

Ottawa Light Rail Commission

Dr. Sharon Oakley
on Friday, May 13, 2022



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6	OTTAWA LIGHT RAIL COMMISSION
7	OLRT CONSTRUCTORS - DR. SHARON OAKLEY
8	MAY 13, 2022
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14	--- Held via Zoom Videoconferencing, with all
15	participants attending remotely, on the 13th day
16	of May, 2022, 2:18 p.m. to 4:53 p.m.
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1 COMMISSION COUNSEL:

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3 Fraser Harland, Litigation Counsel Member

4 Emily Young, Litigation Counsel Member

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7 PARTICIPANTS:

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9 Dr. Sharon Oakley, OLRT Constructors

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16

17 ALSO PRESENT:

18

19 Judith Caputo, Stenographer/Transcriptionist

20 Gabriel Lavoie, Virtual Technician

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* * The following is a list of documents undertaken to be produced or other items to be followed up * *

INDEX OF UNDERTAKINGS

The documents to be produced are noted by U/T and appear on the following pages: 92:24

1 -- Upon commencing at 2:18 p.m.

2

3 SHARON OAKLEY: AFFIRMED.

4 FRASER HARLAND: Dr. Oakley, as I've
5 said, my name is Fraser Harland, I'm Commission
6 Counsel.

7 I'm going to start by setting out some
8 of the parameters for how this interview will go
9 and then we'll get into some questions after that.

10 So the purpose of today's interview is
11 to obtain your evidence under oath or solemn
12 declaration for use at the Commission's Public
13 Hearings.

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

19 This interview is being transcribed,
20 and the Commission intends to enter this transcript
21 into evidence at the Commission's Public Hearings,
22 either at the hearings or by way of procedural
23 order before the hearings commence.

24 The transcript will be posted to the
25 Commission's public website, along with any

1 corrections made to it after it is entered into
2 evidence.

3 The transcript, along with any
4 corrections later made to it, will be shared with
5 the Commission's participants and their counsel on
6 a confidential basis before being entered into
7 evidence.

8 You will be given the opportunity to
9 review your transcript and correct any typos or
10 other errors before the transcript is shared with
11 the participants or entered into evidence. Any
12 non-typographical corrections made will be appended
13 to the transcript.

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

1 for perjury, in giving such evidence.

2 As required by Section 33 (7) of that
3 Act, you are hereby advised that you have the right
4 to object to answer any question under Section 5 of
5 the Canada Evidence Act.

6 So I'd like to just start by showing
7 you a document. If you can bear with me.

8 Do you recognize this document,
9 Dr. Oakley?

10 SHARON OAKLEY: Yes, I do.

11 FRASER HARLAND: And this is your CV, I
12 take it?

13 SHARON OAKLEY: Yes, it is.

14 FRASER HARLAND: And can you affirm
15 that the CV is accurate and up-to-date?

16 SHARON OAKLEY: Yes, it is.

17 FRASER HARLAND: Okay, thank you.

18 So we'll enter that exhibit as
19 Exhibit 1, madam reporter.

20 EXHIBIT NO. 1: Curriculum Vitae of
21 Sharon Oakley, P.Eng.

22 FRASER HARLAND: And so I see from your
23 exhibit that you're trained as an engineer.

24 Can you tell us a little bit about your
25 background and training?

1 SHARON OAKLEY: Yes. I did my
2 Bachelors of Engineering at the University of
3 Victoria. I went on from there to do a Masters in
4 Advanced Manufacturing of Materials at the
5 University of Hull in the UK.

6 After working for a year in Vancouver
7 here, I went back to UK to do my Doctor of
8 Philosophy, DPhil is what they call it in the UK,
9 at Oxford. And I completed that, the requirements
10 in 2004, went back for the degree in 2005. I was
11 working at SNC-Lavalin at the time when I went back
12 for the confirmation of the degree.

13 That's my education.

14 FRASER HARLAND: Do you have experience
15 in systems integration for trains, for rolling
16 stock?

17 SHARON OAKLEY: Systems integration,
18 nothing more than I've been exposed to is
19 administrating the rolling stock contracts.

20 FRASER HARLAND: So you've worked for
21 SNC for a number of years. How did it work while
22 you were an SNC employee, but working for OLRT-C?
23 Who was your employer at that time, how did that
24 work?

25 SHARON OAKLEY: I'm still employed by

1 SNC-Lavalin, but I'm kind of under a secondment to
2 OLRT for the duration of this project.

3 FRASER HARLAND: Okay. So if we can
4 just speak about your roles at OLRT for a moment.

5 So I see that from September 2013 to
6 March 2014, you assisted in the rolling stock
7 conceptual design review process; is that right?

8 SHARON OAKLEY: Yeah. Yeah, back in
9 the early days, I was requested to come help review
10 the documents, which is what I did. And, yeah,
11 following that they -- I guess my services weren't
12 required at that point, so they replaced me with
13 someone who had moved to Ottawa, and I returned to
14 Vancouver and did various stuff.

15 FRASER HARLAND: Okay. I'll have, as
16 you can imagine, more questions about each of these
17 roles as we go through, but I just want to get a
18 general overview of your roles.

19 So then January 2015 to May 2015, you
20 came back to the project and were assisting with
21 the mechanical design and vehicle interface in the
22 maintenance facility?

23 SHARON OAKLEY: I was working out of
24 Vancouver office with EJV, which is the other joint
25 venture. Helping out with more of the power

1 systems, because that is the working group that
2 I'm, I guess, formally under at SNC. And so I was
3 assisting with the power systems group on vehicle
4 interface to their system.

5 FRASER HARLAND: That was through EJV,
6 that's "Engineering Joint Venture"; is that
7 correct?

8 SHARON OAKLEY: Yes, I believe that's
9 correct.

10 FRASER HARLAND: Okay. And did you say
11 you were doing that role out of Vancouver?

12 SHARON OAKLEY: Yes.

13 FRASER HARLAND: Okay. And then
14 October 2016 to March 2017, you were back on the
15 project, assisting with the administration of the
16 rolling stock subcontract; is that right?

17 SHARON OAKLEY: Yes. I was requested
18 to go back to Ottawa, I was replacing a girl who
19 was leaving to join another company, and her role
20 was vehicle delivery manager, I think is what the
21 title was. Anyway, I was taking her place which
22 was, yeah, basically a more technical role.

23 FRASER HARLAND: And who would you have
24 worked with in that role, the October 2016 to
25 March 2017, primarily, with OLRT-C?

1 SHARON OAKLEY: Primarily, it was
2 Jacques Bergeron and Alex Turner.

3 FRASER HARLAND: Okay. And then from
4 March 2017, you took over in the rolling stock
5 contract management position; is that right?

6 SHARON OAKLEY: That's correct.

7 FRASER HARLAND: And was that the role
8 that Alex Turner had formerly filled before you
9 were promoted into that role?

10 SHARON OAKLEY: Yes, he took that role
11 and he decided to move to RTM, I filled the gap.

12 FRASER HARLAND: And you said "until
13 present"; are you still in that role now?

14 SHARON OAKLEY: Yes.

15 FRASER HARLAND: You are, okay.

16 And does that encompass only Stage 1
17 vehicles, or are you also working on contracts
18 related to the Stage 2 vehicles?

19 SHARON OAKLEY: Yes, just both the
20 Stage 1 and the Stage 2.

21 FRASER HARLAND: Okay. And you
22 mentioned it briefly, but there's obviously some
23 gaps between these roles that you filled in the
24 project.

25 So were you back in Vancouver doing

1 other projects for SNC-Lavalin at the time, or what
2 was happening in the breaks between your role on
3 the project?

4 SHARON OAKLEY: The only real break was
5 between that first set in the early design reviews,
6 and when I was back again full-time in 2016. And
7 the bit of work that I did out of Vancouver for the
8 EJV.

9 Other than that, it was various, I
10 guess you might say minor projects, just assisting
11 the power systems group.

12 FRASER HARLAND: Okay. So I can stop
13 sharing that.

14 And I take it given the start of your
15 involvement in September of 2013, that you wouldn't
16 have had any involvement with the negotiation of
17 the Project Agreement or Alstom's subcontract?

18 SHARON OAKLEY: No, I wasn't involved
19 in the selection of the vehicle.

20 FRASER HARLAND: Okay. And the
21 subcontract with Alstom would have already been
22 executed then by the time you arrived on the
23 project; is that right?

24 SHARON OAKLEY: By that time, yes.
25 Prior to that, I was remotely involved with the

1 review of the proponents, prior to contract award
2 in the RFP stage. But again, I didn't hold a
3 significant role there, I just did some review and
4 sat in on the meetings; that was it.

5 FRASER HARLAND: Did you have any
6 awareness at that time that Alstom became a vehicle
7 supplier for the preferred proponent, or the
8 consortium later on in the procurement that might
9 have been expected? Do you have any knowledge of
10 that?

11 SHARON OAKLEY: No.

12 FRASER HARLAND: Okay. So let's start
13 with your first role, September 2013 to March 2014
14 at the early conceptual design review phase.

15 Can you explain that role for us just
16 in a little bit more detail?

17 SHARON OAKLEY: The concept design
18 review is the initial set of reviews of the design
19 prior to vehicle manufacture. They need to get the
20 design set, because of course later -- the farther
21 they go down, the more difficult it is to change
22 things, the more costly it is, and stuff. So it's
23 better to catch everything, as much as you can,
24 upfront.

25 And the concept design reviews are the

1 very first set of reviews. And it's basically
2 where the vehicle supplier expands on what they
3 proposed in the proposal. So we go through each of
4 the vehicle bits, but just in very good detail.

5 FRASER HARLAND: And who are you
6 reporting to in this role at the time?

7 SHARON OAKLEY: In that role it was
8 Rainer Ibowski.

9 FRASER HARLAND: Okay. So you've said
10 that Alstom would have been giving more detail on
11 the vehicle they had proposed.

12 So would you say that the Citadis
13 Spirit was a new model for Alstom? Was this a new
14 vehicle; would you call it a proven vehicle? How
15 would you describe that?

16 SHARON OAKLEY: The Citadis Spirit is a
17 prototype. They never built them before.

18 FRASER HARLAND: I understand that at
19 least in some respects, it was modelled on the
20 Citadis Dualis or other Citadis models in Europe.
21 So can you just explain that a little bit more for
22 us?

23 SHARON OAKLEY: It's most closely
24 related to the Citadis Dualis, which is a tram
25 train. Meaning that it's intended to go up to

1 100 KPH. Most trams, like low-floor vehicles, are
2 not intended to go that fast. I don't know the
3 maximum speed of their Citadis line, but I do
4 not believe it's anywhere near 100 K.

5 The Citadis Dualis, I believe is
6 designed to go up that high, and so that's why our
7 vehicle is most closely related to that one.

8 FRASER HARLAND: Okay. But you
9 wouldn't consider it a proven vehicle. You'd
10 characterize it as a prototype.

11 SHARON OAKLEY: I would, yes.

12 FRASER HARLAND: And is that partly due
13 to the number of adaptations that needed to be made
14 for North American standards?

15 SHARON OAKLEY: That, the winterization
16 that they did, the change in vehicle suppliers,
17 just, there was a lot of stuff that changed. It
18 was just new on this vehicle.

19 FRASER HARLAND: So did OLRT-C
20 understand that it was getting a prototype instead
21 of a proven vehicle, would you say, at this time?

22 SHARON OAKLEY: I don't know what was
23 understood when they entered into the contract with
24 Alstom.

25 Alstom sold it as a service-proven

1 vehicle. But I don't know, you know, what the
2 thought was within OLRT.

3 FRASER HARLAND: Okay. Can you help me
4 understand that just a little bit more?

5 So Alstom sold it as a service-proven,
6 but upon analysis it looked like a prototype. So
7 what explains the difference there?

8 SHARON OAKLEY: I don't know. Because
9 I know that Alstom did sell it as a service-proven
10 vehicle, but in my own mind, I can't justify it.
11 Just from all, the number of differences, and it
12 just being so different.

13 FRASER HARLAND: So there were North
14 American standards. Were there also standards or
15 specifications set out in the Project Agreement
16 that would have contributed to this being more of a
17 prototype, as opposed to something that can be
18 characterized as service-proven?

19 SHARON OAKLEY: Oh, I expect there are.
20 But I don't think I can name any straight off.

21 FRASER HARLAND: Okay. And the
22 Canadian content requirement, there was a Canadian
23 content requirement in the Project Agreement.

24 Did that have an impact on this sort of
25 novelty of the design that Alstom was presenting?

1 SHARON OAKLEY: I'm not sure if it
2 impacted the novelty. It definitely impacted
3 things like the suppliers that they used, and met
4 by building it in Canada, as opposed to, for
5 instance, at the Hornell site in New York. Setting
6 up a new production facility just for this. You
7 know, it would have fed into -- yeah, issues that
8 are associated with vehicles that are built on
9 brand new facility on top of vehicles being a new
10 design, really.

11 FRASER HARLAND: Right. And during
12 that design phase, I understand that there were
13 design and styling details that were received late
14 from the City.

15 Did that have an impact on your work,
16 or did you see that had an impact on the design
17 phase of the project?

18 SHARON OAKLEY: Any impacts on that
19 would have been done by the time I came back. Like
20 the vehicle was fully designed, they were in
21 production when I came back in 2016.

22 Materially, should it have affected the
23 vehicle production? Personally, I don't think
24 significantly. Alstom used it as a holding point,
25 because they wanted it to be confirmed before they

1 carried on. But did it really affect it, I'm not
2 sure.

3 FRASER HARLAND: Did you have any
4 involvement in assessing the Thales system at the
5 design phase, or were you focused mostly on the
6 rolling stock?

7 SHARON OAKLEY: No, just on the rolling
8 stock.

9 FRASER HARLAND: Are there any other
10 aspects of the design phase that stood out to you
11 as posing challenges to the project or that, you
12 know, looked, just raised concerns or problems for
13 you at that early stage?

14 SHARON OAKLEY: Not back at the concept
15 design, definitely. And when I came back the
16 design was frozen. So, yeah, there's nothing
17 really more from me.

18 FRASER HARLAND: Okay. Was there a
19 plan for systems integration at that early design
20 phase? Was that part of what you would have been
21 looking at?

22 SHARON OAKLEY: No, I don't recall
23 that. No, I don't think so.

24 FRASER HARLAND: In your experience,
25 should that be something that's considered early in

1 the project is accounting for systems integration
2 from the outset of a project?

3 SHARON OAKLEY: I should think so,
4 because everything needs to work together. So the
5 design has to -- all the bits need to be able to
6 interact properly, which would require integration,
7 yeah.

8 FRASER HARLAND: So that's important,
9 but it just wasn't part of the piece that you were
10 looking at?

11 SHARON OAKLEY: Parts that I would see
12 would be the, like the interface documents for
13 things that interfaced with the vehicle, such as
14 like the wheel-rail interface, for instance, or --
15 I mean, of course there was the Thales interface,
16 but it was being held by -- Thales contract is
17 being managed by another person, and so when we
18 looked at the same ICD, the interface control
19 document, you know, I was more focused on the
20 vehicle aspect of it. Jacques was doing more of
21 the integration, you might say.

22 FRASER HARLAND: Okay. And was there
23 any provision for maintenance made at this early
24 design phase?

25 I mean, I can give you an example. For

1 example, we know now that there were issues with
2 the roller bearings that came up later, key centres
3 may have addressed that, but various things like
4 that, that would make maintenance easier or more
5 manageable being reflected in the design; is that
6 part of that early design phase?

7 SHARON OAKLEY: I'm trying to remember
8 just how much the maintenance aspect was involved.
9 It's always a consideration when you're reviewing
10 something that, you know, "can this be maintained?"

11 I'm not remembering specifics.

12 FRASER HARLAND: In terms of the safety
13 case for the vehicles picked the project, is that
14 something that has been considered at the design
15 phase as well, or does that come later in the
16 project?

17 SHARON OAKLEY: Well, safety-related
18 aspects of the vehicle are in the design phase.
19 Like Alstom submitted a suite of safety documents
20 for various subsystems. And so in that respect,
21 the safety of the vehicle is at the design stage.

22 Now the safety case itself, kind of --
23 it came later, as I recall. That it is more during
24 the testing phase when everything was kind of
25 getting pulled together, when the safety case is

1 being written.

2 FRASER HARLAND: Did you have any
3 involvement with the safety case at that stage?

4 SHARON OAKLEY: Only providing
5 documents as requested. And, you know, asking
6 Alstom to provide documents if we didn't have them.

7 FRASER HARLAND: Okay. And then did
8 you have any knowledge of -- you mentioned, you
9 know, the train track interface, for example.

10 Did you have any knowledge of the track
11 specification provided for in the project agreement
12 not being ideal or appropriate for the vehicle that
13 was being selected?

14 SHARON OAKLEY: Not really. Because my
15 understanding is that Alstom kind of designed the
16 wheel-rail interface. The track itself, the
17 alignment is kind of under the track work group.

18 But you typically build the vehicle for
19 the alignment, not the other way around.

20 FRASER HARLAND: Can you explain that
21 for us a little bit more?

22 SHARON OAKLEY: Well, you know, there's
23 certain parameters, such as the tightest curves,
24 and the maximum speeds, and stuff like that, that,
25 you know -- it's my understanding that the track is

1 pretty much -- you could tweak it, but where the
2 alignment goes, is kind of dictated within the
3 alignment boundaries.

4 FRASER HARLAND: What about the sort of
5 material design of the track or the alignment?

6 I mean, presumably there's different
7 types of rail used for different types of vehicles;
8 is that fair?

9 SHARON OAKLEY: I'm afraid that is out
10 of my area, I really don't know. You know, the
11 track people would have to deal with that one.

12 FRASER HARLAND: Okay. And so you left
13 in March 2014, I think you may have already
14 explained this, but what led to your departure at
15 that stage of the project?

16 SHARON OAKLEY: Well, the management at
17 OLRT, they wanted someone who would move to Ottawa
18 and would be there full-time. I was happy to
19 travel in from Vancouver, but I didn't want to
20 move, I didn't want to relocate.

21 And so they found someone who was
22 willing to move, and so they -- yeah, basically
23 dismissed me, so, yeah.

24 FRASER HARLAND: So there was someone
25 taking over your role at that time then?

1 SHARON OAKLEY: Yes. Yihong Xi was her
2 name.

3 FRASER HARLAND: And did you travel to
4 Ottawa during the time that you were on, between
5 September 2013 and March 2014, were you travelling
6 to and from Ottawa? Or was it mostly work that
7 could be done from Vancouver?

8 SHARON OAKLEY: No, I traveled out for
9 all the meetings that they had for the design
10 reviews.

11 FRASER HARLAND: I'm going to switch
12 gears and talk a bit about the location of the
13 manufacturing for the first two LRVs.

14 I think you mentioned this briefly
15 already, but I understand there were changing plans
16 around where those vehicles would be constructed.

17 Can you tell me what the original plan
18 was for construction?

19 SHARON OAKLEY: I recall originally the
20 first two vehicles were supposed to be built in
21 France. But then they decided that probably wasn't
22 the most expedient thing to do, so they decided to
23 build them at their facility in Hornell.

24 And they did build LRV1, the first one
25 in Hornell. But then they decided that, well,

1 maybe they should just move to the MSF early, and
2 build LRV2 at the MSF.

3 They presented a plan that was
4 acceptable to the people at the time at OLRT, and
5 so that was the route they went.

6 FRASER HARLAND: Just for the record,
7 when you were referring to "they" --

8 SHARON OAKLEY: Alstom.

9 FRASER HARLAND: -- you mean Alstom?
10 Yeah.

11 Do you have any more insight on the
12 rationale that Alstom was providing for why they
13 would want to relocate the train manufacturing?

14 SHARON OAKLEY: I forget. I recall
15 reading it in the past, but I really don't
16 remember.

17 FRASER HARLAND: And you said that
18 OLRT-C would have accepted this proposal in order
19 for it to move forward; is that right?

20 SHARON OAKLEY: Yes, I believe so.
21 This is a long time.

22 FRASER HARLAND: I know, fair enough.

23 Do you know if OLRT-C had any demands
24 or requirements around being willing to accept the
25 proposal? Do you have any recollection of that?

1 SHARON OAKLEY: No, I don't.

2 FRASER HARLAND: And do you know if the
3 City and RTG would have had to approve this
4 relocation in manufacturing as well?

5 SHARON OAKLEY: I really don't know. I
6 would assume so, but I don't know.

7 FRASER HARLAND: And any sense of
8 whether Thales would have been consulted at the
9 time?

10 SHARON OAKLEY: No idea, no.

11 FRASER HARLAND: So what implications
12 would the relocation of the manufacturing of these
13 vehicles have for the project? Can you speak to
14 that even in general terms?

15 SHARON OAKLEY: Well, I think that
16 producing a vehicle at a established facility, you
17 have the benefit of like supply chains that are in
18 place, you have experienced personnel, technicians
19 and stuff. The design staff is usually quite
20 accessible.

21 Like I think that things run much more
22 smoothly if you're in an established facility. And
23 also you have all the equipment and stuff that you
24 need there, you know, through the years or however
25 long it's been there, you've just accumulated

1 everything -- all the bits-and-bobs you find that
2 you need as you go along.

3 When setting up a new facility,
4 everything is new. And depending on the size
5 constraints you have, you might have to set up new
6 processes. And, of course, training all new staff.
7 Yeah, it presents difficulties.

8 FRASER HARLAND: So at least in
9 retrospect, do you think it would have been better
10 for the project, if at least those first two LRVs
11 had been manufactured in Hornell?

12 SHARON OAKLEY: Being manufactured and
13 tested offsite. All the type testing, if that
14 would have been done upfront, according to the
15 original plan, I think it would have made quite a
16 difference, yeah.

17 FRASER HARLAND: Can you elaborate on
18 that a little more? Why would that have made a
19 difference?

20 SHARON OAKLEY: Well, the initial tests
21 that are done on the vehicles are called "type
22 tests". It's a suite of tests that are designed to
23 test every aspect of the vehicle, and they're quite
24 detailed. But it's typically only carried out on
25 the first couple of vehicles, so that any changes

1 that they find need to be made, can get fed into
2 the final design before they build the series
3 vehicles. Just because it reduces the number of
4 retrofits and stuff you have to do, if you find it
5 after a bunch of vehicles have been produced.

6 And each of the vehicles, they undergo
7 a set of tests, that's kind of a subset of the type
8 tests. Just to confirm that the vehicle, if it
9 meets these select tests, the vehicle is expected
10 to perform the same, because it's meeting these,
11 that it doesn't have to undergo quite the detailed
12 testing.

13 So it is kind of important that these
14 type tests be done first, because you're proving
15 out the vehicle.

16 FRASER HARLAND: So you're referring to
17 type tests, are those sometimes referred to as
18 validation tests as well?

19 SHARON OAKLEY: Validation tests,
20 qualification tests, they're the same.

21 FRASER HARLAND: And so if I can just
22 try and paraphrase. It's your view that ideally
23 you would want to do type testing or validation
24 testing first and early on the first two LRVs prior
25 to entering into serial construction?

1 SHARON OAKLEY: Yes, yeah, that would
2 be the proper way of doing things in my mind.

3 FRASER HARLAND: Do you know what
4 happened on this project? Is that how -- it
5 sounded like that's maybe not how things proceeded
6 here.

7 SHARON OAKLEY: No, it's not. The type
8 testing went very late, and most of the vehicles
9 produced, if not all, I guess, they're pretty much
10 all produced by the time we finished the last type
11 tests. So, yeah, that's not the ideal sequence of
12 things.

13 FRASER HARLAND: So type testing,
14 validation testing, would it be run in parallel
15 with serial construction and even serial testing?

16 SHARON OAKLEY: Yes.

17 FRASER HARLAND: Do you know what led
18 to the decision to do that? Was it earlier delay
19 in the project, schedule compression? Why would
20 that have been the approach?

21 SHARON OAKLEY: The arrival at the
22 decision to do that did happen before I came back.
23 I understand the scheduling had to do with it, that
24 the vehicles were kind of behind and was to try and
25 speed things up. But the reasoning of all the

1 background information on that, I really -- I just
2 may have read in letters in the past, but I have no
3 recollection of just what those specifics were.

4 I know that it was agreed that Alstom
5 could carry out their type tests in Ottawa on that
6 test track section. I do recall reading a proposal
7 from Alstom that kind of outlined how they'd be
8 able to do it and, you know, to expedite matters as
9 far as timing and scheduling.

10 FRASER HARLAND: Okay. If we could
11 talk about the maintenance facility or the MSF for
12 a moment.

13 So in January 2015 to May 2015, you
14 were assisting with the mechanical design and
15 vehicle interface for the stinger system in that
16 facility; is that right?

17 SHARON OAKLEY: Yes, yeah.

18 FRASER HARLAND: So did that involve
19 being in the facility, are you reviewing documents?
20 What did your work look like for that role?

21 SHARON OAKLEY: I was in Vancouver and
22 it was just looking at documents and proposing
23 things like, for instance, the stinger system on
24 the interfacing with the wayside. It's essentially
25 that they power plug the plugs into the train.

1 And on the Alstom vehicle, it's on the
2 roof. And the location of it, you know, how to get
3 this cable to that location, so that the technician
4 would be able to stick it in to the vehicle,
5 regardless which orientation the vehicle had
6 entered into the maintenance bay, given that this
7 plug on the vehicle, you might say, is kind of on
8 one side of the roof, and they couldn't step on the
9 roof.

10 So it was like proposing a jib crane to
11 be able to swing the plug from one side to the
12 other, so that the technician would be able to grab
13 the cable, and then put it into the receptacle.
14 Just interface, and things like that is what I was
15 looking at.

16 FRASER HARLAND: Having that plug on
17 the roof of the train, is that kind of a
18 peculiarity with LRVs, where things get put on the
19 roof; do I understand that correctly?

20 SHARON OAKLEY: Yeah. Pretty much all
21 the equipment is on the roof. There's no space
22 really anywhere else on the vehicle to have it.

23 FRASER HARLAND: So you weren't there
24 at least at this time, but given all of your
25 experience on the project, are you able to speak to

1 the readiness of the MSF for train construction
2 when Alstom arrived and was needing to begin work
3 on LRV2 and then serial construction for the rest
4 of the vehicles?

5 SHARON OAKLEY: I really don't know,
6 you know.

7 FRASER HARLAND: And if I were to say
8 that because of the new -- because of constructing
9 LRV2 in Ottawa, the MSF needed to be ready earlier
10 than planned, do you have any recollection of that?

11 SHARON OAKLEY: No, I don't. I wasn't
12 involved at that time.

13 FRASER HARLAND: Do you think the MSF
14 was a suitable facility for train construction,
15 given your involvement?

16 SHARON OAKLEY: Not -- it's not
17 preferable, no. One, it's a brand new facility and
18 also its primary function was never meant to be an
19 assembly facility, it was meant to be a maintenance
20 facility.

21 And, yeah, it just never struck me as
22 being a suitable place for it.

23 FRASER HARLAND: Was that related to
24 sort of infrastructure in the building, or is it
25 related to personnel and staffing? What are the

1 specific problems of using a facility like this?

2 SHARON OAKLEY: Oh, goodness. My
3 understanding of the manufacturing aspect of the
4 vehicle is rather limited, you might say. Like
5 setting up a facility and stuff.

6 I'm just considering experience,
7 looking at other vehicle suppliers, you know,
8 facilities that are established and seeing what was
9 in Ottawa, it seemed more like a temporary
10 jury-rigged type of environment that... yeah.

11 FRASER HARLAND: And do you know if
12 Alstom had the workers and the staff that they
13 needed in the MSF, both in terms of sheer number of
14 workers, but also in terms of the experience of
15 workers?

16 SHARON OAKLEY: I think they struggled.
17 Particularly keeping with the workers, I think they
18 had quite a high turnover of staff, staff
19 retention.

20 So I think they were constantly
21 training new people, and the experience just wasn't
22 there amongst the labourers, you might say.

23 FRASER HARLAND: And did you or OLRT-C
24 observe issues coming out of that? Did that have
25 implications for the project?

1 SHARON OAKLEY: I do recall there were
2 instances, but I'm not recalling specifics, that's
3 the problem. Yeah, things like wires put in the
4 wrong place and stuff.

5 I mean, for a train technician, they
6 would know. But if you just told someone to put
7 cable X into port B, or whatever, and they really
8 don't know what they are, and they get the wrong
9 wires shoved in, to them it doesn't mean anything,
10 but it could cause issues. Just things like that,
11 you know...

12 FRASER HARLAND: These are things that
13 are more likely to happen with new staff and a new
14 facility than they probably would be in an
15 established facility with staff who had been
16 building trains for a number of years, type of
17 thing; is that fair?

18 SHARON OAKLEY: I would think so.

19 FRASER HARLAND: Do you know if any
20 concerns around staffing and experience were
21 communicated by OLRT-C to Alstom at this time?

22 SHARON OAKLEY: I don't know.

23 FRASER HARLAND: Do you recall if this
24 issue improved over time? Do you have any sense of
25 it now with Stage 2, are things getting better or

1 does this remain a problem for Alstom?

2 SHARON OAKLEY: I really don't know. I
3 know the product itself hasn't really improved. I
4 mean, they're still seeing the same level of
5 failures, you know.

6 Yeah, but of course Alstom built their
7 new facility for Stage 2, so they went through the
8 same thing of getting new staff in. So, you know,
9 there may have been the similar type of issues.

10 FRASER HARLAND: You said you're
11 experiencing the same number of failures. I mean,
12 now obviously type testing is completed, I would
13 have thought for Phase 2, things would be a little
14 bit more smooth; but are you saying they're not?

15 SHARON OAKLEY: Well, the reliability
16 of the vehicles, you know, are kind of -- it's
17 gradually improving, I've got to give them that, it
18 is gradually improving.

19 But again, after two and a half years
20 of service, it's far below what it should be,
21 really.

22 FRASER HARLAND: Given some of your
23 previous answers and your experience in the MSF,
24 you may not have knowledge of this, but it's my
25 understanding that Alstom experienced numerous

1 power issues related to both the overhead catenary
2 system and stinger power in the MSF; do you have
3 any knowledge of that?

4 SHARON OAKLEY: Not a lot, no.

5 FRASER HARLAND: And no knowledge of a
6 delay of being provided with power or the MSF being
7 equipped with power for Alstom to be able to do its
8 work?

9 SHARON OAKLEY: We received letters
10 from Alstom whenever there was a perceived delay.
11 Did it affect it materially? I don't know.

12 FRASER HARLAND: And issues around
13 blown fuses in the MSF, do you have any
14 recollection of that and what the cause of that may
15 have been?

16 SHARON OAKLEY: Yes, I do recall that
17 there were blown fuses. I'm not really recalling
18 the root cause of it. Other people would have to
19 speak to that one.

20 FRASER HARLAND: Okay. I understand
21 there was an electrical fire or a near miss of an
22 electrical fire in the MSF; do you have any
23 recollection of that?

24 SHARON OAKLEY: No. No, actually.

25 FRASER HARLAND: That's fine.

1 And then you left this role in
2 May 2015, so had you completed your work, or was
3 there someone taking over from you? What did that
4 look like?

5 SHARON OAKLEY: No. What happened at
6 that point was that Alex Turner decided to join
7 RTM. And so I was asked to fill his role to
8 administer the Alstom contract, but no one filled
9 my role after that; I kind of was doing both. Not
10 so much on the technical end, Jacques was the
11 primary one on that, but he was before. It was
12 just, you know, I was down to writing the letters
13 and stuff, as opposed to doing solely what I was
14 doing before. So my workload increased, but other
15 than that, that was about it, yeah.

16 FRASER HARLAND: I want to talk about
17 the contract and that role, but just before doing
18 that. Do you have any knowledge of the readiness
19 of the test track and any difficulties that might
20 have been experienced because of that?

21 SHARON OAKLEY: I don't recall -- it
22 was a number of communications on that, but I'm not
23 remembering the details of it all.

24 FRASER HARLAND: No sense of why it
25 would have been delayed, if it was, and what the

1 implications for Alstom would have been because of
2 that?

3 SHARON OAKLEY: No. I had no idea, any
4 reason -- if it was delayed, like the reasons
5 behind it, I don't recall.

6 I think that although Alstom complained
7 about the track not being ready, I don't think they
8 had vehicles ready to run on it.

9 FRASER HARLAND: Okay.

10 SHARON OAKLEY: That's my recollection.

11 FRASER HARLAND: So in your CV you've
12 got two different positions. One, you were
13 assisting with the administration of the
14 subcontract. And then you took over the contract
15 management position. So what was the difference
16 between those two roles?

17 SHARON OAKLEY: The main one, now I was
18 writing the letters. That was the main things,
19 that I was the one dealing with the contractual end
20 of it, as opposed to just the technical end.

21 FRASER HARLAND: Okay. So before you
22 started writing the letters and taking care of
23 that, what was your role, what did it look like?

24 SHARON OAKLEY: It was more on the
25 technical. All these design documents and stuff

1 that came in, had to go through a review process
2 where all these documents were reviewed by us, but
3 also by the City. And comments would be sent back
4 to Alstom, they would respond. We'd review, are we
5 happy with this response? Can we close the
6 comment, are there further questions?

7 The same thing for the City, are they
8 happy with the responses to their questions? And
9 can those comments be closed?

10 And so a huge chunk of my work at that
11 time was trying to close these questions with the
12 City, to get these design documents closed, really,
13 to finalize that, yes, we're okay with the design,
14 it's done.

15 Even though in fact they were building
16 the trains, it was just this documentation part
17 that needed to be tied up. And, yeah, this is
18 documents, and people like to ignore the documents,
19 but they do need to be dealt with. So that was a
20 lot of our work at that point.

21 FRASER HARLAND: Just so I understand,
22 you would receive documents from Alstom. Were
23 these all Alstom documents that you would have been
24 reviewing?

25 SHARON OAKLEY: Yes. All their design

1 documents, test procedures, test reports, later on
2 when they were doing the testing, yes, all these
3 official documents, yeah.

4 FRASER HARLAND: And you'd review them
5 for OLRT-C and come up with comments as required?
6 You were also receiving comments from the City; is
7 that right?

8 SHARON OAKLEY: Yeah. Now Jacques was
9 the primary reviewer. I mainly was doing the, you
10 might say, the administrative work, the tracking of
11 the comments and -- yeah. I would then be
12 requesting to Alex, like, "please will you send a
13 letter for this?"

14 It was more a case of, once I moved
15 into the role, it actually made it a bit easier,
16 because then I could just send the letter myself,
17 instead of asking for the letter to be sent.

18 FRASER HARLAND: Okay. So were you
19 reporting to Jacques Bergeron in that role?

20 SHARON OAKLEY: No. Actually, I was
21 within OLRT. In the structure, I was actually
22 reporting to David Watt, the commercial director.

23 FRASER HARLAND: But you were working
24 closely with Jacques Bergeron, I take it?

25 SHARON OAKLEY: Yes.

1 FRASER HARLAND: So I understand that
2 Mr. Bergeron was focused on systems integration; is
3 that fair?

4 SHARON OAKLEY: Yeah, and the overall
5 vehicle design. And he was heavily involved with
6 the vehicle in all aspects, really. He was the
7 technical guru, you might say for the project, for
8 the vehicles.

9 FRASER HARLAND: And was there someone
10 dealing with his role and in systems integration
11 from the beginning of the project?

12 SHARON OAKLEY: I can't speculate. I
13 wasn't involved in the project at that time.

14 FRASER HARLAND: Okay. So you don't
15 know if Alstom or Thales would have raised concerns
16 about the lack of a systems integrator at the start
17 of the project and the need for someone to be
18 filling that role?

19 SHARON OAKLEY: Yeah, I have no
20 knowledge of that.

21 FRASER HARLAND: With your work with
22 Mr. Bergeron, would you have gained an
23 understanding or appreciation of how interrelated
24 the rolling stock was with Thales's signalling
25 system?

1 SHARON OAKLEY: I'm trying to recall on
2 just...

3 I mean, of course there was -- I knew
4 that there was interaction integration between the
5 two, there had to be.

6 As far as the details and stuff, I
7 recall sitting in a few meetings, but that's really
8 about all.

9 FRASER HARLAND: So it's my
10 understanding that Mr. Bergeron would have been
11 quite involved with both Alstom and Thales. But
12 you were really helping him just on the Alstom
13 things then, do I have that right?

14 SHARON OAKLEY: Yeah, that is correct.

15 FRASER HARLAND: And you would have had
16 at least some understanding of the Alstom
17 subcontract in your role, I presume?

18 SHARON OAKLEY: Yeah. Yeah.

19 FRASER HARLAND: Did you have any
20 understanding of there being a misalignment between
21 the Alstom subcontract and the Thales subcontract
22 in terms of schedule and requirements?

23 SHARON OAKLEY: No.

24 FRASER HARLAND: Okay. So as an
25 example, it's my understanding that Alstom -- in

1 the Alstom subcontract, it was stated that the
2 interface control document, the ICD from Thales,
3 would be available as of April 26, 2013. So
4 basically right at the beginning of the project.
5 Is that something you're aware of?

6 SHARON OAKLEY: Yes, I am aware of
7 that. And it is, in my mind, a bizarre
8 requirement. Because at that time in the design
9 it's impossible to deliver a final ICD at that
10 time. It's just not reasonable. But because for
11 some reason it made it into the contract, it was
12 always put forward by Alstom as a big deal.

13 FRASER HARLAND: Do you have any
14 understanding of how that ended up in the contract,
15 or what that would have looked like?

16 SHARON OAKLEY: No.

17 FRASER HARLAND: But you're saying
18 that's -- that would be unusual, that's not a
19 typical requirement?

20 SHARON OAKLEY: Yeah.

21 FRASER HARLAND: Can you just explain a
22 little bit more why that's the case?

23 SHARON OAKLEY: Because I don't see how
24 it's possible to have a finalized interface, like
25 an interface specification when the vehicle hasn't

1 been designed yet; like it just doesn't make sense.

2 I mean to a certain extent, the train
3 control system has to have information from the
4 vehicle fed into it as well, like it works both
5 ways, that's why it's an interface. So how can you
6 get a finalized interface from the train control
7 system when the vehicle hasn't been finalized?

8 FRASER HARLAND: And so do you think
9 Alstom would have understood that when the
10 subcontract was executed?

11 SHARON OAKLEY: Well, they should have,
12 being experienced suppliers.

13 FRASER HARLAND: So do you think there
14 may have been some level of just commercial
15 advantage being sought by having a requirement like
16 that in the subcontract?

17 SHARON OAKLEY: It makes one wonder.

18 FRASER HARLAND: And, you know, ideally
19 it sounds like this is something OLRT-C also would
20 have caught at the time of subcontract negotiation,
21 they wouldn't want unrealistic timeframes set out
22 in the subcontract, right?

23 SHARON OAKLEY: Yeah, I don't know why
24 it made it through, really. Whether people thought
25 it wasn't such a significant thing that it was

1 obvious that, you know, it was an anomaly and -- I
2 don't know. I really don't know the reasoning.

3 FRASER HARLAND: In terms of
4 significance, how significant do you think that it
5 is or it was?

6 SHARON OAKLEY: Significant in what way?

7 FRASER HARLAND: Well, you had said
8 they may have just thought it wasn't very
9 significant --

10 SHARON OAKLEY: Oh.

11 FRASER HARLAND: -- so they left it in.
12 Was this --

13 SHARON OAKLEY: I mean significance as
14 far as commercially. You wouldn't think that
15 anyone would play that card because it's kind of
16 obvious that you can't have a finalized ICD when
17 the vehicle hasn't been finalized.

18 FRASER HARLAND: Do you recall any
19 misalignment or any disputes around requirements in
20 the subcontracts?

21 As an example, I understand that Alstom
22 was expecting what could be called a plug and play
23 vehicle onboard control rack; but that's not what
24 was received. Is that something you have a
25 recollection of?

1 SHARON OAKLEY: No, I don't have
2 knowledge of that.

3 FRASER HARLAND: And Mr. Bergeron, as I
4 understand it, organized and attended numerous
5 interface workshops and meetings between Alstom and
6 Thales.

7 Would you have been present at any of
8 these meetings, or have attended them?

9 SHARON OAKLEY: No. I think they were
10 primarily done before I came back. I do recall
11 seeing a list of minutes and stuff for that type of
12 meeting, but I wasn't there.

13 FRASER HARLAND: And did you perceive --
14 and you may not have, because it sounds like Thales
15 was outside of your scope in some ways. But did
16 you perceive tensions between Thales and Alstom as
17 a result of them being competitors?

18 SHARON OAKLEY: I speculate that, you
19 know, some of the friction we see is because they
20 perceive each other as competitors.

21 Which, you know, I didn't see on
22 previous projects where Thales was providing the
23 train control system to another train supplier,
24 like I'm seeing the tensions I see with Alstom.

25 So I can only presume that's because

1 they see each other as their competitors; but, you
2 know, I don't know.

3 FRASER HARLAND: So can you speak a
4 little more to that. You've been on other projects
5 with Thales as the signalling system supplier?

6 SHARON OAKLEY: Yes. I'm speaking
7 about the Canada Line project, where Thales
8 provided the train control system for the vehicle
9 supplied by Hyundai-Rotem. And there appeared to
10 be, from what I could see, very little tension
11 between the two.

12 Thales went to Korea and installed
13 their system -- a rudimentary system, but a system
14 nonetheless -- on Rotem's test track so that they
15 could do testing there.

16 And there really didn't seem to be an
17 issue. But on the other hand, Rotem doesn't
18 produce a train control system, or at least they
19 didn't at that time. So it was a very different
20 dynamic, really.

21 FRASER HARLAND: And you said there was
22 friction on this project. Can you just speak a
23 little bit more about that, please.

24 SHARON OAKLEY: Difficulties getting
25 all the information that's needed. Like, it's like

1 pulling teeth sometimes, you know, trying to get
2 the information.

3 It seems like only when there's
4 failures, that specific item comes out. Oh, they
5 needed that information. Oh, that depended on this
6 other bit. Oh, I didn't even know, you never told.
7 You know, kind of back and forth.

8 They'll provide information on an
9 as-needed basis, rather than just being upfront,
10 "this is everything we need," you know...

11 It's that type of difficulty, you know.

12 FRASER HARLAND: You were feeling like
13 you were having to continuously go back to Alstom
14 for each specific thing, as opposed to just getting
15 what you need at the outset and moving forward on
16 that basis?

17 SHARON OAKLEY: Yeah. It seemed like
18 there was an inordinate number of back and forths.
19 Just trying to iron out details that if the
20 information were provided right at the beginning,
21 it seems like it would have been a whole lot
22 simpler of a process.

23 FRASER HARLAND: Okay. So then to
24 speak of it more about the contract management
25 piece with Alstom. You stepped into the role in

1 March of 2017, taking over the contract management
2 position.

3 But if I understood your earlier
4 evidence, are you saying that you continued to do
5 some technical reviews, but you were also dealing
6 with the commercial side; is that right?

7 SHARON OAKLEY: Yeah, a certain amount.
8 Just, I put more weight onto the commercial -- not
9 the commercial, there was a bit of that, too, of
10 course -- but the contractual part.

11 So I tried to withdraw as much as I
12 could from the technical, just because I was
13 getting weighed down with the other stuff. And of
14 course I had helped with the technical as-needed.
15 I was still dealing a certain amount with those --
16 actually a lot -- with those design review
17 documents getting the questions closed with the
18 City and that.

19 Mainly Jacques would do the heavy bit,
20 and I would do the lighter bit at the end, I might
21 say.

22 FRASER HARLAND: And so did anyone step
23 into the role that you had been in previously, or
24 you were still doing that and then taking on the
25 new role as well?

1 SHARON OAKLEY: Yes, it was primarily
2 just Jacques and me for quite a while, yeah.

3 FRASER HARLAND: And what experience
4 did you have doing sort of more contract management
5 parts of a rail project? Have you done that
6 previously, or was this the first time on the
7 Ottawa LRT project?

8 SHARON OAKLEY: No. On the Canada Line
9 project, it was very similar to what I was doing at
10 the end.

11 My role in the Canada Line did evolve.
12 I was in all aspects from the design reviews, the
13 technical, the -- you know. But at the end, when
14 they were doing the testing and commissioning of
15 those vehicles, the person who was the contract
16 manager, was kind of looking for other projects and
17 stuff. So his time was more consumed there, and I
18 kind of stepped in as his deputy, you might say, as
19 contract manager.

20 That's where my title was changed to
21 rolling stock manager, and that's when I started
22 dealing more with the letter writing and stuff for
23 the Canada Line project. So it's pretty similar to
24 what I was doing on that project from what I'm
25 doing now, at the end.

1 FRASER HARLAND: That was at the
2 testing and commissioning phase of the project that
3 you were --

4 SHARON OAKLEY: I was working on --
5 yeah, for Canada Line during the testing and
6 commissioning phase, I moved into a role that's
7 very similar to what I'm doing now.

8 FRASER HARLAND: And then in the Ottawa
9 project, I guess you would have been doing
10 construction phase through testing and
11 commissioning through to revenue service; you were
12 there for all those stages?

13 SHARON OAKLEY: Yeah. From whatever
14 stage they were in on the production of the
15 vehicles, testing of the vehicles to, you know,
16 Stage 1 and turning service into the Stage 2 build,
17 which I'm still doing.

18 FRASER HARLAND: Okay. Do you think
19 it's important or helpful to have an engineering
20 background to fulfill the commercial side of that
21 role?

22 SHARON OAKLEY: I think it's useful to
23 have a technical background, yeah. Just because
24 when you're writing letters and stuff, you're not
25 just parroting what the technical staff has said,

1 you can actually do a bit of a review yourself and
2 have some input. You know, I may not understand
3 the system in as much detail as Joe, for instance,
4 I'm a long way from Joe. But I do understand what
5 he's talking about and the concepts and, you know,
6 I think it makes it easier, yeah.

7 FRASER HARLAND: But before Alex
8 Turner, your predecessor, didn't have that
9 experience, right? And he was still fulfilling
10 that role; do you think there's an issue there?

11 SHARON OAKLEY: I don't know. I'm not
12 sure what his background was. And, yeah, I really
13 don't know how it influenced his performance.

14 FRASER HARLAND: Okay. So I understand
15 that in the subcontract, Alstom was required to
16 submit a vehicle delivery schedule on a monthly
17 basis, I believe; is that right?

18 SHARON OAKLEY: Yes. At a minimum, it
19 was supposed to be monthly.

20 FRASER HARLAND: Can you explain the
21 vehicle delivery schedule process to me a bit more?

22 SHARON OAKLEY: Could you explain what
23 you're looking for? The delivery process, are you
24 meaning like the --

25 FRASER HARLAND: Sure. The schedule

1 process for the vehicle delivery schedule. For
2 example, I understand that if they weren't seeking
3 changes to milestones, or significant changes to
4 the schedule, it would become the new schedule.
5 But if they were seeking to change milestones, then
6 OLRT-C would have to review and accept that
7 schedule; is that how that process worked? It's
8 that process that I want to understand.

9 SHARON OAKLEY: I mean, the process of
10 how far they can deviate from the schedule before
11 it's reset?

12 Their scheduling kind of hold to it,
13 particularly the milestones are the key ones that
14 are the target. And as long as you're within a
15 certain reasonable number of days, I mean, it's --
16 you know, there's always give and take a bit on
17 these things. You can't always be 100 percent
18 accurate -- you can't peg every date exactly,
19 there's going to be a bit of play.

20 But you shouldn't be diverging
21 significantly off it, because that is the schedule.
22 You're supposed to be holding to it at the end. If
23 the end date is still whatever date, then you're
24 supposed to meet that. And if you're diverting
25 from it, then resources or whatever should be

1 applied to try and get you back on that schedule.

2 FRASER HARLAND: So I just want to make
3 sure I understand that. I think there were a
4 number of versions of schedules that were agreed to
5 between the two parties.

6 So I mean, I think they're referred to
7 as V1, V2, V3, V4; is that right?

8 SHARON OAKLEY: Yes, yeah. There was
9 only a couple of them that were actually accepted
10 as schedules. I'm forgetting which ones.

11 But I know that the V5, which was in
12 effect when I came on, was a recovery schedule, but
13 it was also a re-baseline. They totally reset all
14 the milestones, they reset the schedule you might
15 say. And that one was kind of a, "we have to make
16 this schedule, otherwise we may not make revenue
17 service".

18 So it was kind of a critical recovery
19 schedule to adhere to. And Alstom was doing pretty
20 good to adhere to it, until they had a bunch of
21 quality issues with their bogies, with their bogie
22 suppliers, that caused a huge delay and threw them
23 off the schedule, and they never recovered.

24 They had other issues that came up
25 after that, but that was the big one that started

1 the diversion off that schedule.

2 FRASER HARLAND: So just to unpack that
3 a little bit.

4 When you came out of the project, there
5 was a new baseline schedule called V5?

6 SHARON OAKLEY: Yeah.

7 FRASER HARLAND: And it adjusted
8 various milestones, but it maintained the same
9 revenue service date; is that right?

10 SHARON OAKLEY: I'm forgetting about
11 the revenue service date, if it moved from the
12 version before or not. I don't remember.

13 FRASER HARLAND: Okay. And then I
14 understand that Alstom submitted a number of more
15 proposed schedule adjustments, V7, V8, V9. Can you
16 walk me through that process a little bit?

17 SHARON OAKLEY: Yeah. When Alstom had
18 diverged significantly off the V5 schedule, we were
19 requesting a recovery schedule per the contract.

20 And there was resistance as they wanted
21 it to be an accelerated schedule, which under the
22 contract means that they get to get paid for it.

23 But they did present various versions
24 of a schedule, as you say, the V7, V8, V9. They
25 weren't accepted, we were discussing them. And I

1 think the V9 -- whether it was the V8 or V9, there
2 was one where it was kind of getting to be a
3 desperate measure, if I say that they could
4 possibly make it, if they threw a bunch of
5 resources at it, they could meet the then revenue
6 service date as proposed in a very high level -- it
7 wasn't a very detailed schedule, those V8, V9. It
8 was kind of a single page, presentation page you
9 might say, with lines for each vehicle activities.

10 And it was discussed at the management
11 level. Like Angelo with Alstom, and Eugene Creamer
12 and that level. And I was in attendance at Alstom.

13 They indicated they could make it, we
14 asked them to provide a detailed schedule for that.
15 Because it looked like our last chance to try to
16 get revenue service, and we were never provided
17 with a detailed schedule, it kind of fell off the
18 table. But that's really all I remember about
19 those schedules.

20 FRASER HARLAND: And so those -- you
21 said OLRT-C didn't accept the adjustments in V7,
22 V8, V9.

23 SHARON OAKLEY: No.

24 FRASER HARLAND: Who would have made
25 that decision to reject those schedules?

1 SHARON OAKLEY: I'm not recalling any
2 individuals. The decision process, I'm not
3 recalling, except that it was a case of -- yeah, I
4 just don't remember.

5 FRASER HARLAND: Would those rejections
6 have gone out on letters from you?

7 SHARON OAKLEY: Well, if a letter was
8 written, it was from me. Quite frankly, from today
9 I've written like over 4,000 letters, I just don't
10 remember.

11 FRASER HARLAND: Maybe I can show you a
12 few documents here.

13 So we have here a letter. For the
14 purposes of the record, it's ALS000989.

15 SHARON OAKLEY: I'm sorry, I'm just
16 seeing my CV.

17 FRASER HARLAND: Oh really? Let's try
18 that again.

19 SHARON OAKLEY: Okay, I'm seeing a
20 letter, V7.

21 FRASER HARLAND: If we look at the
22 bottom of the second page.

23 SHARON OAKLEY: Yeah, I definitely
24 signed it. I do kind of recall a table to that
25 effect.

1 FRASER HARLAND: We see on the last
2 paragraph that that's --

3 KARTIGA THAVARAJ: You can take a
4 moment, Dr. Oakley, if you need to read it.
5 Mr. Harland will just scroll through it for you.

6 SHARON OAKLEY: (Witness reviews
7 document).

8 Right. This was about the -- their
9 two-day takt time. And how they figured that if
10 they started it in May, that they'd be able to get
11 done, you know, on the next date, and there would
12 be some schedule that had been started much later.

13 (Witness reviews document).

14 Yeah, so it appeared they suddenly
15 would not be able to meet the revenue service and
16 have all 34 vehicles ready.

17 FRASER HARLAND: Okay. I want to show
18 you just two more documents quickly here.

19 This is ALS0001142 for the record, 3rd
20 of November 2017. I'll just let you review that as
21 well.

22 SHARON OAKLEY: (Witness reviews
23 document).

24 Can you go to the next page?

25 (Witness reviews document). Yeah.

1 FRASER HARLAND: We see on the second
2 page, it says:

3 "As the contractual dates for
4 substantial completion and revenue
5 service are not met, OLRT-C cannot
6 accept this proposed schedule V8 as
7 the new baseline schedule."

8 Is that right?

9 SHARON OAKLEY: Yes.

10 FRASER HARLAND: I just want to show
11 you a third document. This is ALS0001299, 16th of
12 February, 2018. And related to proposed schedule V9.

13 SHARON OAKLEY: (Witness reviews
14 document).

15 The comments basically go through
16 saying what vehicles cannot be done according to
17 their schedule because their schedule is basically
18 saying they're not going to meet the contractual
19 dates as far as like the Project Agreement dates
20 for revenue service, substantial completion of the
21 vehicle part.

22 FRASER HARLAND: Right. And again, we
23 see on the second page of this letter, it says:

24 "This proposed schedule V9 is
25 not compliant with the contractual

1 dates for substantial completion of
2 the vehicle part and revenue service
3 availability and is therefore
4 rejected."

5 Is that right?

6 SHARON OAKLEY: Yes.

7 FRASER HARLAND: Okay.

8 SHARON OAKLEY: That was based on
9 really because the project had not received
10 schedule relief from the City, and so therefore we
11 were not in a position to grant relief on the
12 schedule.

13 FRASER HARLAND: Okay, so that's really
14 what I was wanting to understand is: What's the
15 assessment that goes into rejecting these
16 schedules?

17 What is OLRT-C, what are you looking at
18 in order to determine that a schedule can be
19 accepted or needs to be rejected?

20 SHARON OAKLEY: One of them, you know,
21 it doesn't make sense. A lot of the timeframes
22 they gave didn't make sense.

23 For Stage 1 revenue service, the key
24 dates of course were substantial completion of the
25 vehicle part and RSA. Those were contractual with

1 the City, and my understanding is we had to kind of
2 meet those dates unless we got relief on the
3 schedule.

4 FRASER HARLAND: And having seen these
5 letters, do you have any sense of the
6 decision-making process which was involved? Were
7 you sending the proposed schedules to the executive
8 committee or to someone else for review and then
9 providing the response?

10 Or were you making these decisions on
11 your own? How did that work?

12 SHARON OAKLEY: I'm forgetting who all
13 did look at them. I know I myself reviewed them,
14 but I'm now forgetting details.

15 FRASER HARLAND: And would there be any
16 consideration of delays that OLRT-C might be
17 responsible for, in assessing whether or not to
18 grant a schedule like this?

19 SHARON OAKLEY: Well, part of it. I
20 mean, Alstom's vehicle, it was predecessor to a lot
21 of the other work that had to be done on the
22 system. Without a vehicle we can't carry on
23 systems integration, and Thales' work was dependent
24 upon having vehicles that worked. Like, there's is
25 really the -- we needed vehicles, really.

1 FRASER HARLAND: And were you aware
2 that there was a renegotiation with Thales around
3 December 2017 that extended their revenue service
4 availability date and their subcontract to
5 November 2018? Do you have an awareness of that?

6 SHARON OAKLEY: Well, now I do,
7 definitely. At the time, I don't recall my
8 understanding, no. I think that they would have
9 been entitled to it because their work couldn't be
10 done without vehicles. And so, you know, without
11 vehicles, they would need an extension.

12 FRASER HARLAND: And so the extension
13 that Thales -- given the sort of close interface
14 between the trains and the signalling system, does
15 that have any impact on whether or not relief
16 should be granted to Alstom as well?

17 SHARON OAKLEY: Well, given that the
18 reason Thales was late was because Alstom was late,
19 I've got to think that just purely because Thales
20 was granted an extension means that Alstom should
21 have been granted an extension, too.

22 FRASER HARLAND: But you weren't aware
23 of Thales' being granted an extension at the time
24 that --

25 SHARON OAKLEY: I don't recall knowing

1 at the time. I may have done, I just don't
2 remember. So I really don't know.

3 FRASER HARLAND: And then in February
4 of 2018, the City announced that the May 2018
5 revenue service date was not going to be met. Do
6 you recall that?

7 SHARON OAKLEY: I'm sorry, could you
8 repeat that?

9 FRASER HARLAND: In February of 2018,
10 the City announced that the revenue service date of
11 May 2018 was not going to be met. That that date
12 was just no longer achievable?

13 SHARON OAKLEY: Yeah, I do kind of
14 recall that happening. And I kind of recall that
15 soon after Alstom scheduled something, it bumped
16 like six months. Yeah, I'd have to look back and
17 review, I just don't remember details.

18 FRASER HARLAND: The part that I was
19 trying to figure out is that announcement was made
20 in early February. But we reviewed a letter from
21 February 16th, 2018, rejecting the V9 schedule and
22 this would have been after the City already
23 announced that revenue service availability wasn't
24 going to be met.

25 It looks to me like OLRT-C is trying to

1 hold Alstom to a revenue service availability date
2 that the City has already announced it can't
3 possibly meet, can't possibly be met. I'm
4 wondering why they would do that?

5 SHARON OAKLEY: I'm not recalling if
6 that was the case. I don't -- not having, like,
7 the dates and everything in front of me, I just
8 don't remember. But I don't think knowingly we
9 would be trying to hold Alstom to something like
10 holding back or whatever like that. I don't recall
11 that ever being a part of anything.

12 FRASER HARLAND: Okay. And you spoke
13 to this a little bit, but did you know that if
14 OLRT-C was to miss revenue service that they would
15 be on the hook for liquidated damages to RTG?

16 SHARON OAKLEY: Not specifically. I
17 would expect that would happen, just because that's
18 typical that LDs are linked to stuff like that, but
19 I wasn't directly involved with anything like that
20 through this project, no.

21 FRASER HARLAND: So that didn't have an
22 impact on the decision-making process around
23 whether or not to be granting schedule relief to
24 Alstom?

25 SHARON OAKLEY: I don't recall. I just --

1 yeah, I don't. I don't remember.

2 FRASER HARLAND: But you did say
3 earlier that, unless the City granted OLRT-C
4 relief, OLRT-C was not going to grant relief to
5 Alstom; is that right?

6 SHARON OAKLEY: I said we weren't in a
7 position to. Just being specifically involved in
8 vehicles, I just have trouble speaking to the
9 overall, you know, project schedule and stuff.

10 You know, I fed into it, and/or the
11 vehicles fed into it, and I fed whatever I got, as
12 best I could. But as far as granting relief and
13 stuff like that, not much we were privy to.

14 FRASER HARLAND: And you said earlier
15 that from your perspective, the big delay that
16 Alstom encountered was related to the supply or the
17 quality of its bogies?

18 SHARON OAKLEY: Well, that was an
19 issue, yeah. They pulled a couple of the vehicles
20 out of the assembly line prematurely, and one of
21 the vehicles to date hasn't been finished.

22 FRASER HARLAND: And so I understand
23 that that was an issue as far as schedule was going
24 on. But was OLRT-C aware of infrastructure delays
25 on its part at this time?

1 SHARON OAKLEY: I'm not sure I can
2 speak to delays to infrastructure.

3 FRASER HARLAND: Well, if you just go --
4 so we spoke about late design and styling
5 information from the City, so could that have had
6 an impact on Alstom's scheduling?

7 SHARON OAKLEY: Materially, it
8 shouldn't have. You should be able to carry out a
9 vehicle build without knowing, you know, exactly
10 the LRV's on stanchion, for instance.

11 FRASER HARLAND: What about
12 availability of the MSF or the test track? What
13 kind of impact would that have had on Alstom's
14 scheduling?

15 SHARON OAKLEY: If they're planning to
16 build their vehicles at the MSF, then of course you
17 had a facility available. On the other hand, they
18 were never intending to build the first vehicles at
19 the MSF; they decided they were going to. Only one
20 was built off site, but it was shipped to Ottawa
21 prematurely.

22 The testing of the first two vehicles
23 was not supposed to be done in Ottawa. But they
24 decided to do it anyway.

25 As I also indicated previously, is that

1 the test track, when it did become available, they
2 didn't really have vehicles to run on it anyway.

3 There was a lot of times the test track
4 was available for them to run vehicles, but they
5 had no vehicles to run on.

6 FRASER HARLAND: So it's your view
7 then, none of these issues had an impact on
8 Alstom's ability to move its schedule along?

9 SHARON OAKLEY: I don't think so. But
10 at the same time, I wasn't there at that time.

11 For the testing of the vehicles, when
12 that happened, you know, I came on board when they
13 were building something like LRV -- no, I can't
14 even remember. It was in the early days, but they
15 had vehicles in production.

16 FRASER HARLAND: Writ large, what I'm
17 trying to understand here is that, you know, Alstom
18 clearly was having issues on its part, but it seems
19 like OLRT-C and the City may have also been having
20 issues on its part.

21 And OLRT-C granted schedule relief to
22 Thales, but was not willing to grant it to Alstom.
23 I'm just trying to understand why that is, given
24 that there seemed to have been issues for many
25 parties across the board.

1 And particularly when the City
2 announced RSA wasn't going to happen and relief
3 wasn't granted; it looks a little hard to
4 understand from the OLRT-C perspective?

5 SHARON OAKLEY: Yeah, of course, all
6 parties are going to have issues. No one is
7 defect-free, you might say.

8 Now, Alstom being a predecessor to
9 Thales, it seems evident that Alstom does need to
10 be able to feed Thales in order for Thales to carry
11 out its work.

12 With the City announcing RSA is not
13 going to be met, I do recall that announcement was
14 made. I don't recall what date it was reset to,
15 and I don't recall just what was being discussed
16 with Alstom at the time regarding schedule. I know
17 there's documents out there, there's letters, but I
18 just don't remember them.

19 FRASER HARLAND: Was Alstom ever
20 granted schedule relief after this time? Do you
21 know that?

22 SHARON OAKLEY: There was no official
23 resetting of the schedule, if that's what you mean.

24 FRASER HARLAND: Okay. And why would
25 that be the case, even though it became clear that

1 revenue service wasn't going to be met, to be
2 holding Alstom to sort of an artificial date that
3 had already passed at a certain point?

4 SHARON OAKLEY: From this perspective,
5 you know, it looks rather different than at the
6 time when you're trying to get the trains out to
7 revenue service.

8 It was clear that Alstom has difficulty
9 holding to a schedule, you know. They treat a
10 schedule as something that you baseline, then you
11 diverge from it, you re-baseline, diverge from it,
12 re-baseline.

13 That's not the purpose of the schedule.
14 The schedule is actually to meet a date at the end.

15 And, yeah, how do you keep to a
16 schedule when it's just not being adhered to? How
17 does one -- how do you manage a contract when you
18 have no way to have the schedule being met?
19 There's nothing you can do.

20 I know this has been subject to a lot
21 of debate and I... I'm not sure where we're going
22 with it right now. I really don't know.

23 FRASER HARLAND: That's fair enough.
24 I'm really just trying to understand how all of
25 this works. I mean I guess from OLRT-C's

1 perspective, part of what I'm wondering is,
2 especially once a date is passed, does it even --
3 can it create difficulties even on the OLRT side in
4 terms of knowing what schedule they're working
5 with?

6 I understand you want to hold your
7 subcontractors to a date, but once that date is
8 missed, isn't a new schedule required in order to --
9 in order for OLRT-C to be planning the rest of the
10 project and with its other subcontractors?

11 SHARON OAKLEY: Practically speaking,
12 you do have to have new target dates. But you also
13 try to pull back to the schedule, like, accelerate
14 as you can to try to globally get back at least a
15 certain amount to the target schedule.

16 FRASER HARLAND: I think -- why don't
17 we take a break now. We can come back at around
18 five after four, if that sounds good.

19 -- RECESS TAKEN AT 3:51 --

20 -- UPON RESUMING AT 4:05 --

21 FRASER HARLAND: So Dr. Oakley, I just
22 wanted to make sure I understand. Did you have any
23 role in managing Thales' subcontract?

24 SHARON OAKLEY: No.

25 FRASER HARLAND: Do you know who

1 through OLRT-C was responsible for that while you
2 were managing Alstom's subcontract?

3 SHARON OAKLEY: They had a few
4 different people. For a while there's Frank
5 Fitzgerald. Then they had, oh, I'm forgetting his
6 name. Anyway, it will come eventually. And right
7 now there's a Caroline Slotman. During Stage 1,
8 yeah, it was --

9 FRASER HARLAND: It's okay if you can't
10 remember. We have Mr. Fitzgerald's name; that's
11 helpful.

12 I understand that when Alex Turner was
13 in your position, he was managing both the Alstom
14 and the Thales subcontracts; is that right?

15 SHARON OAKLEY: Yeah.

16 FRASER HARLAND: Do you know why you
17 weren't assigned to work on both, as he had been
18 doing?

19 SHARON OAKLEY: Yeah, I saw it was too
20 much for one person to be handling it properly. So
21 I agreed to take on the Alstom subcontract, but I
22 said I wouldn't do Thales as well; they would need
23 someone else to do that.

24 FRASER HARLAND: Would you have
25 maintained regular contact with the person managing

1 the Thales subcontract? Did you feel it was
2 important for the two of you to be communicating
3 about the two subcontracts?

4 SHARON OAKLEY: As needed, you know.

5 FRASER HARLAND: And just to come back
6 to this point. I know I've already asked you, but
7 would the Thales -- would a change in Thales'
8 schedule be something that would be important for
9 you to communicate with Mr. Fitzgerald, or whoever
10 was in that role about?

11 SHARON OAKLEY: They just needed
12 vehicles for their testing and that was really the
13 key. So they were more interested in Alstom's
14 schedule than -- for me their schedule wasn't
15 really too important because we just needed to get
16 the vehicles to them so they could do their work.

17 They'd tell us when they needed
18 vehicles, so okay, we just needed to get vehicles
19 to them for whenever it was they needed.

20 FRASER HARLAND: Okay. In terms of the
21 interfacing procedure between Alstom and Thales,
22 would you have been the person to receive -- or
23 perhaps this would have been Mr. Turner's time?

24 But would you receive interface control
25 documents from Alstom that would then be sent to

1 Thales; is that the person in your role, who would
2 receive those documents?

3 SHARON OAKLEY: I would receive any
4 document Alstom submitted. If it happened to be an
5 interface control document, then, yeah, I would
6 direct it to the appropriate party.

7 FRASER HARLAND: And were you aware of
8 any delays in those documents moving from Alstom to
9 Thales?

10 SHARON OAKLEY: Not that I can recall.

11 FRASER HARLAND: Okay. Why would an
12 integrated schedule on OLRT-C's part -- was there
13 someone who was trying to keep an overall
14 perspective on all of the schedules and how they
15 fit together?

16 SHARON OAKLEY: Yeah, the project had a
17 scheduler. He oversaw or put together, tried to
18 mesh all the schedules. Regularly when I got
19 schedules I would feed that information to him
20 along with everyone else feeding him their part.
21 That there was a schedule, yeah.

22 FRASER HARLAND: What did that
23 communication with the scheduler look like? What
24 did you communicate to them and what would they
25 communicate to you?

1 SHARON OAKLEY: I would communicate to
2 them any updates to the schedule that Alstom would
3 provide.

4 FRASER HARLAND: And would those be
5 only accepted schedules, or would you be
6 communicating any proposed schedule? What did that
7 look like?

8 SHARON OAKLEY: I recall communicating
9 any schedule that we received from him so he'd be
10 able to see where they were at, yeah.

11 FRASER HARLAND: Okay. I understand
12 that in 2018, there was a fairly significant change
13 in management at OLRT-C; do you recall that?

14 SHARON OAKLEY: Sorry, the date again?

15 FRASER HARLAND: In 2018.

16 SHARON OAKLEY: 2018. Yeah, I think
17 that -- 2018. Yeah, I think that would have been
18 the date where a lot of the management was
19 replaced. Like the project director and the deputy
20 director, a lot of people were shifted around,
21 yeah.

22 FRASER HARLAND: Do you have any
23 understanding of why that happened?

24 SHARON OAKLEY: Not really, no. At the
25 time I may have known, but I just, you know, I

1 don't remember. I don't recall knowing. I know it
2 happened. The mechanisms behind it and that, I
3 don't recall.

4 FRASER HARLAND: Was this something
5 that would have had an impact on OLRT-C's
6 relationship with Alstom; to your knowledge?

7 SHARON OAKLEY: Not that I'm aware.

8 FRASER HARLAND: And I understand that
9 OLRT-C went through a, I think it was at least four
10 project directors in the course of the project.
11 Are you aware of that?

12 SHARON OAKLEY: Yeah. Yeah, there has
13 been a progression.

14 FRASER HARLAND: And is that normal in
15 a project like this? Or what would have been
16 behind that?

17 SHARON OAKLEY: I'm not sure what's
18 normal on a project as far as the replacement of
19 the director. Yeah.

20 FRASER HARLAND: Are you aware of any
21 impact this had on relationships with Alstom or
22 Thales?

23 SHARON OAKLEY: No, I'm not aware that
24 that impacted them significantly. Alstom itself
25 went through a constant series of different project

1 managers themselves, I'm not sure us changing
2 director would influence them too much.

3 FRASER HARLAND: Around 2018, in this
4 time, after the May 2018 revenue service
5 availability date had been missed, was there
6 significant pressure within OLRT-C to get the
7 project done at that point?

8 SHARON OAKLEY: Of course. Our mandate
9 was to get this project up and running, so yeah.
10 The focus was to get the system running as quickly
11 as possible.

12 FRASER HARLAND: And did that lead to
13 the aggressive schedules on the part of OLRT-C to
14 try to make that happen?

15 SHARON OAKLEY: Aggressive in...

16 FRASER HARLAND: Schedules?

17 SHARON OAKLEY: In what way? I mean,
18 the testing regimes still were fulfilled according
19 to what needed to be done.

20 FRASER HARLAND: Was there any what you
21 could call value engineering at the time to try and
22 allow the project to be launched as quickly as
23 possible?

24 SHARON OAKLEY: Not that I'm aware of.

25 FRASER HARLAND: So you just mentioned

1 testing; did you have a role in the testing and
2 commissioning process?

3 SHARON OAKLEY: The vehicle portion of
4 the testing and commissioning is just their --
5 they're testing off of the system itself, the
6 overall system. Not a whole lot, no.

7 FRASER HARLAND: But you were involved
8 in the vehicle testing?

9 SHARON OAKLEY: Well, involved insomuch
10 that I was aware that it was happening and tracking
11 where they were with the vehicle delivery as far as
12 completion of those testing that linked with
13 various, like the milestones, for instance, for the
14 completion of the serial testing, you know, things
15 like that.

16 But as far as details or the carrying
17 out of the tests and stuff, no, I wasn't directly
18 involved.

19 FRASER HARLAND: Would you have had a
20 role in integration testing at all?

21 SHARON OAKLEY: No, that was more the
22 site people.

23 FRASER HARLAND: And I understand
24 Alstom had to undertake a series of retrofits? We
25 talked about this a little bit before in the

1 context of type testing and validation testing.

2 Can you explain your understanding of that?

3 SHARON OAKLEY: Yeah. They had a lot
4 of retrofits. Let's put it that way. Part of it
5 stemmed from them trying to meet that two-day takt
6 time that was referred to. They couldn't complete
7 trains that way. They'd finish trains that looked
8 complete, but they were missing a lot of stuff.

9 They looked complete from the outside,
10 but weren't functional. So they had to go undergo
11 a lot of retrofits just to get them working.

12 And once they were working there were
13 lots of retrofits coming up that needed to be done
14 and there wasn't a lot of transparency as far as
15 what it was. We'd request for, you know, lists of
16 retrofits that had to be done and we'd be given a
17 list, but more stuff would be happening.

18 It's like -- there's more than what's
19 on this list, where is the real list? Then more
20 stuff would come to the surface. Initially, they
21 had what they called their first bucket of list of
22 items to be done. They referred to it as Config 1.

23 Well, when there turned out to be more
24 than was indicated, what is this? That's Config 2.
25 Okay, that's Config 2.

1 Then they're working on this was a part
2 of Config 1 or Config 2. Well, their tracking is
3 that. Then they'd report it as being done, Config
4 2 being done, except for certain items.

5 When it was pointed out to them,
6 Alstom, that is, that, well, how can you say that
7 you are done with this list of Config 2 when it's
8 missing these items?

9 Oh, we're done except for those items.
10 Then they referred to it as Config 2 partial. Then
11 there were other items. It's just a constantly
12 evolving list of retrofits. It was never really
13 clear what was in it or when it was done. It was
14 just, yeah, I never experienced anything like that.

15 FRASER HARLAND: And did "config" means
16 "configuration"; is that --

17 SHARON OAKLEY: I assume that's what it
18 was short for. Essentially, it was a list of items
19 that needed to be retrofitted that was kind of in
20 this bucket list, you might say that they referred
21 to as Config 1 or Config 2. There was a Config 3
22 as well. But anyway...

23 FRASER HARLAND: What was the
24 difference between those categories?

25 SHARON OAKLEY: There was supposed to

1 be kind of a level of importance assigned to it.
2 But then that didn't really seem to hold up. Like
3 things are put in kind of ad hoc into whatever.

4 So it wasn't clear what constituted,
5 like what would go into one bucket and what would
6 go into another. Like I say, it was kind of not
7 very clear.

8 FRASER HARLAND: And then so we have
9 these retrofits. There's also a minor deficiencies
10 list, I understand?

11 SHARON OAKLEY: Yeah, that's kind of at
12 the end of the day when revenue service was
13 achieved; contractually you're allowed to have a
14 list of items that are considered to be minor.

15 Like you can carry on operating the
16 system, you know, say if it can operate, function
17 according to design, etcetera. But there are these
18 items that still need to be complete, but they're
19 considered minor as in it doesn't affect, you know,
20 the overall operation of the system. At the same
21 time, they do need to be done because they're a
22 deficiency.

23 And so these are supposed to be
24 completed within a certain length of time from
25 revenue service. And, you know, due to constraints

1 and whatever of being in an operating facility, you
2 know, it does make it a bit more difficult to
3 complete those items.

4 FRASER HARLAND: So did you have any
5 concerns about what was on the minor deficiencies
6 list or how long it was or anything like that?

7 SHARON OAKLEY: Well, there's a lot of
8 items on it. But it's concerned, as far as, you
9 know -- the only concern is getting them done and
10 that's the hard part.

11 I mean, there's a lot of items. Like I
12 say it's nothing that affects, you know, safety or
13 anything like that. That would not be considered
14 minor if it did.

15 But there's minor items that do need to
16 be addressed. It is just, there's a lot of them.

17 FRASER HARLAND: And what explains the
18 difficulty with getting them addressed?

19 SHARON OAKLEY: Part of it is vehicle
20 availability. Like in order for Alstom to correct
21 them, it means that you have that vehicle not
22 available for service. Like you have to have it in
23 a maintenance bay for however long it takes for
24 them to address those items.

25 And when you're trying to meet service,

1 it's kind of a juggling act between having enough
2 vehicles to maintain service as well as being able
3 to complete these retrofits.

4 You know, if the vehicles -- yeah, as
5 we're getting more Stage 2 vehicles, we're getting
6 enough of the surplus that they're able to address
7 some of these items a bit more easily because they
8 have more vehicles to play with to keep service
9 running.

10 FRASER HARLAND: And what about the
11 term sheet. Are you aware of that?

12 SHARON OAKLEY: The RSA term sheet?

13 FRASER HARLAND: Yeah.

14 SHARON OAKLEY: Yeah, I'm aware that
15 it's -- I'm aware of it, yeah.

16 FRASER HARLAND: Can you explain that
17 for us?

18 SHARON OAKLEY: Well, it was an
19 agreement and I wasn't part of the agreement or
20 discussions with it. But it was an agreement that
21 was reached with the City that -- just to enable
22 revenue service to happen if the conditions in that
23 term sheet were agreed to.

24 FRASER HARLAND: And did that raise any
25 concerns for you, especially related to reliability

1 of the system?

2 SHARON OAKLEY: No concerns really.
3 These were the conditions that were agreed upon by
4 people higher up than me. So this is... just the
5 way it was.

6 FRASER HARLAND: What was your
7 involvement in vehicle acceptance? Was that
8 something that you were involved in?

9 SHARON OAKLEY: Vehicle acceptance
10 being?

11 FRASER HARLAND: The vehicle is being
12 accepted, well, ultimately by the City for service?

13 SHARON OAKLEY: Right. Right at the
14 end, not really. It all happened kind of in a
15 whirlwind and I was very much not a part of it.

16 It was kind of spearheaded, like trial
17 running and all of that, it was kind of run from
18 our side by Matt Slade. I had very little
19 involvement. I knew trial running was happening,
20 but day-to-day I didn't really know what was
21 happening with it.

22 FRASER HARLAND: Okay, that was going
23 to be my next question specifically about trial
24 running.

25 Did you have any involvement in that

1 process?

2 SHARON OAKLEY: Not really, no.
3 Because my understanding is that I would have to be
4 like doing the -- acceptance certificates, the bill
5 of sale and stuff. I didn't know where the
6 vehicles were, like, where they were. How could I
7 do that?

8 At the end of the day I wasn't really
9 involved and everything happened and okay, it's,
10 you know, it's done. I didn't have much
11 involvement, no.

12 FRASER HARLAND: So you didn't have
13 involvement or knowledge of the scoring or changes
14 in the scoring of the trial running?

15 SHARON OAKLEY: No.

16 FRASER HARLAND: Okay. We were
17 speaking of the numerous retrofits and the minor
18 deficiencies list. Did this put additional
19 pressure on maintenance that you saw?

20 SHARON OAKLEY: On maintenance? Well,
21 today the minor deficiencies are not finished.
22 They have a lot of minor deficiencies still to
23 complete.

24 The retrofits, like for Stage 1, those --
25 except for the stuff that was put on the MDL, the

1 minor deficiencies list, all of that would have
2 been done prior to revenue service.

3 I mean, the maintainers weren't doing
4 that before revenue service. They weren't doing
5 their role.

6 FRASER HARLAND: How did that work in
7 terms of the hand off between OLRT-C and RTM as far
8 as the maintenance went? Do you know how that
9 process worked?

10 SHARON OAKLEY: The handover?

11 FRASER HARLAND: Yeah.

12 SHARON OAKLEY: Not really.

13 FRASER HARLAND: You weren't involved
14 in that at all?

15 SHARON OAKLEY: No.

16 FRASER HARLAND: You worked with -- let
17 me rephrase. Is it your understanding that Alstom
18 rolling stock or Alstom construction is different
19 from the Alstom maintenance group that's been --
20 that is working on the maintenance of the trains;
21 are they two different entities?

22 SHARON OAKLEY: Contractually they're
23 supposed to be. Reality is not so. You know, we
24 know they have the same workers working for both
25 sides. You know, there's -- in reality, no. It's

1 like Alstom was --

2 FRASER HARLAND: Can you elaborate on
3 that a little more?

4 SHARON OAKLEY: Well, for instance, we
5 have documents that are signed off by people who
6 are supposed to be under RTM. And we have, you
7 know, there's just kind of a mismatch.

8 Like, it's always, well, which hat are
9 they wearing today? You know, are they maintenance
10 or are they production? Because within Alstom it
11 seems like they don't have definition between, like
12 in reality, between production and maintenance.

13 They have like a test team; and they
14 have a quality team; and a retrofit team; and you
15 know it's that type of thing. Rather than, are
16 they maintenance or are they production?

17 FRASER HARLAND: And are you
18 responsible only for the production subcontract, or
19 do you have any involvement with the maintenance
20 subcontract as well?

21 SHARON OAKLEY: No, I'm just
22 production.

23 FRASER HARLAND: Does that split
24 between the two entities, has it caused issues, or
25 I guess the lack of split that you were just

1 explaining? What issues do we see there?

2 SHARON OAKLEY: Yeah, there are issues.
3 As far as Alstom plays maintenance against
4 production for their advantage.

5 FRASER HARLAND: So what does that look
6 like?

7 SHARON OAKLEY: Well, for instance,
8 it's kind of a silly example, but vehicle goes into
9 the wheel lathes, and Alstom maintenance, their
10 technicians they get the machine running and walk
11 away.

12 Well, they're not there to clear the
13 swarf away. It backs up into the machine; the
14 machine breaks. They write to RTM saying, our
15 machine is broken, come fix it.

16 Alstom production writes us and says,
17 we can't do our work because the lathe is broken.
18 It's like, but it broke because Alstom didn't, you
19 know, take care of the equipment.

20 You know, again, like the train moves
21 like Alstom maintenance was doing the -- the train
22 moves, and, you know, if there was a mishap, then
23 it would be, you know, Alstom production would be
24 writing that it was our fault.

25 But it actually was, you know, it

1 wasn't us who were doing the moves. It was, you
2 know, all through down, flowed through RTM's
3 contract with Alstom maintenance.

4 And, yeah it's just been kind of a
5 difficult split to deal with, having the two
6 supposed entities when they're not really.

7 FRASER HARLAND: All right, okay.

8 In terms of your involvement with
9 Stage 2 of the project, I understand that Alstom is
10 now constructing trains at a facility in Brampton;
11 is that right?

12 SHARON OAKLEY: Yeah.

13 FRASER HARLAND: What implications does
14 that have for the project that you've seen? Is
15 that a positive development? Does it cause
16 problems? Can you say?

17 SHARON OAKLEY: It's mixed. How they
18 went about their move was pretty wrong
19 contractually, but, and also when they did move,
20 there actually wasn't a facility there. It was a
21 brand new thing they were setting up.

22 And they really did cause quite a delay
23 just that process of stopping at the MSF and
24 transferring to their new facility.

25 Now, on the other hand, you know, as

1 the maintenance facility was never meant to be an
2 assembly plant, in particular after revenue service
3 started, you know it's hard to carry on maintenance
4 when you're trying to build vehicles at the same
5 time.

6 So, you know, it is a -- yeah it's a
7 difficult one, as far as there are benefits but
8 it's mainly benefits to the maintainers and Alstom,
9 but not a lot for OLRT.

10 FRASER HARLAND: Okay. Do you know if
11 there was any -- were workers from the MSF moved to
12 Brampton when that facility was set up?

13 SHARON OAKLEY: I think management was.
14 As far as the shop workers, I think they pretty
15 much trained new people.

16 FRASER HARLAND: Was there any concern
17 about experienced workers from the MSF leaving that
18 facility and that creating an experience gap there?

19 SHARON OAKLEY: I think there was
20 concern with OLRT. I can't speak to Alstom.

21 FRASER HARLAND: What was OLRT's
22 concern?

23 SHARON OAKLEY: Well, always with new
24 staff there's a learning curve and stuff. It's a
25 new facility, you know, it's...

1 FRASER HARLAND: And what about
2 OLRT-C's relationship with RTG, did you have a
3 counterpart at RTG, or were you involved with that
4 contractual relationship at all?

5 SHARON OAKLEY: No.

6 FRASER HARLAND: Okay. And then one of
7 the commission's central focuses for its work is to
8 look at the derailments that occurred.

9 You were working, continued to work on
10 the project in August and September of 2021 when
11 the derailments occurred; is that right?

12 SHARON OAKLEY: Yeah.

13 FRASER HARLAND: Do you have any
14 particular knowledge about, let's start with the
15 first derailment in August 2021. What can you tell
16 me about that?

17 SHARON OAKLEY: What can I tell you
18 about it? Well, there is a catastrophic failure;
19 the wheel came off. Yeah, the root cause analysis
20 has been in progress. There isn't a final report
21 yet. But it's being, you know, Alstom produced a
22 preliminary just shortly ago. It's being reviewed.

23 FRASER HARLAND: Given your role on the
24 design phase of the project, now that we've -- you,
25 know, in retrospect, do you see any design issues

1 that may have contributed to that derailment?

2 SHARON OAKLEY: We have our
3 wonderances, but again, it's -- but it's... yeah.

4 I mean, nothing that we could relate
5 back to the early design review days, you know
6 there's stuff that has come up since then that we
7 kind of wonder about, but I don't think there was
8 any indication back in the design stage of factors
9 that might contribute to this here.

10 FRASER HARLAND: What about the second
11 derailment, what was your knowledge of that, or
12 your involvement in that?

13 SHARON OAKLEY: I didn't have
14 involvement but knowledge of it was such that it
15 was related to the first one, to the extent that
16 there was inspections that need to be carried out
17 on the vehicles as a result of that derailment.

18 And in those, one of those inspections,
19 when the vehicle was being readied to get back on
20 the main line, that one of the gearboxes was not
21 properly torqued down by the worker. And when it
22 was running on the track, the gearbox came off, and
23 that caused the derailment.

24 FRASER HARLAND: And so this was an
25 Alstom quality control issue from your perspective?

1 SHARON OAKLEY: Yeah.

2 FRASER HARLAND: Just while I review my
3 notes here, I want to see if my colleague,
4 Ms. Young, has any questions for you.

5 EMILY YOUNG: Sure. Dr. Oakley, I just
6 wanted to go back to something you told us about in
7 relation to the design phase.

8 You mentioned that you had received
9 documents in designs from Alstom, and OLRT-C would
10 comment on them, and the City would comment as
11 well.

12 I was wondering if you can tell us who
13 at the City you were dealing with at this time?

14 SHARON OAKLEY: At that time, it was
15 mainly Eric Dube and Leyla, what's her last name
16 now? I'm forgetting her surname. And there was
17 Matt Pieters. I think those were the key, the
18 primary ones.

19 EMILY YOUNG: It sounded like, based on
20 what you've said before, that the City was
21 sometimes slow to respond on these issues to deal
22 with closing out comments; is that accurate?

23 SHARON OAKLEY: Yeah, yeah, there was a
24 certain amount where that happened. It happened on
25 both sides. Alstom sometimes was very slow in

1 responding, actually quite a lot Alstom was slow in
2 responding. So it kind of worked both ways.

3 EMILY YOUNG: Did that have any
4 implications more broadly, or is that just
5 something you're waiting for kind of as a
6 formality?

7 SHARON OAKLEY: Part of it was
8 formality. I think more the effect became more
9 critical when we were doing the test procedures and
10 reports. We were trying to finalize reports or
11 procedures, and yeah, for not getting the questions
12 responded to timely it's, like, well, the tests
13 need to progress and...

14 EMILY YOUNG: Would those reports
15 you're mentioning, who would those go to?

16 SHARON OAKLEY: You mean like at the
17 City or...

18 EMILY YOUNG: Yeah, who were you
19 reporting to? Who were you submitting the reports
20 to?

21 SHARON OAKLEY: We would submit it to
22 the City in general to their SharePoints. I guess
23 it wasn't SharePoints, it did have a similar type
24 system, though for document sharing, that we'd
25 submit the documents to and they would send

1 comments back. Like I say, it was typically Eric
2 Dube and Leyla who wrote comments.

3 EMILY YOUNG: Were there any other --

4 SHARON OAKLEY: I don't really recall
5 that this was really holding up -- like, tests or
6 stuff were still happening even though there were
7 outstanding comments. I don't think tests were
8 being held up because of it.

9 EMILY YOUNG: Okay. And were there any
10 other aspects of your work in which you were
11 interacting with the City?

12 SHARON OAKLEY: No.

13 EMILY YOUNG: Just to follow up on
14 something you were speaking about before. You
15 mentioned that OLRT-C had a scheduler? I just
16 wanted to confirm the name of that person if you
17 remember.

18 SHARON OAKLEY: Oh goodness, I don't
19 remember. Yeah, I don't remember. I can picture
20 him in my mind, but I don't remember.

21 EMILY YOUNG: Maybe your counsel would
22 be able to find out that information for us?

23 U/T KARTIGA THAVARAJ: Yes, we can do that.

24 EMILY YOUNG: Okay, thanks.

25 That's all I've got in the way of

1 follow-up questions.

2 FRASER HARLAND: Just a couple of other
3 topics for me. We talked a bit about testing and
4 commissioning, but I just wanted to go back to
5 that.

6 Was it your understanding that the
7 schedule for testing and commissioning was
8 compressed by that stage of the project?

9 SHARON OAKLEY: I'm not aware that it
10 was compressed, no.

11 FRASER HARLAND: Okay. And are you
12 familiar with the idea of a soft start or a sort of
13 gradual ramp up to service? Is that something that
14 would have been beneficial on this project?

15 SHARON OAKLEY: It may have been. I
16 don't -- I don't know. I had no input into
17 something like that.

18 FRASER HARLAND: As far as testing and
19 commissioning goes, you really -- I mean, what was
20 your role, I guess as far as that went, just so I'm
21 clear on that?

22 As testing and commissioning, Alstom
23 was doing that, you were continuing to monitor
24 their schedule and their performance?

25 What exactly -- what role were you playing

1 during that phase of the project?

2 SHARON OAKLEY: Yes, just trying to
3 monitor -- I see that, you know -- I guess for the
4 testing and commissioning, are you referring to the
5 overall system, like the OLRT system?

6 FRASER HARLAND: I guess from your
7 perspective specifically the testing and
8 commissioning of the vehicles?

9 SHARON OAKLEY: Of the vehicles.
10 Because once the serial testing was done, then they
11 were pretty much doing testing for the OLRT system,
12 so they're doing the site acceptance tests and the
13 Thales integration tests and stuff like that.

14 So, you know, my involvement was --
15 really wasn't too much involved with the testing so
16 to speak. Like I -- it was more tracking the
17 retrofits and how they were as far as having
18 vehicles available for the various areas.

19 FRASER HARLAND: Understood.

20 SHARON OAKLEY: They're producing
21 vehicles way late, you know. And trying to get
22 the -- doing the serial testing, while they're
23 still doing the integration and stuff concurrently.

24 And, you know, while I wasn't involved
25 directly with what was happening on site, you know,

1 I was involved in a more higher level, I guess, as
2 far as seeing, trying to track where everything was
3 as far as vehicles being where they were in
4 readiness, availability and stuff like that.

5 FRASER HARLAND: And after -- well, I
6 guess in the lead up to revenue service
7 availability and after, did you have any role in
8 meeting OLRT-C's deliverables to RTM or Alstom
9 maintenance; was that part of your job at all?

10 For example, I believe that a number of
11 maintenance manuals were required by RTM and
12 Alstom. Did you have any role in getting those
13 manuals from one party to the other? Was that part
14 of your role?

15 SHARON OAKLEY: No. No, those were
16 actually deliverable under the maintenance
17 contract.

18 FRASER HARLAND: And do you have
19 knowledge of something called the operational
20 restrictions document?

21 SHARON OAKLEY: Operational
22 restrictions document? No.

23 FRASER HARLAND: Okay. So just before
24 closing, the Commission's mandate is to look into
25 the commercial and technical circumstances of the

1 breakdowns and derailments that affected the Stage
2 1 of Ottawa LRT system.

3 Are there any topics or areas that we
4 haven't discussed today that you think are
5 important for the Commission to be aware of?

6 SHARON OAKLEY: Not that I can think of
7 straight off.

8 FRASER HARLAND: Okay. And the
9 Commissioner is also asked to make recommendations.
10 Do you have any suggestions for specific
11 recommendations with respect to the project?

12 SHARON OAKLEY: Yeah, I'm not sure what
13 type of recommendations they'd be.

14 FRASER HARLAND: Maybe around
15 reliability of the system, the operations of the
16 breakdowns and derailments, you know, about how
17 these can be prevented, how the systems can be
18 improved; all that kind of stuff.

19 If there are recommendations that you
20 could suggest, the Commissioner would certainly be
21 interested in hearing them.

22 SHARON OAKLEY: I'm not sure I have
23 anything to add there.

24 FRASER HARLAND: And just one more
25 question is, do you feel like there are lessons

1 learned for OLRT-C or even more broadly between
2 Stage 1 of the project and Stage 2 of the project?

3 SHARON OAKLEY: Lessons learned. I
4 think that fundamentally, like, the vehicle choice
5 wasn't right for the Ottawa environment. That that
6 was what was required.

7 FRASER HARLAND: Can you elaborate just
8 a little bit on what you mean when you say that?

9 SHARON OAKLEY: Well, knowing the
10 Ottawa climate, for instance, a low-floor vehicle
11 is not a very good choice, you know. And yeah,
12 there's -- I think the vehicle selection probably
13 was -- could have been handled differently.

14 FRASER HARLAND: There is issues that
15 an LRV would encounter here that another type of
16 vehicle would be able to handle better; is that
17 what you mean?

18 SHARON OAKLEY: I think that the
19 operation requirement that the vehicle is on in its
20 system -- like a typical high floor metro vehicle
21 probably would be more suited than a low-floor
22 tram.

23 And in reality with how the Ottawa
24 system is, with a dedicated guideway and station
25 platforms and everything, there really was no need

1 to have a low-floor vehicle, which is really meant
2 for in street running and ease of stepping from a
3 road and that sort of thing.

4 As a far as winterization of the
5 vehicle, it's easier to winterize a high floor
6 vehicle rather than a low floor because you have
7 more space, for instance, under the vehicle.

8 You also have, you know, larger bogies,
9 so you have more, larger wheels, for instance, that
10 are just meant to take higher speeds than those
11 little tram-type bogies.

12 Yeah, it's...

13 FRASER HARLAND: Understood. Any other
14 lessons learned, if we want to put it that way,
15 that you can speak to.

16 SHARON OAKLEY: I think from OLRT's
17 perspective at least, I'd be thinking twice again
18 before teaming with Alstom, really.

19 FRASER HARLAND: Can you elaborate on
20 that a little more just so we're clear as to why
21 you're saying that?

22 SHARON OAKLEY: They've just been quite
23 a difficult supplier to deal with, very
24 contractually and commercially oriented. Not very
25 good at delivering a quality vehicle on schedule.

1 Yeah.

2 FRASER HARLAND: Any other points
3 there?

4 SHARON OAKLEY: Points there is --

5 FRASER HARLAND: In terms of lessons
6 learned then, I mean OLRT is continuing in this
7 Stage 2, so there may be very practical things that
8 they're doing differently, I don't know.

9 We're just trying to get a sense of
10 what could have been done differently, what is
11 being done differently, what might have made the
12 project better from your perspective; those kinds
13 of things.

14 SHARON OAKLEY: Yeah, I'm not sure I
15 can add too much more. It's nice to say, "Well, if
16 we had the -- getting to schedule and stuff".

17 But, you know, I don't think that would
18 change anything as far as where we are with vehicle
19 delivery and practically speaking. I don't really
20 have more to add.

21 FRASER HARLAND: Ms. Young, do you have
22 any other questions?

23 EMILY YOUNG: No.

24 FRASER HARLAND: Ms. Thavaraj?

25 KARTIGA THAVARAJ: No questions, thank

1 you.

2 FRASER HARLAND: We can go off record.

3

4 -- Concluded at 4:53 p.m.

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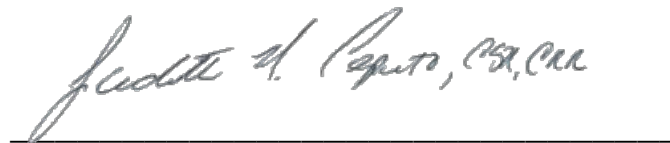
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3 I, JUDITH M. CAPUTO, RPR, CSR, CRR,
4 Certified Shorthand Reporter, certify;

5 That the foregoing proceedings were
6 taken before me at the time and place therein set
7 forth; at which time the interviewee was put under
8 oath by me;

9 That the statements of the presenters
10 and all comments made at the time of the meeting
11 were recorded stenographically by me and
12 transcribed at my direction;

13 That the foregoing is a Certified
14 Transcript of my shorthand notes so taken.

15
16 Dated this 16th day of May, 2022.

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