?
13 It wasn't like we were expecting to have to repair
14 something. It was more that these were concerns
15 that it wasn't going to work, and we would have to
16 do some troubleshooting or some fixing to make it
17 work.

18 CARLY PEDDLE: So what actions or what
19 was done to prepare Alstom's maintenance team for
20 that troubleshooting?

21 JUSTIN BULPITT: There were two main
22 aspects, I would say. So first of all, there were
23 the things that were -- you know, that stay within
24 our control. So we had -- obviously we had the
25 warranty and commissioning technicians. We have

1 our maintenance crews. We had supervisors. We had
2 management supervision at each shift to kind of
3 support decision-making.

4 We had the retrofit team, and kind of
5 that had a management supervision to deal with any
6 kind of issues that had come up during service that
7 needed to be dealt with overnight.

8 We have the track technicians and
9 the -- you know, the -- all the maintenance
10 technicians there. We train them as much as we
11 can. We make sure we had supervision. We made
12 sure that we had -- they were supported.

13 And then also, OLRTC provided --
14 especially during trial running, they provided
15 additional support. So there was one or two people
16 in Thales who were present in the YCC who were
17 following all the Thales issues and especially
18 during the -- entering into revenue service, there
19 was someone, you know, with our -- we had -- one of
20 our technicians, our kind of star troubleshooters,
21 if you like, he was in the YCC, and one of the
22 Thales star troubleshooters was in the YCC, so they
23 together were kind of monitoring -- you know, they
24 were the ones following the entrance into service
25 and resolving any issues as they were coming up.

1 OLRTC then also -- so they had people
2 on hand to respond to SCADA issues, to respond to
3 network issues.

4 As far as I remember, those were, yeah,
5 the kind of reenforcement of personnel during that
6 trial running time, which went away as soon as we
7 had substantial completion. So the level of
8 support that we had from trial running was
9 different from the level of support that we had as
10 we started revenue service.

11 CARLY PEDDLE: Can you explain a bit
12 more about that?

13 JUSTIN BULPITT: Yeah. So, for
14 example, you know, one -- the interaction between
15 the Thales system and the Alstom system is critical
16 from that standpoint, and so entering into service,
17 there were a lot of -- I don't know if I say
18 problems or potential problems where, you know,
19 loss of positioning, error messages that were
20 coming up, you know, things that are needing kind
21 of review and attention. And as I said, the Alstom
22 and the Thales technicians, they work very closely
23 during trial running.

24 As we entered revenue service, the
25 Thales technician went back to university and

1 wasn't -- so he was a summer student, went back to
2 class, and the Alstom technician then was left to
3 do the troubleshooting for both the Thales piece
4 and the Alstom piece.

5 So in the long-term, yes, that was
6 something that probably Alstom should be doing for
7 sure, but in the short-term, it was very noticeable
8 the level of support to get revenues -- to get
9 substantial completion compared to level of support
10 now revenue service has started.

11 I mean, that was one real clear memory
12 that I had. You know, the network management
13 system, again, as soon as -- after substantial
14 completion, the Alstom technicians really were left
15 to be responsible for the first troubleshooting,
16 and if they didn't have an answer, now they needed
17 to call somebody rather than to actually have --
18 there was somebody physically on hand.

19 CARLY PEDDLE: Was the -- the departure
20 of the Thales technician, was that contemplated?

21 JUSTIN BULPITT: It wasn't expected
22 from us anyway.

23 CARLY PEDDLE: It was not expected?

24 JUSTIN BULPITT: No. No. You know, as
25 I say, it's not like this was a contractual

1 requirement, that we contractually required them to
2 have somebody physically there, but it was a layer
3 of support that suddenly wasn't available and, you
4 know, Thales didn't provide.

5 CARLY PEDDLE: Through the course of
6 trial running, what kind of information were you
7 being provided and from what sources?

8 JUSTIN BULPITT: From what I recall,
9 there would be a -- maybe a day or so lag, and then
10 we would be told that, yes, today was a pass, today
11 was not, or two days would go well. It was a pass
12 yesterday or today, or sometimes I think if there
13 was an issue, we might get some questions on the
14 issue or might get some feedback on something not
15 going well.

16 From what I recall, there was a kind
17 of -- if I remember, there was a 10 o'clock or
18 11 o'clock meeting that RTM and the City, RTG, they
19 would have, and sometimes we would get some
20 indirectly back from RTM that, you know, it was a
21 good meeting. It was going well. There's a
22 problem. But mostly it was that kind of indirect
23 kind of drip feed of...

24 CARLY PEDDLE: Were you able to get
25 information directly from IMIRS?

1 JUSTIN BULPITT: Yeah. Yes. We
2 could -- we did have access to it.

3 CARLY PEDDLE: And what kind of
4 information does that provide you?

5 JUSTIN BULPITT: So if there was an
6 event, there's a kind of -- I'm trying to remember
7 now. It -- so IMIRS would have -- if there was,
8 like, a service order that was created, it would --
9 it would be on IMIRS, and there would be a
10 statement.

11 If there was an event, it would be like
12 a YCC or a TOCC recording of an event. Like, ERO
13 has called to say that he's experiencing overspeed
14 on an LRV, you know, and that information would be
15 on IMIRS, would be recorded, and you'll get to see
16 that.

17 CARLY PEDDLE: Okay. So on any
18 given -- sorry, I didn't mean to cut you off.

19 JUSTIN BULPITT: Also, there would be
20 an IMIRS report that would be -- that you would get
21 the next day. That would have a summary of the
22 kilometres done and actual versus (ph) plan, and if
23 there was an event, you know, like, a failure or
24 loss of kilometres, a reason would be assigned to
25 that loss of kilometres, and we would get that

1 information.

2 CARLY PEDDLE: Were there challenges in
3 performing maintenance during trial running?

4 JUSTIN BULPITT: I'm trying to --
5 nothing -- in terms of a general -- a general
6 statement, I would say no different challenges
7 during trial running than there were before and
8 after trial running.

9 I can't recall a specific event, but we
10 were -- we were consistently, you know, plagued
11 with issues with sanding, issues in terms of the
12 sanding gun, so those kind of typical machinery
13 problems that we had, that we had before and we had
14 after we had during trial running.

15 I would say one thing that also
16 occurred kind of at the same time that I recall is
17 when everybody had said the system was complete,
18 which was somewhere in middle of July, it was
19 almost like a switch was flipped. Everybody said,
20 okay, my trains are complete. My signalling is
21 complete.

22 The next day trial running started, but
23 the City had said that there were -- that the
24 standard of the vehicle -- up until that point, the
25 City hadn't really made any comments on the

1 standard of the vehicle. And what I mean by that
2 were, you know, if doors were -- and I think we
3 had -- there were problems with the locks on the
4 doors, for example.

5 So during that period of time, before
6 trial running, it was okay to have a door that
7 didn't shut properly or didn't lock properly. Now,
8 suddenly for trial running, that was important.

9 So there was -- there was a week or two
10 where all that kind of other stuff needed to be
11 done that -- you know, let's say the system
12 reliability issues were fixed, but there was all
13 the cosmetic, you know, door locking, windows,
14 brake and seat needing recovering, that kind of
15 thing needed to be done.

16 Also at the -- at the same time,
17 because the MSF had only just been handed over also
18 at that point, end of June, July, that kind of time
19 frame, we were faced with a backlog of maintenance,
20 preventative maintenance, so we had to, during the
21 night, recover for the backlog of maintenance.

22 And also, all the vehicles needed heavy
23 cleaning and needed to be ready to be -- no, for
24 revenue service, they needed to be cleaned, in a
25 position to clean.

1 So there was a 21-day clean, so I
2 remember those -- you know, 21-day clean and the
3 monthly or one of the inspections we needed to --
4 we had a backlog that we needed to do those at the
5 same time as any kind of day-to-day maintenance
6 repair or troubleshooting that came up.

7 So those were all events that were
8 occurring at the same time that trial running was
9 occurring.

10 I do remember a couple of events, but I
11 don't remember if they were doing during trial
12 running or just after. There was one time when
13 there was a storm which knocked out a -- something
14 called a WRU, which I don't remember what it stands
15 for, but it affected -- basically it tripped a
16 switch. That meant the zone controller didn't
17 work.

18 And it meant -- it was something like
19 the 4th of September. And it was just -- so it was
20 just after -- it was after substantial completion
21 but before revenue service, and it meant that
22 the -- there was -- like, the whole morning was
23 lost in terms of train activity.

24 And our technicians had to go and
25 understand why this zone controller wasn't working,

1 and in the end, we discovered that there was a --
2 the storm had tripped the switch and that the SCADA
3 didn't recognize that the switch wasn't working, so
4 there was no alarm in the SCADA.

5 The network management system did
6 recognize that it -- there was a problem, but, you
7 know, we didn't look at the right time. It was
8 also in the wrong -- in a bad place, so it
9 wasn't -- it was, like, in an office around the
10 corner.

11 So that was a problem. There was one
12 time when the -- that we lost power because of some
13 problem with the hydro, Hydro Ottawa connection, so
14 we had no power for two -- couple of hours. They
15 were, you know, isolated events like that.

16 CARLY PEDDLE: What was your
17 understanding about what was agreed to between the
18 City and RTG about the system and work left to be
19 done on the vehicles at substantial completion --
20 or, sorry, at revenue service?

21 JUSTIN BULPITT: At revenue service. I
22 know that there was -- during trial running, there
23 was an amendment to allow for only 13 trains to be
24 in service at peak instead of 15 trains.

25 I know at the time that we entered into

1 revenue service, there was still the requirement
2 for spotters to be on the station because the CCTV
3 wasn't always picking up -- the driver couldn't be
4 certain that he was getting accurate readings on
5 the CCTV.

6 I think that there was a time -- and I
7 don't remember if it was -- I think it was during
8 revenue service, but it may have been during trial
9 running where -- or, no, it was -- maybe it was
10 after revenue service when there started to be door
11 issues. There was somebody with a driver to -- if
12 the door was locked out, to be able to manually
13 make sure the door was shut so the driver didn't
14 have to get out of the train.

15 But in terms of -- you know, in terms
16 of, like, a punch list or a deficiency list, I'm
17 not -- again, I'm not sure if there was a specific
18 list at revenue service. I think there was a list
19 at the trial running stage where there was, like, a
20 punch list. Yeah, I recall there was a punch list
21 that the Rolling Stock guys had to complete. I
22 don't remember exactly what was on it.

23 CARLY PEDDLE: You mentioned that there
24 was an amendment from 15 to 13 trains. Did that
25 cause any concerns from Alstom's perspective?

1 JUSTIN BULPITT: Yes. You know, in
2 terms of maintenance, yeah, for sure because the
3 agreement -- in the end, what the agreement meant
4 was that although only having 13 trains wasn't a
5 system event, it meant that we were -- with 13 in
6 peak, we were always going to have a defect, you
7 know, deductions for vehicle availability.

8 It also meant that it -- that any
9 further failures were quickly -- if we started off
10 at 98 percent, you could quickly get to 95 or 94
11 percent when the deductions really mounted up. So
12 that was definitely a concern.

13 You know, I guess from a maintenance
14 standpoint, there's a concern generally that, you
15 know, the -- obviously then there was an
16 expectation that this situation would be resolved
17 quickly to get back to 15, so that puts -- you
18 know, we need pressure on the teams.

19 And I suppose to a degree there's a
20 concern that -- you know, we're expected to -- you
21 know, if that -- that was the -- a relaxation on
22 the trains that had a penalty and what other -- you
23 know, what other relaxation -- what other things
24 were to happen that we were still required to
25 achieve a level of performance, but, you know,

1 there were -- there were other relaxations.

2 CARLY PEDDLE: Describe your view as to
3 the City's approach to the project agreement
4 requirements after the system opened to revenue
5 service.

6 JUSTIN BULPITT: Remembering that I
7 left in November of 2019, so -- yeah, 2019, so it
8 was a bit frustrating really actually and maybe
9 after it grew even more frustrating, but it was --
10 it was a bit frustrating because -- maybe starting
11 off with kind of more anecdotes.

12 There was an extreme amount of pressure
13 and stress from mid-June all the way through to
14 revenue service in order to meet -- you know, be
15 ready regardless, and so it was quite a surprise
16 then as we were all trying to help be ready.

17 But one of the frustrating things was
18 that the IMIRS system -- so up until then, nobody
19 really made a -- you know, we had used IMIRS to
20 find out event defaults let's say -- no, problems
21 and use it for information.

22 Suddenly, from the beginning of
23 September, it was used as a basis to determine the
24 KPMS for -- you know, what was a service failure
25 and a quality failure.

1 You know, so even to the point -- and I
2 know this is maybe before -- sometime before
3 revenue service, so that period of time even from
4 the 1st of September, was before the 14th of
5 September, but suddenly we were on the clock, and
6 we weren't even told that we were on the clock
7 until something like the 4th or -- you know, I
8 remember on the Monday being told, Oh, yeah, by the
9 way, over the weekend, there was substantial
10 completion, so we're now in -- we're now live.

11 And it was then a significant surprise
12 two weeks into September to find -- you know, the
13 City saying to RTM, Oh, by the way, there's -- I
14 can't remember exactly what the number is. Let's
15 say 8, 9, 10, 12, 15 million dollars of penalties,
16 service failure and quality failure penalties that
17 had been racked up under the system that nobody
18 really had been kind of following before that.

19 That was -- yeah, that was a -- that
20 was a shock. And I think my initial feeling was
21 that I expected it to be kind of washed out through
22 common sense, if you like, that it would be obvious
23 that there were -- a lot of the things were -- I
24 mean, I remember some of it was just lack of
25 discipline, lack of awareness of the process.

1 You know, the City had the
2 responsibility to log the defect, so they logged
3 the defect. There was no means of communication
4 that the clock had started. We weren't following
5 to check to see if there were any defects. It
6 could have been closed but not closed on IMIRS, or
7 it was -- no.

8 So there were some really, really minor
9 things that over -- and everything was logged by
10 the City as super -- you know, super urgent, you
11 know, maximum penalty per hour of delay.

12 So if you -- if something was logged on
13 a Friday night at 11 o'clock, and you arrived on
14 Monday morning and found it out, you could already
15 have a quarter of a million, half a million, a
16 million dollars of penalties.

17 And it was just totally out of context
18 of, you know, what was supposed to be very minor
19 things that needed attention suddenly became, you
20 know, more than our revenue for the month of an
21 issue.

22 And at the time, this was just as we
23 were starting revenue service. It was at the time
24 when actually entering into revenue service was
25 quite -- it was quite successful.

1 On the day of revenue service and
2 that -- and the -- and the first week or two after
3 revenue service, everybody was pretty happy with
4 the entry into service. The fact that it was quite
5 a smooth start was positive.

6 So our relationship with the City was
7 quite a positive one in terms of they were happy
8 that we had started. Well, it wasn't -- it wasn't
9 adversarial for those first week or two.

10 So then to be in -- you know, then to
11 have that kind of this is a good first week of
12 starting but by the way you owe us \$10 million of
13 penalties for things that nobody's really been
14 following, it was -- it was difficult.

15 And I guess I had an expectation that
16 they would just be kind of washed out or solved,
17 but they weren't. And then obviously when real
18 problems did start to occur, like, on, you know,
19 the beginning of October when -- you know, when the
20 train failed and the stations -- the buses went
21 away and the stations got overloaded and suddenly
22 we're in the newspaper, you know, in the press and
23 the news and the stations are crowded, and everyone
24 is shouting, and they're storming and walking to
25 the...

1 You know, now there's a real problem,
2 and there's 8 or \$10 million of penalties hasn't
3 been resolved and is -- has suddenly become a heavy
4 weight that is hanging over us now because it's
5 like a negotiation point that you guys have got
6 this major, major penalty, and you're still not
7 delivering in terms of performance.

8 I don't know where -- I feel like I
9 drifted off a bit, but...

10 CARLY PEDDLE: So let me just ask you a
11 follow-up. So what was your understanding of why
12 that shift took place? Is it simply because now
13 you were in revenue service, so you were to
14 perform?

15 JUSTIN BULPITT: Yeah, I mean, I guess
16 contractually, yeah, that was the point. The clock
17 had started, so yes. You know, in one level, it's
18 not unreasonable to say the clock has started, so
19 there was an expectation to perform.

20 I think it was in the context of
21 knowing all the things -- all the issues and, you
22 know, things that we had to overcome in order to
23 get to that point.

24 You know, one -- if it was so
25 important, we should have had -- you know, we

1 should have sat down with the City and with RTM --
2 RTM should have sat down with the City and said,
3 Okay, when we start revenue service or when the
4 clock starts, this is how we're going to record it,
5 and by the way, this is important, and we -- you
6 know, let's all have a common understanding of what
7 are the KPMS, what is a major, what is a minor,
8 what is a medium, how are we going to record it,
9 how are we going to stop it so that we have a clear
10 understanding and level playing field before it
11 starts, not kind of discover after two weeks that
12 this was the process and by the way, you know,
13 you're already in debt for half a year's revenue
14 kind of. That, I think, was the frustrating thing.

15 CARLY PEDDLE: And did you or -- do you
16 have any information, direct information, about
17 others from Alstom approaching, you know, the City
18 or RTM in order to facilitate that kind of
19 discussion?

20 JUSTIN BULPITT: So during September
21 and the beginning part of October, there were
22 discussions between the City and RTM, and I was
23 present with a few of them with Claude Jacob.

24 You know, another problem was that
25 starting -- you know, there are a lot -- there were

1 a lot of service orders, a lot of data that you had
2 to troll through in order to start to make sense of
3 it and combat it.

4 So we spent -- we spent -- and some of
5 my project team spent some time to try and analyze
6 the data and come up with buckets of common themes
7 and then -- sort of buckets of rationalizations of
8 either why we considered this not to be relevant or
9 we considered this to be a construction defect or,
10 you know, yes, we accepted that this was something
11 that we should have done something about.

12 So I was involved in that process, both
13 getting my team to do some analysis and also to try
14 and support Claude when he sat with the City. And
15 I don't remember exactly who in the City he talked
16 to. Yeah, I don't remember his name.

17 CARLY PEDDLE: You mentioned that
18 you -- going into revenue service, you assumed --
19 I'm paraphrasing, so please correct me if I'm
20 wrong, that there would be some understanding that
21 these minor defects would essentially just be, you
22 know, not seen as actual failures, be given a level
23 of -- I think it's referred to as a bedding-in
24 period or I've heard, you know, burn-out for
25 vehicles, that kind of thing, just the idea that

1 the new system is going to have errors.

2 What was the basis of your belief that
3 that was going to be the approach?

4 JUSTIN BULPITT: Yeah, I mean, there
5 is -- maybe if I go back, for sure there's no
6 contractual statement that says there is a
7 bedding-in period and, you know, you're going to
8 get a benefit.

9 I think -- I think for me, if -- the
10 fact that it seemed -- you know, I wouldn't --
11 there was a decision to start revenue service in
12 September. I mean, really when -- you know, for
13 me, if I think through, in mid-June as I was
14 saying, you know, at a point where the systems are
15 not mature, the MSF hasn't properly been handed
16 over, all these things, you know, there's a lack of
17 documentation, there's a pretty decent -- you know,
18 the City has people monitoring all our activities,
19 so it's not -- you know, it's not like we're in a
20 complete vacuum.

21 It's clear that we're not in a very
22 mature, ready condition, and yet all the executives
23 are holding -- there's a decision that there will
24 be revenue service. There will be substantial
25 completion in August. Revenue service is going to

1 be in September. We're going to make this happen.

2 It -- almost, like, you know, maybe
3 naively made me think, well, you know, against the
4 backdrop of this isn't, you know -- this isn't a
5 normal thing to do. Surely there would be an
6 acceptance that if we're going to achieve this, if
7 the City is going to make some deviations, some
8 allowances, some relaxations in order to achieve
9 it, then it seems unfair then to turn around and
10 say, ah, but you haven't -- you know, we've relaxed
11 it so you can achieve service, but now we're going
12 to penalize you because it's not perfect. Well,
13 like, no kidding it's not -- it's not perfect.

14 I think, you know, as uncontractual and
15 maybe naive as that was, I think that was the basis
16 of a lot for...

17 CARLY PEDDLE: Who applies codes or an
18 assessment of severity to work orders at the
19 outset?

20 JUSTIN BULPITT: Right. So at the
21 start at revenue service, that was done by the
22 City. From what I remember, at some point in
23 October or November, there was a push by RTM to
24 take care of that responsibility.

25 And then the City would kind of

1 validate if you, like, agree with the definition,
2 but at the start, it was the City because in
3 September and I think in part of October, I
4 remember, like, 90 something percent of all the
5 orders were major, severe.

6 CARLY PEDDLE: And so since RTM has
7 taken over, you've seen a decrease in the
8 characterization of work orders as severe?

9 JUSTIN BULPITT: I think so. I believe
10 it was taken over more or less at the time as I
11 started to phase out of the project, so I couldn't
12 speak too much, but, yes, my understanding is it
13 should have. That was the expected result anyway.

14 CARLY PEDDLE: Has Alstom, to your
15 knowledge, received any maintenance payments since
16 revenue service started?

17 JUSTIN BULPITT: I understand that we
18 may have got some money in March maybe. We got
19 maybe a few hundred thousand. Of 2022.

20 CARLY PEDDLE: You mentioned some door
21 issues, and I understand this was probably around
22 the time that you were also phasing out.

23 So, you know, please tell me if you're
24 not in the best place to answer these questions,
25 but what's your understanding of the cause of some

1 of the door failures?

2 JUSTIN BULPITT: I mean, so what I
3 remember is that the -- I remember in October that
4 there was a few incidences which were quite public
5 incidences of passengers holding back the doors
6 forcefully or putting up an obstacle in and that
7 overloading the system, causing the door system to
8 fail.

9 So on one level, that was a starting
10 point. You know, passengers -- let's say
11 uneducated passengers who were being rough on the
12 doors. That sounds nice as a vehicle supplier.
13 And I remember there being kind of all this
14 advertising campaign and news things and people
15 saying, No, no, please don't.

16 So that was one aspect. Obviously
17 there was some work done by Alstom since then to
18 reenforce -- to do some modifications to reenforce
19 the system so that it was less likely to fail when
20 it was being pushed -- held back.

21 From what I recall, it had something to
22 do with if there was too much resistance to the
23 motor, that it would trip -- like, trip a switch or
24 trip something so that it would go out of service.

25 Then the driver would be expected to do

1 a reset, would have to do a reset and have to do it
2 in the right order, and if you didn't do it in the
3 right order, then suddenly it was out of service,
4 and that was it. Game over. You would have to go
5 back to the yard and be reset.

6 That was probably an oversimplification
7 dramatically, but, you know, that -- it started
8 with passenger -- some reenforcements either to the
9 sensitive edges or to the motors to stop them from
10 being (indiscernible).

11 CARLY PEDDLE: Were there any other
12 causes or modifications that Alstom made to respond
13 to the door issues that you're aware of?

14 JUSTIN BULPITT: I don't recall the
15 details. I do know that we had -- we had
16 technicians from Faiveley physically on our site to
17 deal with door issues.

18 I think there may have been more than
19 just those two things that I've described, but I
20 don't really know the details enough to comment.

21 CARLY PEDDLE: I don't know if you're
22 going to have any knowledge of this, but do you
23 have any awareness of an agreement to introduce
24 Type 1 braking?

25 JUSTIN BULPITT: I have a small

1 familiarity with that. So what I understand is --
2 let me -- what I understand is that in certain
3 weather conditions, either heavy wind or cold or
4 snow, Type 1 I think refers to the fact that it
5 tells the signalling system to slow down, not to be
6 as aggressive in terms of acceleration and
7 deceleration.

8 So obviously the train is not moving so
9 quickly, so journey time takes longer, so overall
10 in the day, there's less kilometres.

11 CARLY PEDDLE: Do you have any
12 knowledge about the wheel flats that the vehicles
13 experienced?

14 JUSTIN BULPITT: I know that there -- I
15 remember there being a number of wheel flats and
16 also, you know, drivers often saying there's a
17 funny noise and us having to send people on board
18 to check to see if there's wheel flats.

19 I would say wheel flats are not
20 uncommon. It's another example of wheel rail and
21 signalling interface. So on other projects, wheel
22 flats occurs when there's -- let's say something
23 not quite right in terms of that interface.

24 And, again, I'm not -- I'm not super
25 technical on engineering in terms to say exactly

1 why that is the case, but it is something that, you
2 know, is observed on other projects when you have
3 something not quite right.

4 And usually when I mean not quite right
5 is, like, it can be as simple as some kind of
6 software modification that would stop it from
7 happening again, that kind of...

8 CARLY PEDDLE: And that's an
9 integration issue?

10 JUSTIN BULPITT: To me, yes. Yeah,
11 because it's -- I mean, the integration from the
12 wheel and the rail, so the wheel wear and the rail
13 is causing a flat, and then what is causing that
14 wheel wear to be too hard is either -- it's either
15 coming -- it's coming from, let's say, a mismatch
16 between the computer programming the train and the
17 signalling system telling the train what to do.

18 Sorry, you know, as a simple example
19 that I try and help me understand is even to the
20 extent that you could have a situation where the
21 signalling is saying accelerate and then you reach
22 a point where the train says I need to emergency
23 brake, then you have an unusual wear of the wheel.

24 CARLY PEDDLE: Do you have any
25 awareness of the causes of the issues with the

1 constant hold supply or the auxiliary power supply
2 units?

3 JUSTIN BULPITT: I am aware -- at least
4 I have a recollection of there being a number of
5 failures in the early part of 2020. So I remember
6 an event occurring. I don't -- I can't -- don't
7 really have a familiarity of exactly why.

8 CARLY PEDDLE: Okay. I think I just
9 have a few questions for you.

10 Just back on the information sharing
11 piece, did -- to your knowledge, did Thales request
12 information from Alstom that Alstom did not
13 provide?

14 JUSTIN BULPITT: I'm not aware of that.
15 I'm not aware of any information not being
16 provided. I would say it's maybe a little
17 difficult to comment because probably the
18 information would be coming from the rolling stock
19 guys, but I'm not aware of that being the case.

20 CARLY PEDDLE: Can you speak to how
21 maintenance activities are divided between RTM and
22 Alstom?

23 JUSTIN BULPITT: Yeah. I mean, RTM is
24 the maintenance contractor, so then in terms of --
25 and they subcontracted the vehicle maintenance, so

1 all vehicle maintenance activities are ours.

2 Inspection of the track is ours.

3 RTM -- or maybe that has to go the
4 other way around. RTM is responsible for
5 maintaining the stations, and they also -- the
6 equipment in the yard, like the washing machine,
7 the wheel lathe and the yard itself, the yard
8 facilities.

9 CARLY PEDDLE: Sorry, go ahead.

10 JUSTIN BULPITT: No, go on.

11 CARLY PEDDLE: Has the -- let's start
12 first with the yard. Has the responsibility of
13 maintaining the equipment there caused any problems
14 from a maintenance perspective?

15 JUSTIN BULPITT: Oh, yeah, absolutely.
16 And, you know, in hindsight, maybe it's not the --
17 you know, the most -- Alstom relies on a working
18 wheel machine to be able to do its maintenance, and
19 if RTM is responsible to -- you know, if their
20 wheel machine doesn't work, RTM is responsible to
21 fix it, make it work.

22 So when it doesn't work, it's a
23 problem, and it's a problem that affects the
24 maintenance and affects us, and that was a source
25 of contention. Same thing with the sanding

1 equipment, with the washing machine. What else?

2 Those -- even the jacks I think, that
3 we had some difficulty initially with the jacks,
4 the lifting jacks. All those things are needed --
5 there can be work-arounds but are needed and cause
6 problems if they're not available.

7 CARLY PEDDLE: Did that have any -- did
8 the unavailability of any of those pieces of
9 equipment have an impact on the ability to perform
10 maintenance? Can you give me examples?

11 JUSTIN BULPITT: Yeah. So, for
12 example, the wheel -- I mean, the wheel machine is
13 maybe a really visible example. So there's a
14 requirement to do, I think, a 5,000 kilometre
15 inspection, which is really a wheel inspection.

16 And then I think every -- I'm trying to
17 say every three months, maybe three or two months
18 the wheels needed truing on the vehicle.

19 And that can be a whole -- that is --
20 typically on the vehicle maybe is an eight-hour
21 activity, so it takes the vehicle out of service
22 for a day.

23 So when you can imagine that you've
24 only got 17 trains and you need to get 15 into
25 service, having one out for a day is a big deal.

1 So if you have that train out needing
2 to be trued and the truing is not available because
3 the machine is down and you know that you have
4 another LRV that also needs to be trued and now
5 that -- you know, that's in danger, it can be quite
6 quick in a situation where you have trains that are
7 not available for service because they need to have
8 their wheels trued, and you don't have enough --
9 you know, you don't have enough trains to make
10 service.

11 CARLY PEDDLE: Okay. What options were
12 available to Alstom to ensure that that equipment
13 was functional? Was your solution to go to RTM?

14 JUSTIN BULPITT: Yeah. Yeah, I mean,
15 that -- yes, essentially.

16 CARLY PEDDLE: And would those requests
17 be in formal correspondence, formal meetings?

18 JUSTIN BULPITT: Most of the time it
19 would just -- I mean, they're both in the same --
20 you know, maybe even the next cubicle. So most of
21 the times it would be -- they would be -- I -- what
22 I understand is very quickly there needed to be a
23 system where there was a formal -- like, a
24 notification, so there was a record kept of when
25 the machine wasn't working and when people were

1 asked to fix it.

2 But right at the very, very beginning,
3 no, it was just someone lifted the phone or someone
4 went to the cubicle next door and said, Hey, it's
5 not working.

6 CARLY PEDDLE: Did you say now there is
7 the formal system?

8 JUSTIN BULPITT: I believe so. I know
9 that there -- at least I know in October, November
10 they were -- they were implementing one in order to
11 record it.

12 CARLY PEDDLE: While I'm looking over
13 my notes, I'm just going to ask Ms. Young if she
14 has any follow-up questions.

15 EMILY YOUNG: Sure. I have one -- I
16 have a terminology question. You've been speaking
17 about wheel truing, and then you also mentioned a
18 wheel lathe, and I was wondering if those are
19 different or if that's the same kind of thing.

20 JUSTIN BULPITT: Yeah, it's the same,
21 sorry.

22 EMILY YOUNG: Okay. That's helpful.
23 Thank you. And so the point is the machine that
24 you are using for that was not available?

25 JUSTIN BULPITT: Right. Right.

1 EMILY YOUNG: Would that machine be the
2 thing that you would use to fix the wheel flats?

3 JUSTIN BULPITT: Yes, because you --
4 it's a -- probably the right term is a wheel probe
5 filing or wheel re-profiling machine. So, yeah, if
6 there's a wheel flat, the wheel true or wheel lathe
7 cuts the wheel to make it the right dimension.

8 EMILY YOUNG: And then I have a
9 question going back sort of way to the beginning.
10 You mentioned how Alstom maintenance or Alstom in
11 general got involved in the bidding quite late
12 because you were brought in after CAF was rejected.

13 I was wondering if there were any
14 meetings or processes that Alstom missed out on
15 because of joining late.

16 JUSTIN BULPITT: Yeah, I mean, we would
17 have missed out on opportunities to ask questions
18 to the -- to the sponsor. You know, during the --
19 and I'm speaking to other bids that -- you know,
20 often the RFQ stages can be -- I mean, we're doing
21 a bid now on Ontario line where the RFP was
22 released in December of 2020, and we submitted the
23 technical offering in April 2022.

24 So it's like a -- there's a 15,
25 16-month time, and during that time, you have --

1 you know, you have revisions to the RFP. You are
2 able to ask questions through RFIs. You're able
3 to -- there are commercially confidential meetings
4 with the sponsors in order to make presentations
5 about your system, in order to ask questions, to
6 ask for revisions to the project agreement or to
7 the RFP.

8 And as the vehicle supplier and vehicle
9 maintainer, we would have had the ability at least
10 to be present in those meetings and to ask
11 questions and to try and make changes.

12 I mean, I couldn't tell you now off the
13 top of my head exactly, well, you know, if we would
14 have had that opportunity, we would have certainly
15 asked for this change to have been made, but, you
16 know, we missed out on the opportunity to be
17 present and ask those questions.

18 And as a team member, that is quite --
19 you know, it's important. Like, for the Ontario
20 line, we spent a lot of time with the City in --
21 not in full development with the sponsor but as an
22 OMJV, developing the yard and then communicating
23 that to the sponsors and getting feedback from the
24 sponsors about the solution and sometimes asking
25 the sponsors to change the RFP to allow our

1 solution to be accepted.

2 You know, that is something that's the
3 typical project activity that we do -- we're doing
4 on other bids that we -- we didn't absolutely get
5 that chance on Ottawa.

6 EMILY YOUNG: You anticipated my next
7 question, which was, of course, going to be whether
8 you can point to anything that you would have asked
9 to be changed, so I won't ask you that, but that's
10 helpful to know.

11 I have one question about trial
12 running. You mentioned that the way that it worked
13 is, you know, you were mainly responsible for
14 getting the trains on the track in the morning, and
15 then a day or two later, you would receive the
16 results of the day.

17 Were there any results you received
18 that you found surprising, or were you normally
19 able to anticipate whether you'd be a pass or a
20 fail that day?

21 JUSTIN BULPITT: Honestly, I'm not sure
22 that I can rely on my memory to be sure of that,
23 there was something that was surprising or not.

24 I don't think everything was as clear
25 cut, so there may well have been surprises, but I

1 don't -- my memory isn't clear enough to say, Yes,
2 I remember clearly this event. This was a real
3 shock.

4 But it wasn't a -- it wasn't a really
5 binary exercise. And maybe I'm oversimplifying it
6 by saying, you know, our main role was to get the
7 trains out. Obviously during the day, you know, if
8 a train had a problem, that problem affected our
9 performance, and our ability to respond to those
10 problems, you know, were important.

11 So it wasn't just getting them out in
12 the morning, but, no, I don't -- I don't recall
13 anything, but all I remember is that there was --
14 you know, it wasn't like you knew at -- there was a
15 certain point, oh, yeah, that day is a failure or
16 yeah, that day is a -- maybe if it was a failure,
17 if we didn't get any trains out, that would be
18 clear, but it didn't necessarily follow that was
19 easy to -- no.

20 EMILY YOUNG: I wanted to also just go
21 back to the IMIRS system, and you mentioned that
22 you -- it was surprising to you in that you weren't
23 necessarily aware that cataloguing of work requests
24 was going to be done through that system.

25 So my question is would that not have

1 been something that was provided for in your
2 contracts? I guess I'm trying to figure out why
3 you wouldn't have known how that type of
4 information is going to be recorded and passed to
5 you.

6 JUSTIN BULPITT: Yeah, I guess I --
7 maybe I should try and break it from kind of
8 practically and what ended up being contractually.

9 So in terms of -- we would have spent
10 some time. So if you look at the PA, the PA
11 doesn't say there's going to be an IMIRS and this
12 is going to be the basis of something being
13 recorded and recognized and closed. It doesn't.
14 It just says there's a -- you know, this is a
15 standard for a defect, and it doesn't even really
16 say that very well. There are defects, major,
17 minor, medium, and something will be classed as
18 that.

19 So during the preparation for the
20 project, I -- you know, I guess -- you know,
21 clearly IMIRS was chosen as the means to do that.
22 I don't think it was necessarily -- it may have
23 been communicated we're going to record events
24 through IMIRS and -- you know, and that's going to
25 be the way the City knows.

1 Maybe that was mentioned, but there
2 wasn't a specific meeting or process to say, you
3 know, this part of the contract for service
4 failures we're going to record in this way, and by
5 the way, guys, pay attention that there's -- you
6 know, everything is super time sensitive and pay
7 attention that we're only going to go by the -- you
8 know, the time -- you know, the person who opens
9 and closes the orders is the one that knows
10 because -- you know, we together -- so Alstom
11 together with RTM would have arranged the
12 interfaces back in -- would have been something
13 like March or April of 2018 when we talked about,
14 okay, we're going to -- we're going to kind of have
15 interfaces between the Alstom SAP system where
16 we're managing the maintenance of our assets and
17 the IMIRS system.

18 So the two need to talk to each other
19 so that there's a work order, and IMIRS is going to
20 communicate to Alstom to have a work order in
21 Alstom. And we manage our maintenance, we issue
22 materials to the work order, and close our work
23 order, which then closes their work order.

24 That's a pretty convoluted process. It
25 works for us in terms of managing mainten -- asset

1 management and managing maintenance records because
2 it's a standard maintenance management system that
3 we have, so we know how to create work orders and
4 close work orders and make the materials more
5 (indiscernible) work, so it works from that
6 standpoint. It doesn't necessarily work from a
7 time sensitive, you know, KPM management.

8 So I think had we have known -- had we
9 have known at the start that this was going to be
10 the way that KPMs are going to be recorded and
11 measured, no, we would have thought a bit more
12 about how we would have structured the interfaces
13 between IMIRS and our MMS. Does that make sense?
14 I mean, have I explained myself?

15 EMILY YOUNG: I think so. My follow-up
16 question, I suppose, would be who made the decision
17 that IMIRS was going to be used in this way, and
18 were you consulted?

19 JUSTIN BULPITT: I'm -- so the answer
20 is no, we were not consulted. I'm guessing the
21 decision was with RTM. I'm guessing it's RTM
22 suggested this to the City as a way of recording
23 it. I don't know, but I'm guessing that would be
24 the case.

25 EMILY YOUNG: Okay. Carly, over to you

1 if you have more questions.

2 CARLY PEDDLE: Mr. Bulpitt, the
3 Commission has been asked to look into the
4 commercial and technical circumstances that led to
5 the breakdowns and derailments on Stage 1.

6 Are there any areas or topics that we
7 haven't talked about that you think the Commission
8 should be looking into to pursue its mandate?

9 JUSTIN BULPITT: Maybe we've touched on
10 it. The only -- the question I always raise is,
11 you know, when I look back at the steps of the --
12 of the project execution, we had, you know, events
13 in May of 2018 and November of 2018 when revenue
14 service dates were set and missed.

15 Just the timing, why -- I mean, it's
16 still not clear to me why there was a decision that
17 absolutely we would have revenue service start in
18 September, and that decision really would be made
19 in June, July.

20 I mean, that to me -- you know, in --
21 that time frame of June and July was critical in
22 the decision. I think it would be important to
23 know exactly why that decision was made and the
24 rationale.

25 CARLY PEDDLE: Anything else?

1 JUSTIN BULPITT: No, I don't think so.

2 CARLY PEDDLE: The Commissioner has
3 been asked to make recommendations to try to avoid
4 these issues from happening in the future. Are
5 there any specific recommendations or areas that
6 you would suggest he consider?

7 JUSTIN BULPITT: Yeah. Sure. I mean,
8 I think what's clear and if I compare it maybe with
9 other projects is there's a lack of real good
10 definition of the hand-over process, and that, I
11 think, should be reenforced.

12 You know, having a hand-over process
13 from the constructor to the maintainer via the
14 City, having it, you know, much more formalized and
15 clear, I think that would be important because
16 it -- I'm pretty sure it's not in the PA.

17 I'm not -- I don't know for sure
18 because I don't know everything within the RTG
19 group, but I don't believe in the interface
20 agreement it was clear, but even if it was
21 something that was -- that was particular to the --
22 you know, to the project company, it's so
23 important, especially as they have subcontractors,
24 that there's a clear document that everyone can see
25 about this is the -- this is what's going to happen

1 for hand-over.

2 The other area that seemed to be
3 missing that I've seen in other projects is kind of
4 a safety case-type rationale list. This is the
5 standard that shows that the system is safe for
6 operation.

7 It seems to me, again, there's a lack
8 of clarity in terms of the safety case approach.
9 That would mean that people are more arbitrarily
10 able to say, yeah, the system is safe to run.
11 It's -- you know, it's ready, and it's safe to run.
12 Those would be two things.

13 CARLY PEDDLE: Thank you. I'll turn to
14 your counsel to ask if there are any follow-up
15 questions that he wanted to ask you. I'll maybe
16 take that as a no.

17 MICHAEL VALO: Sorry. No, not from me.
18 Thanks, Carly.

19 CARLY PEDDLE: Okay. Thank you. All
20 right. So I think we can stop the recording.

21

22 -- Adjourned at 3:52 p.m.

23

24

25

1 REPORTER'S CERTIFICATE

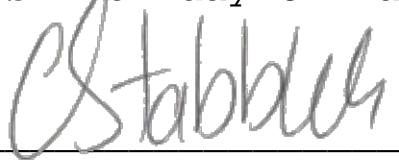
2
3 I, CARISSA STABBLER, Registered
4 Professional Reporter, certify;

5
6 That the foregoing proceedings were
7 held remotely via Zoom videoconference at the time
8 therein set forth, at which time the witness was
9 put under oath by me;

10
11 That the testimony of the witness
12 and all objections made at the time of the
13 examination were recorded stenographically by me
14 and were thereafter transcribed;

15
16 That the foregoing is a true and
17 correct transcript of my shorthand notes so taken.

18
19 Dated this 11th day of May 2022.

20 
21 _____

22 NEESONS, A VERITEXT COMPANY
23 PER: CARISSA STABBLER, RPR
24 COURT REPORTER
25

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