

Ottawa Light Rail Commission

CLAUDE JACOB
on Monday, May 16, 2022



77 King Street West, Suite 2020
Toronto, Ontario M5K 1A1

neesonsreporting.com | 416.413.7755

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OTTAWA LIGHT RAIL COMMISSION
RIDEAU TRANSIT MAINTENANCE - CLAUDE JACOB
MAY 16, 2022

--- Held via Zoom Videoconferencing, with all participants
attending remotely, on the 16th day of May, 2022, 2:00
p.m. to 5:00 p.m.

COURT REPORTING AND CAPTIONING INC.
416-413-7755

1 COMMISSION COUNSEL:

2 Christine Mainville, Co-Lead Counsel Member

3

4 LITIGATION COUNSEL:

5 Emily Young

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7 PARTICIPANTS

8 Claude Jacob: Rideau Transit Maintenance

9 Kartiga Thavaraj: Paliare Roland Rosenberg Rothstein LLP

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11 ALSO PRESENT:

12 Christophe Bolduc, French Court Reporter

13 Gabriel Lavoie, Virtual Technician

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1 --- Examination began at 2:01 p.m.

2 CLAUDE JACOB: ASSERTED.

3 CHRISTINE MAINVILLE: So, Mr. Jacob, the
4 purpose of the interview today is to obtain your sworn
5 testimony to be used in the context of the Commission's
6 public hearings.

7 CLAUDE JACOB: Hum hum.

8 CHRISTINE MAINVILLE: This will be a
9 collaborative interview in the sense that my colleague,
10 Maître Young, may step in to ask questions.
11 If time permits, your lawyer may also ask questions at the
12 end of the interview.

13 CLAUDE JACOB: Hum hum.

14 CHRISTINE MAINVILLE: The interview is
15 transcribed and the Commission intends to introduce the
16 transcript into evidence at public hearings of the
17 Commission, either at the hearings themselves or before the
18 hearing begins in a procedural order.

19 CLAUDE JACOB: That's fine.

20 CHRISTINE MAINVILLE: The transcript will
21 be posted on the Commission's website with any corrections
22 made after the transcript is entered into evidence.

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1 The transcript with any corrections made will be shared
2 with Commission participants and their counsel on a
3 confidential basis before being entered into evidence.
4 You will be given the opportunity to review the transcript
5 and correct any errors before it is shared with other
6 participants or put into evidence. Any errors that are not
7 typographical, minor, will be attached to the
8 transcription.

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

20 And under section 33(7) of the same Act, you are advised
21 that you have the right to object to answering any
22 question under section 5 of the Canada Evidence Act.

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1 CLAUDE JACOB: That's fine.

2 CHRISTINE MAINVILLE: That's fine, thank
3 you. So can you start by explaining your role and position
4 in the early stages of the Ottawa Light Rail project?

5 CLAUDE JACOB: Yes. So, I was hired on
6 February 20, 2018 as the General Manager of Rideau Transit
7 Maintenance, RTM, as the General Manager, with the mandate
8 to lead the maintenance group eventually, once the train
9 went into service, and I left those duties on November 10,
10 2019.

11 CHRISTINE MAINVILLE: O.K. And before you,
12 was there another General Manager?

13 CLAUDE JACOB: Yes, there was at least one
14 other one there, whose name I forget right now, but I was
15 replacing someone else.

16 CHRISTINE MAINVILLE: Okay, did you... did
17 you overlap for a while or... No?

18 CLAUDE JACOB: No, the other Manager
19 before me had left there a few months before I arrived.

20 CHRISTINE MAINVILLE: O.K., O.K. And
21 before being replaced by Mr. Guerra?

22 CLAUDE JACOB: Yes, Mario Guerra.
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1 CHRISTINE MAINVILLE: O.K. And was there
2 any overlap at that point?

3 CLAUDE JACOB: No, not at all

4 CHRISTINE MAINVILLE: O.K.

5 CLAUDE JACOB: No.

6 CHRISTINE MAINVILLE: Do you know why?
7 Maybe I can ask you why you left first.

8 CLAUDE JACOB: So, what is the first
9 question?

10 CHRISTINE MAINVILLE: The reason for your
11 departure.

12 CLAUDE JACOB: The reason I left, I was
13 told, was for business reasons.

14 CHRISTINE MAINVILLE: O.K. And do you know
15 how long after that he arrived?

16 CLAUDE JACOB: Mr. Guerra?

17 CHRISTINE MAINVILLE: Yes, Mr. Guerra.

18 CLAUDE JACOB: I would only tell you, from
19 what I could understand through the newspapers and the
20 media, so not very long after, since RTM was already in
21 service at that time, but I would not have a more precise
22 answer.

23 CHRISTINE MAINVILLE: O.K. And he didn't
24 have another position at RTM before, so he came from
25 outside?

1 CLAUDE JACOB: Yes, Mr. Guerra was a Vice-
2 President at SNC-Lavalin.

3 CHRISTINE MAINVILLE: O.K.

4 CLAUDE JACOB: And he was my immediate
5 supervisor there, back when I was... when I was at RTM.

6 CHRISTINE MAINVILLE: Okay, so he was
7 involved before in...?

8 CLAUDE JACOB: Yes, he was quite aware of
9 the... the progress of the project.

10 CHRISTINE MAINVILLE: O.K., O.K. And who
11 else was on your team at that point in time at maybe the
12 director level or the... or the management level?

13 CLAUDE JACOB: There was a team there, the
14 whole structure of RTM, obviously, reported to me. I had a
15 senior manager, Tom Pate, who was responsible for
16 overseeing maintenance in the broadest sense of the term,
17 i.e. vehicles, rail infrastructure and stations. So all
18 maintenance there was directly under Tom. And so, Tom,
19 with an assistant, was making sure that those mandates
20 were carried out, so especially the Alstom mandate, which
21 had almost... over 80% of our maintenance activities that
22 had been allocated to Alstom in a maintenance contract,
23 there, that had been allocated before my arrival between
24 the consortium partners.

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1 CHRISTINE MAINVILLE: O.K. And you, were
2 you employed by one of the companies of the consortium?

3 CLAUDE JACOB: Yes, SNC-Lavalin.

4 CHRISTINE MAINVILLE: By SNC. And maybe
5 you can tell us a little bit about your experience,
6 actually, I don't think we have your CV?

7 CLAUDE JACOB: Yes, I sent it.

8 CHRISTINE MAINVILLE: Yes?

9 Kartiga, if you can look into that in the
10 meantime.

11 So, can you just tell us a little bit
12 about your experience?

13 CLAUDE JACOB: Professional?

14 CHRISTINE MAINVILLE: Professional, yes.

15 CLAUDE JACOB: Civil engineer by training.
16 So, I started my career in construction in 1994, I worked
17 for different contractors until 1996 when I joined the
18 Agence métropolitaine de transport, different positions,
19 which led me to the position of Head of Infrastructure,
20 Railway Facilities.

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1 So, I'm just going for the key positions
2 of interest, so this is a position I held for about four
3 years, after which I moved to the North Shore for a mining
4 company called Quebec Cartier Mining, which became
5 ArcelorMittal, where I held several positions, up to that
6 of General Manager, Railway, Port and Handling. So, that
7 took place, there, roughly, from 2007 to 2014.

8 After that, I worked in various executive functions for
9 railway construction companies before joining RTM.

10 CHRISTINE MAINVILLE: O.K. So, you have
11 rail experience, particularly on light rail, do you have
12 any experience in that before?

13 CLAUDE JACOB: Uh... in construction, yes,
14 not in operation. The trains in Montreal were heavy
15 trains, like those in Toronto, for example, GO Transit, so
16 they were passenger trains.

17 The... on the North Shore, the mining
18 company, of course, was freight trains, and in the various
19 construction functions, there, for the rail construction
20 companies, they had built some rail facilities for light
21 trains.

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1 CHRISTINE MAINVILLE: O.K. And in terms of
2 interviewing, did you...you mentioned, I think, maybe
3 experience, do you have any experience in that?

4 CLAUDE JACOB: Yes, well, all my years at
5 the Agence métropolitaine de transport, first of all, were
6 with the responsibility for maintenance of the rail
7 facilities and the stations and the park-and-ride lots. So
8 when we talk about rail infrastructure, we are talking
9 about tracks, signals, bridges and buildings, etc. So, I
10 held similar positions on the North Shore for the mining
11 company before becoming General Manager where I was also
12 responsible for the maintenance of the rolling stock in
13 that position. And so, these were the two main functions,
14 there, which totalled probably not far from a dozen years,
15 there, or fifteen, depending on how you count them, in
16 railway maintenance.

17 CHRISTINE MAINVILLE: Is there a
18 significant difference between maintaining light rail
19 systems versus heavy rail?

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1 CLAUDE JACOB: Not in the broad
2 engineering principles, the design concepts are different,
3 there, for example, in light rail, you have slopes and
4 curves that are much tighter, because that's the nature of
5 light rail. But in terms of the forces involved and the
6 engineering concepts, there, and the maintenance
7 practices, it's basically the same.

8 CHRISTINE MAINVILLE: O.K. So, can you
9 explain what the state of affairs is when you get to 2018?

10 CLAUDE JACOB: Yes

11 CHRISTINE MAINVILLE: Especially for RTM.

12 CLAUDE JACOB: Hum hum. So when I arrived,
13 in February 2018, we were still trying to go live for May
14 2018, which was the original commissioning date. So, it
15 was still... there was a certain excitement, I would say,
16 where people, there, saw the amount of work that remained
17 to be done and everyone was still trying, there, a little
18 strangely, to keep the date of May 24, there.

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1 So, what it did for RTM was that,
2 although we were far from having all our employees, all
3 that, at that time, and even less from having received the
4 trains and the infrastructures, there, because all that
5 was under construction, we had to try to find a way to be
6 ready to go into service if ever all that materialized on
7 May 24. So, it was a bit of an imposing and intense race.

8 So, obviously, that didn't happen. In the
9 weeks that followed, there was an official announcement,
10 there, to postpone this commissioning date, and I forget
11 the other dates, there, but the... the commissioning was
12 postponed, there, three times, there, from memory.

13 CHRISTINE MAINVILLE: Hum hum.

14 CLAUDE JACOB: And so, what it did,
15 because if we add up quickly, here, my experience at RTM,
16 20 months, it was from one date in service to another date
17 in service, so we were constantly rushed, there, to
18 prepare for another date. So, that created a... a rather
19 intense dynamic, throughout those months, people thought
20 we had a year and a half to prepare quietly, but it was
21 more like three blitzes, trying to find all the means that
22 were contractually under our responsibility to go into
23 service, to be ready.

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1 So there was a structure that was defined, there were
2 protocols, health and safety plans, there were different
3 things that had to be prepared. So, we had to review each
4 time how we could prepare all this for these dates which
5 were always postponed further.

6 So, it was a very intense 20 months, in
7 that sense, and obviously, we ended up being ready, in the
8 summer of 2019, this time, seeing all the facilities reach
9 their completion and the successful tests, during that
10 summer. And above all, in our minds, at RTM, the two-week
11 test at the beginning of September 2019, which was a
12 success, led us to believe that we had indeed arrived
13 at... once at the end of the construction, but also at the
14 desired stability of this new system.

15 CHRISTINE MAINVILLE: O.K. So, let's go
16 back to some of the elements.

17 First of all, in terms of the plans that
18 may or may not have existed when you came in, was
19 that...what was your starting point? Were there any...
20 were there any elements that... well, obviously there were
21 elements missing, but that you would have expected to be
22 ready at that stage, that were not...?

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1 CLAUDE JACOB: We had a lot of work to do,
2 just by the partnership documents, there, PPP. So, there
3 was a lot of precise and detailed technical information in
4 these documents to prepare the different elements I
5 mentioned earlier. A lot of that work was done with the
6 City, OC Transpo, so we had to keep up with that as well.
7 When we prepared these documents, well, obviously, we had
8 to consult them; when it was finished, we gave the
9 documents, we waited for their comments, it came back to
10 us, etc.

11 So, all this was quite, as we say in
12 Chinese, time consuming, and we also had to set up a
13 computer tool that would be used for payment measurements.
14 All these parameters had to be entered into a software
15 program that would be used to calculate monthly payments,
16 including penalties, etc. Obviously, this tool also had to
17 be developed with the City's people. So, this nonetheless
18 was a major effort.

19 So, all of this together meant that, as
20 they say, we didn't have much time to worry about what
21 wasn't on our plate in the first place, we had enough of
22 that to make sure it was ready.

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1 And so, obviously, seeing the state of
2 the facilities at the beginning that were not completed,
3 there was no one who was worried about receiving as-built
4 plans and specifications, there, it was clear that we were
5 not there at all.

6 So, these are documents that were
7 requested more in early 2019, as stuff was completed and
8 accepted and received by the City, so it was some stations
9 at the beginning, different infrastructure, obviously,
10 trains at the very end.

11 Therefore, we received the final
12 technical documentation for all these infrastructures very
13 late before going into service. So RTM was a team that was
14 not intended to be very large, because our mandate was to
15 essentially oversee the Alstom contract and receive a new
16 system, so it was a small structure by definition.

17 CHRISTINE MAINVILLE: O.K. And when you
18 say: "The final technical documentation was received very
19 late", we're talking about when approximately at the
20 level... before the commissioning date?

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1 CLAUDE JACOB: Yes, I don't have the...I
2 don't have the dates, there, I would say, in early summer
3 2019, we started to receive what we call the plans and
4 specifications, there, and it went, there, in batches,
5 there, over several weeks. So, I would say, probably from
6 June to sometime in early August, there, with
7 reservations, there.

8 CHRISTINE MAINVILLE: Did you say "life
9 plans"?

10 CLAUDE JACOB: As-built plans and
11 specifications. So there were the plans...

12 CHRISTINE MAINVILLE: Ah, "and estimate",
13 D-E-V-I-S?

14 CLAUDE JACOB: D-E-V-I-S, yes.

15 CHRISTINE MAINVILLE: Yes, okay. And you
16 got this from OLRTC?

17 CLAUDE JACOB: Right, through RTG.

18 CHRISTINE MAINVILLE: O.K. So, who did you
19 deal with mostly, you, outside of RTM?

20 CLAUDE JACOB: With RTG, Peter Lauch.

21 CHRISTINE MAINVILLE: O.K.

22 CLAUDE JACOB: Who was the CEO of RTG. So,
23 technically, my first client.

24 CHRISTINE MAINVILLE: So, did you have a
25 lot of interaction with OLRTC directly or does it always
go through RTG?

1 CLAUDE JACOB: All documentation was
2 transferred through RTG, but of course, especially in the
3 last few months before going into service, we had several
4 meetings with the OC Transpo, OLRTC and RTG people, so
5 this was done jointly. In the end, we were often the three
6 of us in these meetings. There were also meetings that
7 took place in other forums, but we were not in all the
8 forums, here, RTM, because there were many things there,
9 that were project completion, in which we were not
10 involved, or there were also discussions on commissioning,
11 the progress of things. So we weren't always in every
12 discussion, but there were still quite a few where we
13 were.

14 CHRISTINE MAINVILLE: O.K. And did that,
15 from your perspective, cause any delays or some challenges
16 in not having... having to go through RTG eventually
17 rather than... No?

18 CLAUDE JACOB: No, RTG, it was a very
19 small company, even smaller than us, so it was fairly
20 fluid there, it was just to keep track of the
21 documentation and all that, it was very correct. And
22 usually it was in the same day, and now it was going
23 through us and it was going to the other party, and vice
24 versa.

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1 CHRISTINE MAINVILLE: And do you feel that
2 you had all the documentation you needed at that time for
3 commissioning?

4 CLAUDE JACOB: Unfortunately, I won't be
5 able to answer that question, because I left the company
6 about eight weeks after it was commissioned, and as I told
7 you, there was documentation that came back very late in
8 the summer, while we were in a blitz of the test period,
9 preparation, RSAD, and commissioning.

10 So, we were already a small team by
11 definition, so we never had the time to go through this
12 documentation with our Alstom people who were working on
13 the maintenance contract.

14 So, the final result, there, of... was
15 there... did we have everything, was there anything
16 missing, all that? I never had, there, the... the final
17 verdict on that.

18 CHRISTINE MAINVILLE: So, I take it you
19 didn't have time to incorporate all that information into
20 the maintenance procedures, et cetera, before
21 commissioning?

22 CLAUDE JACOB: In principle, no, except
23 that in fact, as it was Alstom that built and Alstom that
24 maintained, there was a lot of documentation that moved
25 directly between the two Alstom groups.

1 So, it was both reassuring and the modus
2 operandi to ensure that RTM would ultimately receive,
3 because it was the contractual maintainer, we would
4 eventually receive all the documentation, all that, but
5 that even before commissioning, the Alstom groups, OLRTC,
6 everyone was already working together on preparation,
7 training, transmitting, equipping, tooling, all that. And
8 we could see, visually, the machine-tool efforts,
9 training, the employees who were arriving, all that, so we
10 had a certain level of confidence, without seeing all the
11 final technical documents, that all the preparation was
12 going well, you know.

13 You could see the training rooms, people
14 getting hired, trained, starting to do maintenance with
15 the construction group at the beginning of Alstom, Alstom,
16 and all that. So, there was a lot of work going on, and
17 that, we could see.

18 CHRISTINE MAINVILLE: In terms of
19 training, you mean by the Alstom maintenance team?

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1 CLAUDE JACOB: With the people from Alstom
2 Construction, who trained the people from Alstom
3 Maintenance...

4 CHRISTINE MAINVILLE: O.K.

5 CLAUDE JACOB: ... to do the handover, if
6 you like, the maintenance of the rolling stock, but also
7 all sorts of training, there, in health and safety, high
8 voltage and others, which were being done, so we could see
9 that these things were progressing well.

10 CHRISTINE MAINVILLE: O.K. And in terms of
11 the infrastructure documents, beyond what Alstom had done
12 for the trains, did you have time to incorporate that
13 into...?

14 CLAUDE JACOB: No, first of all, the... at
15 the level of the railway infrastructure, so the track, the
16 signalling, the catenary, that was built by other
17 contractors. This documentation was sent to Alstom
18 Maintenance. So, it's... but it came in batches, so they
19 were still, one can imagine, fairly important documents.

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1 And it must also be understood that
2 during commissioning, precisely because the construction
3 work had been completed very late before going into
4 service, there had been an agreement, there, among all the
5 parties, that OLRTC and its contractors were going to stay
6 on board, if you wish, to assist RTM in the first few
7 months, because everyone was aware that there were a lot
8 of transfers that hadn't been done according to best
9 practices, if you wish, the best means, at the last
10 minute, quickly, and all that, so to ensure that the
11 transfer was done properly and especially for there to be
12 support if something happened, given that all this was
13 relatively new, there nonetheless were a number of people
14 in all specialties who everyone around the table had
15 agreed would assist RTM, to ensure that if ever there was
16 something, that would be, as they said at the City, an
17 army of people ready to support the project, according to
18 the different specialties.

19 CHRISTINE MAINVILLE: O.K. And I know you
20 were just there a few weeks after commissioning, but from
21 what you saw, were these, let's say, secondary measures
22 there, were they enough, finally, in... how to put it, in
23 retrospect, do you think these measures were enough?

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1 CLAUDE JACOB: Well, for the problems we
2 had where we were able to see the number of people on the
3 different shifts according to all the specialties, tracks,
4 catenaries, rolling stock, all of that, I think that the
5 quantity of people according to all the expertise was more
6 than enough.

7 I think what surprised everyone was the
8 nature and number of problems that quickly came to plague
9 the performance of the trains, especially there. There
10 were all sorts of small problems, there, track problems,
11 there, odour problems, delay, all that, but obviously, the
12 big problems were related to the trains as such, the
13 rolling stock.

14 CHRISTINE MAINVILLE: O.K. And we'll come
15 back to that in a moment.

16 So maybe we can get back to the
17 preparations. So what kind of plans and procedures had
18 been prepared at the maintenance level, and then if you
19 can talk about the process a little bit?

20 CLAUDE JACOB: So, obviously, for the
21 reasons I mentioned earlier, there, RTM's effort in the
22 summer of 2019 was focused first on the facilities of...
23 of train stations and ventilation facilities, there, in
24 the tunnel.

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1 So, we have deployed all the maintenance
2 contracts according to the specifications of the PPP
3 contract documents and according to the best practices,
4 whether for the ventilation, fire or other systems. So, we
5 also conducted visits to the facilities, which were not
6 completed, but very very advanced at that time, so we were
7 able to validate the information we found in the
8 preliminary drawings.

9 So, even if we didn't have the final
10 drawings for the stations, we still had the original
11 construction drawings annotated in some cases, and plus
12 the visits, and plus what we had as information in the
13 documents, that allowed us to construct the maintenance
14 contracts and the frequencies that respected the
15 expectations of the PPP contract on all points.

16 CHRISTINE MAINVILLE: And that's why you
17 say that every time there was a new date, it was a new
18 blitz?

19 Why exactly was it not a progression on
20 what had been done, why was it new; it was because there
21 had been changes to the designs, et cetera?

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1 CLAUDE JACOB: No, it was mostly about the
2 track and the rolling stock, obviously. The stations were
3 ready well before September 2019. So, we were ready on
4 that side, several months earlier, probably somewhere in
5 the spring, we would have been able to go into service
6 with regard to the maintenance of the... of the stations
7 only.

8 So, the big imbroglio each time was
9 always the rolling stock and the track facilities, for
10 which we knew that it was Alstom, because the contract was
11 already defined with them, that was going to go into
12 service to do the maintenance of all that, and obviously,
13 we knew that all that was not completed. So, every time,
14 we had to try to say: O.K., well, there's someone who says
15 that it's going to be over, there, before we go into
16 service for any of the dates, we won't have all the
17 documents before we go there, so what are the game plans
18 that we put in place, how do we make sure that if we don't
19 have all the plans or we have them the day before or very
20 very late, we're still going to have all the information
21 on day one.

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1 So, we were trying to create new plans,
2 how are we going to train people if it's such and such a
3 date, if it's such and such a number of weeks that we
4 have, et cetera, are you able to bring more trainers, are
5 you able to... are the tools there, can you order them in
6 advance, even if it was just supposed to go in six months?

7 So, all these kinds of details came up,
8 and since we had brainstorming meetings with the people
9 from Alstom Maintenance, who were already in our offices,
10 we talked to each other on a daily basis about the
11 progress of our respective efforts. And obviously, there
12 were follow-up meetings every week to prepare for one or
13 another of these elements.

14 CHRISTINE MAINVILLE: And I guess there
15 were some things that were waiting for, say, the official
16 go-ahead, like hiring more people and some training?

17 CLAUDE JACOB: No, not... not on our side,
18 anyway. I, for one, can tell you that it was my first
19 assignment when I arrived, there, in February 2018, to
20 complete the RTM team, with the positions that were
21 contractually established, that we had to have authorized
22 by the City for some of them.

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1 So, all of that was done, there, not long
2 after February 2018, and Alstom Maintenance did the same
3 thing. So, obviously, it took them a little longer,
4 because there were many more people, since they were
5 physically doing the maintenance, and it was agreed that
6 some of their positions would be former Alstom
7 Construction positions, which would be transferred to the
8 Alstom Maintenance team. So, if you like, they were vacant
9 positions, but not in a way.

10 CHRISTINE MAINVILLE: O.K. And were there
11 any... any challenges on the part of either RTM or Alstom
12 in finding qualified personnel in Ottawa for this work?

13 CLAUDE JACOB: For RTM, not really. First
14 of all, because we were a small team, so the number played
15 in our favour there. Also because it was agreed between
16 the partners that each of the partners would allocate key
17 players in the RTM team, so each position was: well, this
18 is a position that's going to be filled by SNC, this one
19 by Ellis Don, this one by someone else.

20 So we had a lot of people at the end of
21 the day, if you will, three organizations to find the
22 players for us. So, that went pretty well for us.

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1 At the level of Alstom, well, obviously,
2 what played for them was the... the size of the
3 organization. So they were able to, whenever there were
4 key positions that they had difficulty meeting, well, they
5 would go and find someone elsewhere, there, in the world,
6 in another contract, they would come and fill the position
7 here while waiting for the person here to be found, to
8 train them and replace them, and then they would return
9 the other person.

10 So, because of these elements, even if
11 the hiring problem, here as elsewhere, was very real,
12 these are elements that worked in our favour to help us
13 find key players.

14 CHRISTINE MAINVILLE: And that's for the
15 key players, but in terms of people on the ground really
16 doing the maintenance work, did Alstom have any... any
17 difficulties in that regard?

18 CLAUDE JACOB: Well, I would say, the
19 challenge was, as I said earlier, there, they would have
20 liked to have all their... if you will, their mechanics,
21 their electricians earlier.

22 The nature of the contract was precisely
23 to wait until the construction was finished to transfer
24 with the... the benefit that these people would arrive
25 with all the knowledge and experience and training already
done.

1 So it was a problem in the sense that not
2 all positions were filled well in advance; on the other
3 hand, it was an advantage to operate like that.

4 CHRISTINE MAINVILLE: Yes. And given the
5 fact -- and we'll come back to this in more detail -- but
6 given the fact that there was assembly and improvements
7 that had to be made to the trains after the commissioning
8 date, did this have an impact on the personnel that were
9 ultimately available to Alstom Maintenance, you know, in
10 the sense that they expected to have, well, the people
11 from... the manufacturers on the construction side,
12 because of these delays or these postponements of... of
13 the work on the trains, did this prevent Alstom
14 Maintenance from having their people when they would have
15 wanted

16 CLAUDE JACOB: I would say that it's...I
17 wouldn't say that it prevented them, but it became very
18 complex at some point to keep up with that, because
19 obviously there were delays when they were putting off the
20 deadlines, but at some point they also started
21 construction of the Phase 2 trains. So, at one point, it
22 became hard to follow: is this someone from Phase 1 train
23 assembly coming to maintenance or not, he's going to Phase
24 2 assembly, is this the person from Phase 2 coming to
25 maintenance?

1 And there, each time, obviously, we spoke through Alstom
2 Construction, RTG and OLRTC. So, that was a challenge,
3 there, to try to follow that. People were there, you could
4 see them, there were people running around everywhere. On
5 the other hand, to be able to say on each of the names,
6 that guy there, where is he going ultimately? That was
7 something that changed, there, and it was a little... it
8 was hard to follow, there,

9 CHRISTINE MAINVILLE: O.K. So, it's
10 possible that there was an impact in that regard, but in
11 terms of quantifying it, it was difficult?

12 CLAUDE JACOB: In terms of numbers,
13 probably not. In terms of the sequence, you know, where it
14 could have been done more clearly and organized, yeah, it
15 was... it wasn't easy.

16 CHRISTINE MAINVILLE: And in terms of the
17 sequence, so you said that, well, the contract says that
18 once the construction is done, well, it's maintenance that
19 comes into play, but I understand that there was
20 preparation anyway. So, how does it work, let's start at
21 the contractual level, to what extent is this provided for
22 in the contract, the preparatory work that had to be done
23 before? Was this planned or not?

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1 CLAUDE JACOB: Well, yeah, in the sense
2 that the whole... what we called trial running had very
3 defined elements, the standards, the activities that had
4 to be completed, the response times with which you had to
5 practice responding.

6 So, obviously, we had trained all our
7 contractors in this so that they understood what they had
8 to do, but also, the urgency to do it within the deadlines
9 so as not to cause penalties.

10 So, when we entered the test period, it
11 was very clear to us, there was no ambiguity, we felt well
12 equipped, well prepared, with all the players we needed,
13 because we had also hired players from our respective
14 contractors for the first few weeks of operation,
15 precisely to be sure that everything would go well.

16 So, that's it, we felt quite ready, and I
17 think we proved it by having successfully completed the
18 test period and the first two weeks of commissioning.

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1 CHRISTINE MAINVILLE: But my question is
2 more in the... in the contract... as I understand that
3 practically speaking, there are things to be done prior to
4 commissioning, so you prepared accordingly, but was
5 that... was that something that you...?

6 CLAUDE JACOB: Before commissioning, we
7 had to demonstrate that the structure was there, that the
8 players we had hired met the required skill profiles, that
9 the training was provided, that the maintenance plans were
10 in place, et cetera, et cetera.

11 CHRISTINE MAINVILLE: O.K.

12 CLAUDE JACOB: But the technical
13 demonstration, if you like, at the level of the
14 installations, was completely at OLRTC. They were the ones
15 who built and handed over the infrastructure of all kinds,
16 whether it was rail facilities, stations or vehicles, and
17 they were responsible for completing the construction and
18 handing it over and having it approved by the City. So we
19 had to demonstrate that we had the structures and
20 processes ready as defined in the contract.

21 CHRISTINE MAINVILLE: And that, obviously,
22 involved Alstom's work?

23 CLAUDE JACOB: Yes

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1 CHRISTINE MAINVILLE: So, did the Alstom
2 contract, between Alstom and RTM, provide for... let's
3 say, when... if I can rephrase, in... when, according to
4 the contract, was Alstom Maintenance to start its work?

5 CLAUDE JACOB: Well, there was no starting
6 date, obviously, we all worked on the basis of the
7 commissioning date. So, we were doing, as they say,
8 engineering backwards. Obviously, we were looking at the
9 time it would take to hire the positions, the training
10 times, the activities to be implemented, the documents to
11 be written, and then, well, we would back up the schedule
12 until we could say: Okay, if we want to get to that date
13 and then we have all this to do, we have to start at that
14 date.

15 So, these plans were pretty much all done
16 when I joined RTM, things were advanced, there, or in
17 progress in that sense. And so, one of the things we were
18 following, among other things, every week with Alstom
19 Maintenance, was the progress of their hiring cuts.

20 CHRISTINE MAINVILLE: And so, was there
21 any resistance on the part of Alstom to starting the work
22 or certain aspects of the work prior to the service entry
23 date?

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1 CLAUDE JACOB: Well, I would say, there,
2 certainly, as would we, because we just didn't have the
3 mandate there. So, it was... obviously, until the end, it
4 was a construction site, so we couldn't afford to start
5 sending contractors, even if it's Alstom, into Alstom,
6 even to start maintaining and inspecting, but people no
7 longer knew if they were handling things or not.

8 So, we visited with a perspective of
9 learning about the facilities, to show the facilities to
10 our contractors, the same thing for Alstom.

11 So, the agreement we had with OLRTC was
12 that we gave them access to the facilities to facilitate
13 training and commissioning, and that's what we stuck to,
14 with a few exceptions, including the maintenance garage on
15 Belfast, which was transferred to RTM as soon as it was
16 completed so that we could maintain and operate it, even
17 though technically we should or could have waited for the
18 other infrastructures to be completed, but to help
19 everyone, and since we were already there, ready with many
20 of our employees and the service, we took on this
21 responsibility very early in the project.

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1 CHRISTINE MAINVILLE: I understand that it
2 was not your or Alstom's mandate to do the maintenance
3 before the end of construction, that belonged to OLRTC,
4 but in terms of making the preparations, let's say, was
5 there any resistance on the part of Alstom to say, "It's
6 not our time yet"?

7 CLAUDE JACOB: Well, there was some of
8 that, I would say, more at the level of the rolling stock,
9 because there was so much technology to be embarked that
10 there was some resistance, there, on the part of certain
11 engineers to the fact that... you know, I don't mean
12 anyone, but that people who were not in the construction
13 phase had access to or handled, for whatever reason, the
14 components that were very sensitive. So, for reliability
15 and safety reasons, it made sense for everyone.

16 So, this was a fairly well-kept secret,
17 which we justified for these reasons, but obviously, this
18 created a pitfall in the sense that the people from Alstom
19 Vehicle Maintenance didn't have all the visual and tactile
20 access. You know, in the classroom, they could see all the
21 trains and all that, but in the field sometimes, I think
22 there were certain restrictions among them.

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1 CHRISTINE MAINVILLE: And you mean
2 because... because the train manufacturing was not
3 finished?

4 CLAUDE JACOB: Yes, or in some cases it
5 was, but you know, there are several computer components,
6 if you wish, inside. So, whether it's the wiring, the
7 programming, the operation, or the functions that you can
8 operate on one or another of these consoles, obviously we
9 didn't want anyone who didn't already have the skills to
10 do so to be able to enter the trains at any time, because
11 it was always Alstom Construction that was responsible for
12 certifying that these trains were safe in their operation.

13 So they couldn't do a series of tests one
14 day to confirm that everything was okay, let someone in
15 the next day without knowing everything they had done and
16 then certify that the train was safe on the third day, for
17 example.

18 CHRISTINE MAINVILLE: Okay, I understand.
19 So it was more because the trains had not been certified
20 yet, so they had not changed hands yet?

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1 CLAUDE JACOB: That's right.

2 CHRISTINE MAINVILLE: O.K. And that, in
3 normal times, let's say there would not have been the rush
4 at the end, how would that be handled? They would have
5 really waited until everything was finished, until the
6 transfer, and then the preparations would have started?

7 CLAUDE JACOB: Yes, well, in a context,
8 there, other than where it would have been a... a
9 different supplier that would have done the construction
10 maintenance, well, obviously, Alstom would have required
11 that every single detail be absolutely completed,
12 certified, qualified and handed over, before anyone would
13 come in and do anything. So it would have been a clearer
14 and cleaner process, if you will. On the other hand, this
15 would have added a lot of delay to the commissioning
16 process, we understand that.

17 So I think that everyone kept in mind all
18 of these issues, the City, OC Transpo, the partners, and
19 people were convinced of certain arrangements that made
20 sense for everyone with all of the parameters, not just
21 the transitional clarity, if you will.

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1 CHRISTINE MAINVILLE: O.K. And so, if I
2 understand correctly, because it was the same company
3 here, Alstom, there was some overlap that would not have
4 happened otherwise, but there was hesitation, some
5 hesitation on the part of...?

6 CLAUDE JACOB: Well, it made it a little
7 more nebulous for the transfer of documentation,
8 information and all that, because it was like real time,
9 if you will, there. On the other hand, it sped things up,
10 because there were a lot of things that could have started
11 earlier without all that being completed, because we knew:
12 well, look, the train is completed, there are things that
13 I don't want you to touch, but there are still other
14 things that you can start looking at. So, there were quite
15 a few advantages, in this sense, in terms of timing.

16 CHRISTINE MAINVILLE: And if there was any
17 hesitation about touching the train before it was
18 certified, about the maintenance crew touching the train,
19 was that hesitation more on the construction side or...?

20 CLAUDE JACOB: Alstom Construction.

21 CHRISTINE MAINVILLE: That's it, that's...
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1 CLAUDE JACOB: Well, OLRTC was also
2 responsible for handing over the trains to RTG, which
3 received them from Alstom Construction.

4 CHRISTINE MAINVILLE: O.K.

5 CLAUDE JACOB: So, everyone in the chain
6 of command had an interest and a concern that not just
7 anyone, in any way, enter the trains, there.

8 CHRISTINE MAINVILLE: O.K. And so, did
9 that, did that, did that... even if there was some
10 overlap, did that have any impact, ultimately, on the
11 ability of or the opportunity for Alstom, Alstom
12 Maintenance, to prepare for the commissioning date?

13 CLAUDE JACOB: No, I don't think it was
14 the process, I think it was the technical challenges of
15 the trains, there, that were being manufactured and
16 debugged, there. That's what took the most time, there,
17 the other processes didn't add to the fun, but were not
18 necessarily a hindrance to progress in terms of time.

19 CHRISTINE MAINVILLE: O.K. Did you
20 understand that there was... that there was tension
21 between Alstom Maintenance and Alstom Construction?
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1 CLAUDE JACOB: I think there was tension
2 between everybody at the end there, because that's the
3 nature, there, of a last minute thing, there, where
4 everybody's running at the end, there. But not... not in
5 any particular way, there, between the two Alstom groups.

6 CHRISTINE MAINVILLE: O.K. How would you
7 describe the maintenance work done by OLRTC
8 before...before the transfer, that is, given that there
9 was...there was a lot left to do towards the end, even in
10 terms of construction, were they able to transfer to you a
11 system that was already well maintained or were there
12 problems at that level?

13 CLAUDE JACOB: There were a number of
14 issues, there, on each of the components, there, that were
15 corrected, there, as the summer of 2019 progressed.

16 There were adjustments to the track, to
17 the switches, to the catenary, to all sorts of things. So,
18 there are a lot of people among the OLRTC contractors who
19 worked hard on this, other deficiencies were found during
20 the test period, so that was corrected as well.

21 So, when we went into service, well, a
22 bit normally, for a new system, with climate change, well,
23 we know that the catenary, for example, is a living thing,
24 that moves, so we had to adjust, which is quite normal in
25 the first year of a system like this.

1 So, there will still be a fair number movements, so there
2 were a lot of adjustments to be made, there, in night runs
3 by the contractors, catenary, OLRTC. So, yes, they had a
4 lot of work to do, and then generally they did well.

5 CHRISTINE MAINVILLE: O.K. So you're
6 saying that before September 2019, they...

7 CLAUDE JACOB: Collaborated.

8 CHRISTINE MAINVILLE: At the end of
9 construction, they did the necessary handling work for...

10 CLAUDE JACOB: Yes.

11 CHRISTINE MAINVILLE: ... maintenance
12 required for the transfer?

13 CLAUDE JACOB: Yes, and as I said earlier,
14 even after the transfer date, there were several weeks
15 where OLRTC contractors stayed on board to make sure that
16 if something happened, we would have enough people to
17 react, but also to do some knowledge transfer with the
18 Alstom Maintenance teams in night sorties, there, things
19 like that.

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1 CHRISTINE MAINVILLE: O.K. And I mentioned
2 it a little bit, but before the commissioning date, there
3 was still work to be done on the trains, can you talk
4 about that a little bit, anything that needed to be done,
5 to your understanding?

6 CLAUDE JACOB: From memory, I would have
7 difficulty specifying the specific things, but there were
8 certain requests made by the City in the last few miles,
9 for example, I remember the straps that we were talking
10 about so that people could stand, which was an additional
11 request that the City had made. So Alstom had done the
12 design and now had to see to the installation of these
13 things. So that was stuff that was going on at the end.

14 There were certain elements, and I'm 100%
15 from memory here, but at the level of camera systems, for
16 example, of vehicles, where there were things that were
17 not yet fully mature at the beginning, so there was an
18 agreement to work with systems, there, of guards, with
19 radio whistle systems to confirm the closing and opening
20 of doors at the stations.

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1 So, there were a few systems like that
2 that were not ready as desired, but for which the
3 partners, including the City, had agreed to have safe
4 mitigation systems in place before they were completed.

5 CHRISTINE MAINVILLE: O.K. And that, from
6 RTM's point of view, did that cause some concern?

7 CLAUDE JACOB: Well, our concern was to
8 inherit a process for which we did not have the tools. So,
9 insofar as before going into service, RTG agreed with the
10 City on the mitigation measures that would be supported by
11 RTG, OLRTC, so if it didn't have an impact on RTM, at that
12 point, we were comfortable, especially since each time,
13 obviously, we could validate that it was a measure that
14 was also safe, which was always a concern, obviously.

15 CHRISTINE MAINVILLE: And were there any
16 that you were considering that would have an impact on
17 RTM, things that still needed to be done, that would have
18 an impact?

19 CLAUDE JACOB: No. As I said, there was a
20 follow-up book, there, of the deficiencies, there, which
21 was followed by all the parties, all that was accepted and
22 known by everyone.

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1 So, for us too, there, we knew that there were things
2 that... that weren't completed, but that didn't pose a
3 commissioning issue or for which there had been mitigation
4 that would be borne by someone else.

5 So, for us, there were no concerns about
6 systems before going live that were not working or for
7 which we would have had to deploy additional resources or
8 tools than what was planned.

9 CHRISTINE MAINVILLE: When you say
10 "tracking book", is that the term sheet?

11 CLAUDE JACOB: I don't think that's what
12 they called it, but OC Transpo had follow-up meetings
13 weekly and then, at the end, almost daily, where we would
14 follow up on all the things that needed to be completed,
15 their progress, and all the players would come in and give
16 a progress report on those things. So, that's what I'm
17 referring to here, but I don't think it's called the term
18 sheet.

19 CHRISTINE MAINVILLE: And it's not the
20 minor deficiencies list either?

1 CLAUDE JACOB: That was one of the
2 outputs, that list, but obviously we were also tracking
3 all the operational elements, you know, on day one, how
4 many OC Transpo people would be on the platforms to tell
5 customers where to go. So, everything was there, there
6 were a lot of things that were not necessarily actions of
7 the consortium, if you will.

8 But the minority deficiencies list was...
9 had common items, although there were items on the list
10 that we didn't follow on a daily basis, because there were
11 a thousand things, details, there, that didn't have any
12 value, that nobody cared about on a daily basis. The
13 builder took care of it, there was a schedule to do it,
14 then it wasn't complex enough to talk about every day.

15 CHRISTINE MAINVILLE: Okay, I understand.
16 You had a list...

17 CLAUDE JACOB: Critical elements, if you
18 will.

19 CHRISTINE MAINVILLE: Critical elements
20 relevant to RTM and...

21 CLAUDE JACOB: Yes, or operational for OC
22 Transpo.

23 CHRISTINE MAINVILLE: Yes, for OC Transpo,
24 so jointly. And on that list, there may have been some
25 items that are on the minor deficiency list, but there was
also something else? O.K.

1 CLAUDE JACOB: It was mostly the most
2 important elements, obviously. On the list of minor
3 deficiencies, there could be a door closer, for example,
4 and it's certain that in committee, we weren't going to
5 talk about the door closer, although someone had to go and
6 repair it before commissioning.

7 So that's the kind of stuff I'm referring
8 to, you know, if there was a problem with the cameras on
9 the trains, that was talked about every day on the
10 committee and it was also on the deficiency list.

11 CHRISTINE MAINVILLE: O.K. Do you happen
12 to know what that tracking book or second list was called
13 in English? No?

14 CLAUDE JACOB: No, as I said, it was
15 mostly... for us, it was the Follow-up Committee that
16 generated that list, the list itself for me didn't
17 necessarily have a name, not that I remember, anyway.

18 CHRISTINE MAINVILLE: Who was on that
19 committee for OC Transpo?

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1 CLAUDE JACOB: Well, it was steered by
2 John Manconi and his team, several of his directors were
3 there, there.

4 CHRISTINE MAINVILLE: So, is that...are
5 you talking about RAMP or not?

6 CLAUDE JACOB: Yes yes yes, that's it

7 CHRISTINE MAINVILLE: O.K.

8 CLAUDE JACOB: Good information!

9 CHRISTINE MAINVILLE: So you were
10 attending the RAMP meetings?

11 CLAUDE JACOB: Yes.

12 CHRISTINE MAINVILLE: O.K. And then, in
13 terms of the...the improvements that were left to be done
14 and other work that was planned for the trains, was there
15 a concern at least in terms of access to the trains for
16 maintenance, that is, would there be enough time for RTM
17 and Alstom to have access to the trains to do maintenance,
18 if there were also improvements left to be done on the
19 manufacturing side?

20 CLAUDE JACOB: Yes, well, all that had
21 been validated, obviously, as I mentioned earlier, we were
22 already in the process of preparing trains for Phase 2.
23 So, we knew, there, that when we were going to go into
24 service, we were going to... I don't think it was long
25 before, or after, there, but we had one or two more RAMs
from Phase 2.

1 So, this gave a buffer to phase 1, if you
2 will, to complete the various programs that were still in
3 progress, to allow us, on paper, to support the number of
4 RAMs in service, that we had to commission every day.

5 CHRISTINE MAINVILLE: O.K. So it's not
6 like the Phase 2 work was adding pressure because...it was
7 more than relieving?

8 CLAUDE JACOB: Yes, that's right. On the
9 contrary, for us, very early on, it came to help us rather
10 than the contrary, because it made trains available to
11 allow us to do these different programs.

12 CHRISTINE MAINVILLE: But weren't there
13 also pressures from the construction that continued on the
14 Stage 2, Phase 2 trains?

15 CLAUDE JACOB: Well, it quickly became --
16 and that's where I left fairly quickly before it really
17 became an issue, but when I left, it was already
18 essentially separate teams working on the construction of
19 phase 2, from those who were all transitioning to the
20 maintenance group, if you will.

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1 CHRISTINE MAINVILLE: O.K. And were these
2 Phase 2 trains built again at the... at the MSF or
3 another... another location that they were built?

4 CLAUDE JACOB: Well, they were built on
5 Belfast Street. When I left, there were talks to start
6 assembling RAMs somewhere near Toronto, but the first ones
7 we discussed were assembled here in Ottawa.

8 CHRISTINE MAINVILLE: O.K. And then there
9 was a reduction in the number of trains that were going to
10 be commissioned... well, that is, come into service or
11 were to be made available as a result of the commissioning
12 date; what impact did that have for you, for RTM?

13 CLAUDE JACOB: Well, this had a potential
14 financial impact, because under one of the clauses of the
15 contract, obviously, we were paid by the number of trains
16 in service. And so, especially for these financial
17 elements, it was more RTG that negotiated these agreements
18 with OLRTC and the City, because obviously, this is where
19 the obligation, the agreement and the monetary
20 consequences obviously came from to compensate RTM in the
21 end, because it was not us who caused the fact that there
22 was a shortage of trains that were commissioned at the
23 beginning or that we did not want to go into service with
24 X number of trains because we did not need them or
25 whatever the reasons.

1 So, we were there ready to maintain and commission when we
2 were asked.

3 CHRISTINE MAINVILLE: O.K. And did the
4 other two... so there was a reduction for rush hour from
5 15 trains to 13?

6 CLAUDE JACOB: Hum hum.

7 CHRISTINE MAINVILLE: Did the fact that
8 there were fewer trains in service, in a practical sense,
9 ease your burden or did it also mean that you had fewer
10 trains available, like spares?

11 CLAUDE JACOB: Probably a little bit of
12 all of the above, depending on the day and what happened
13 to break down or need repair. Sometimes it was an
14 advantage, because we had fewer trains to produce;
15 sometimes it was a disadvantage, because we had fewer
16 buffers too. So, it was... depending on the day, there,
17 the answer could change, there.

18 CHRISTINE MAINVILLE: O.K.

19 CLAUDE JACOB: And obviously, the fact
20 there weren't two in service meant they were somewhere in
21 the yard. So, that, in terms of handling in the
22 marshalling yard, was causing us constraints as well,
23 there.

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1 CHRISTINE MAINVILLE: Can you talk a
2 little bit about...the maintenance garage and the...the
3 challenges that you saw there, if from your perspective,
4 there were any?

5 CLAUDE JACOB: Yes. On the shop floor
6 side, we had -- and still have, state-of-the-art shops,
7 you know, I think all rail operators would like to have
8 shops that are well set up in terms of health and safety
9 and efficiency like those were built, so it was very good,
10 really no issues there, at that time.

11 At the yard level, there was a problem at
12 one point with the outdoor shelters, which were leaking
13 during heavy rainfall. So, there were roofing defects,
14 there, that were corrected, there, by the builder, there.
15 It was a construction deficiency. So, that was fixed, it
16 didn't cause anyone any trouble, there, during or after.

17 During commissioning, there were some
18 communication problems between the trains in the yard, but
19 there were various corrections, there, of additions in
20 terms of communications and others, so that when we went
21 into service, there, communications in the yard were as
22 they should be.

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1 CHRISTINE MAINVILLE: And who was in
2 charge of this marshalling on a daily basis?

3 CLAUDE JACOB: It was RTM.

4 CHRISTINE MAINVILLE: And was there
5 particularly a... as they say, like a foreman or somebody
6 who was in the yard who was running the trains,
7 supervising the whole thing?

8 CLAUDE JACOB: Yes, there was a head
9 dispatcher with dispatchers on duty in the control centre,
10 which was located inside the Belfast shops.

11 CHRISTINE MAINVILLE: And who was that
12 person, if you remember?

13 CLAUDE JACOB: I forget the name, there we
14 had a director and a department head in addition to a team
15 of dispatchers. So, there was a scheduling system, so on
16 rotation, there, we ensured the follow-up of the control
17 centre like that.

18 CHRISTINE MAINVILLE: O.K.

19 CLAUDE JACOB: Ah, Murray Hill.

20 CHRISTINE MAINVILLE: Murray Hill.

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1 Have you had any challenges related to access times to
2 trains after commissioning for maintenance, either access
3 to trains or access to the maintenance garage?

4 CLAUDE JACOB: No, the maintenance garage
5 had been... each of the tracks was assigned to a function,
6 so the maintenance functions were always available to us,
7 so there were no problems of accessibility, there, to
8 maintenance bays or things like that, nor to the yard,
9 since we were the ones responsible for the rail operation
10 inside the yard.

11 So, we were responsible for accommodating
12 all parties, both the trains that needed to be moved for
13 routine operation and maintenance needs because they were
14 in service or soon to be in service or the trains that the
15 construction group needed to move as well. So, that was
16 going very well, there was just a captain in the boat and
17 it was going fairly smoothly.

18 CHRISTINE MAINVILLE: And you alluded to
19 that, in the beginning, the trains... for at least, what,
20 the first three weeks of commissioning, were performing
21 well?

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1 Just to... you just had to say "Yes" for the recording.

2 CLAUDE JACOB: Ah, sorry. It was two
3 weeks, I think, to be exact.

4 CHRISTINE MAINVILLE: O.K. And then there
5 started to be some problems?

6 CLAUDE JACOB: Hum hum.

7 CHRISTINE MAINVILLE: And so, is it
8 possible -- is it possible -- you left not too long after,
9 is it possible that afterwards, there were more... if
10 there were problems that would lead to upgrades or
11 repairs, is it possible that there would have been, let's
12 say, a... a contingency or a... you know, could you
13 perceive that if it wasn't running very well, there might
14 be problems with congestion, let's say, or access to
15 trains?

16 CLAUDE JACOB: I can't tell right now.
17 That's because I left before the engineering findings were
18 identified, which were the problems that were in progress.
19 So, it's hard for me to get a perspective on how much
20 repair it was going to take.

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1 But at the same time, it was a vast
2 workshop, so if it had ever come to that, which I would
3 have done, I would have just pushed the construction group
4 aside to have more room for the maintenance group, because
5 we were in service.

6 So, these kinds of discussions between
7 the partners were already taking place, because we were
8 trying to think about this. So, I don't know if it would
9 have been an issue, but it wouldn't have been, because we
10 would have had solutions to take for that.

11 CHRISTINE MAINVILLE: And maybe let's get
12 back to the preparations: how...what was there to do in
13 terms of planning for a maintenance system like...and
14 maybe you can tell me what was in this project and what
15 else might have been there if there had been more time?

16 CLAUDE JACOB: Well, in terms of...
17 maintenance, as I said, everything was fairly... fairly
18 well defined, if not by the PPP contract in terms of the
19 activities, their content and their frequency, it was in
20 the recommendations of the manufacturer, Alstom, for the
21 rolling stock.

22 So, in terms of what had to be done, in
23 the maintenance plans, it was fairly well defined, there
24 were no worries.

25

1 Regarding time to prepare to do the maintenance that was
2 expected to be required by the facilities, well, I think
3 we felt relatively ready, and as I said, both the test and
4 the first two weeks of September showed that we had
5 systems that were reliable, maintained, inspected at the
6 frequencies and at the... at the definition requested, and
7 that we were able to keep up the pace, because even when
8 the trains were not broken down, we had a series of
9 inspections, cleaning activities to complete and all that,
10 in nights that were relatively short. So, all this was
11 shown to be well practiced and effective during those
12 weeks.

13 CHRISTINE MAINVILLE: I just want to be
14 clear: when you say "rolling stock", I think that's
15 rolling stock, right?

16 CLAUDE JACOB: Hum hum.

17 CHRISTINE MAINVILLE : (Indiscernible).

18 CLAUDE JACOB: That's right. Yes.

19 CHRISTINE MAINVILLE: O.K. And what
20 coordination was there with OC Transpo as the train
21 operator in the preparatory stages?

22 CLAUDE JACOB: Ah, well, there was a lot
23 of work, obviously, because it was the real-time operation
24 that was never going to stop.

25

1 So, there was a collaboration, there, very early, I would
2 say, somewhere in early 2019, to already start discussion,
3 there, about... well, first of all, the Rail Operating
4 Rules were all pretty much completed at that time, so we
5 were already discussing that, we... we were sharing the
6 training of our dispatchers in a reciprocal way, so there
7 were people from OC Transpo who came to spend weeks of
8 time in our dispatch center to be trained to operate the
9 yard, if ever there was any emergency situation or
10 whatever. We had our dispatchers periodically go into the
11 OC Transpo control center to do the same thing.

12 So, the... the collaboration was
13 continuous, especially in the last few weeks, when we were
14 preparing the trains, and obviously, we had to coordinate
15 the departure of the train onto the main track, which
16 became the responsibility of OC Transpo.

17 So, the two control centres, there,
18 working in close proximity like that every day, from
19 minute to minute, is most likely the thing that worked
20 best, there, in the whole project, there.

21 CHRISTINE MAINVILLE: And so, you... you
22 were working... earlier you mentioned Mr. Manconi, but
23 were you working with anyone more directly on this work?

24 CLAUDE JACOB: Well, I was talking more
25 directly with Troy Charter...

1 CHRISTINE MAINVILLE: Yes.

2 CLAUDE JACOB: ... who was the Director of
3 Maintenance Operations. My assistant, Tom Pate, also,
4 although he worked with some of Troy's subordinates, and
5 we both had other OC Transpo people there that we talked
6 to, depending on the function there, whether it was health
7 and safety or training or whatever.

8 CHRISTINE MAINVILLE: So, from that
9 perspective, you think there was good collaboration
10 between OC Transpo and RTM for the service entry?

11 CLAUDE JACOB: Yes. I would describe it as
12 excellent.

13 CHRISTINE MAINVILLE: O.K. Were
14 there...were there any challenges that resulted from the
15 operator being a different entity, let's say, and not part
16 of the consortium?

17 CLAUDE JACOB: Well, it wasn't...so it
18 wasn't necessarily a problem, but it was a challenge,
19 obviously, to have two operators involved in moving a
20 train. So, that was a concern of everyone at the
21 beginning, and I think it was well addressed, I think both
22 parties were so concerned that we took care that it did
23 not become an issue, and as I said earlier, it has not
24 been an issue in my opinion.

25

1 Where it was an issue for us was that a
2 lot of the features of the train were going to be mostly
3 manifested or used on the main track, where OC Transpo, as
4 an operator, could see and have a feel for the trains that
5 we didn't have as a low-speed operator in the yard, if you
6 will.

7 So that was a challenge, because at that
8 point we always had to go backwards in the communication
9 loop to stay informed about what was happening with the
10 observations or requests or... or responses that were
11 made, there, on the various observations that OC Transpo
12 could make on the trains directly to OLRTC.

13 CHRISTINE MAINVILLE: Was it a problem of
14 access to information they had, finally?

15 CLAUDE JACOB: No, it was just the
16 structure there that...that posed an additional
17 communication challenge like that one there. Because it
18 was a bit peculiar, you know, that the... the City gave
19 the responsibility for design-build, but only for part of
20 the operation, keeping the other part of the operation.
21 So, it's not a problem, there, everything was done, but at
22 the level of communication and discussion in the last
23 miles, well, it was something additional to do again and
24 again.

25

1 CHRISTINE MAINVILLE: What is the part of
2 the operation that was not... that was divided that you
3 are referring to?

4 CLAUDE JACOB: The (indiscernible).

5 CHRISTINE MAINVILLE: The...?

6 CLAUDE JACOB: We were the marshalling
7 operator...

8 CHRISTINE MAINVILLE: Ah, okay.

9 CLAUDE JACOB: ... and the City, which
10 operated the trains on the main track.

11 CHRISTINE MAINVILLE: O.K. So, this was
12 like passing the baton on departure or...?

13 CLAUDE JACOB: Good example!

14 CHRISTINE MAINVILLE: Yes? O.K.

15 CLAUDE JACOB: Good example!

16 CHRISTINE MAINVILLE: And I guess
17 there's...there had to be a different operator for the
18 mainline, you didn't really... did they not really have a
19 choice to proceed that way, because it would be a little
20 complicated to have the OC Transpo operators at the level
21 that you needed them in the room -- in the marshalling
22 yard space?

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1 CLAUDE JACOB: Every arrangement has its
2 advantages and disadvantages, and there are all kinds of
3 arrangements around the world. Obviously, it is easier
4 from an operational point of view when there is only one
5 operator for the whole territory. Obviously, it's easier
6 when the marshalling yard operator is the one who builds
7 the trains for that section. However, it creates a need
8 for additional communication with the other operator on
9 the main line. So it's not necessarily good or bad,
10 it's...

11 CHRISTINE MAINVILLE: A different system?

12 CLAUDE JACOB: Hum hum.

13 CHRISTINE MAINVILLE: Is there an
14 agreement then between RTM and OC Transpo, a... to
15 coordinate activities?

16 CLAUDE JACOB: Well, there was no
17 agreement as such, but it was already defined in the
18 articles of the PPP contract these reciprocal
19 responsibilities, so what had to be put in place were
20 mainly operational documents to ensure that our
21 operations, that our ways of communicating on the radio,
22 that all that was perfectly attached, that our people had
23 the same training, the same references on the language to
24 be used, on the position of the trains, etc.

25

1 CHRISTINE MAINVILLE: Uh...

2 CLAUDE JACOB: It is operational.

3 CHRISTINE MAINVILLE: It was operational.

4 And in this regard, who prepares the... I don't know if
5 they call it normal operating procedures, but standard
6 operating procedures?

7 CLAUDE JACOB: Hum hum.

8 CHRISTINE MAINVILLE: Who...

9 CLAUDE JACOB: Both...

10 CHRISTINE MAINVILLE: Both parties?

11 CLAUDE JACOB: Yes. So, we were
12 responsible for our own STOs, obviously we had to get them
13 approved by the City, and the City was doing the same
14 thing, because the City was on... an auditor, if you will,
15 there, as a transportation authority, so they were writing
16 their own STOs and then they had their own approval
17 procedures, and we were doing it and then submitting it to
18 them afterwards.

19 CHRISTINE MAINVILLE: In French, what is
20 the acronym? This is...

21 CLAUDE JACOB: Standard operating
22 procedures?

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1 CHRISTINE MAINVILLE: O.K. Even in French?

2 Yes.

3 CLAUDE JACOB: I don't know, in French
4 it's a good question.

5 CHRISTINE MAINVILLE: SOP.

6 CLAUDE JACOB: Standard operating
7 procedure, something like that.

8 CHRISTINE MAINVILLE: O.K. So, they were
9 developed from when, was it already underway when you
10 arrived?

11 CLAUDE JACOB: Yes, it had started, it had
12 probably started the year before, because everybody
13 understood that it was critical and sensitive in terms of
14 safety.

15 So, I would say that when I arrived, we
16 were probably halfway through the work that needed to be
17 done, so all the procedures to be done had already been
18 listed and heard, and now we were in the writing and
19 approval phase.

20 CHRISTINE MAINVILLE: O.K. And from your
21 perspective, is that... was that document ready and, let's
22 say, developed to the level you would... you would want it
23 to be, when you went into service?

24 CLAUDE JACOB: Absolutely.

25

1 CHRISTINE MAINVILLE: Was there a... what
2 is called a concept of operation?

3 CLAUDE JACOB: Hum hum.

4 CHRISTINE MAINVILLE: Do you remember a
5 document like this or not?

6 CLAUDE JACOB: Not literally, there, if
7 you define it for me, I will...

8 CHRISTINE MAINVILLE: O.K. Let's say,
9 something that is, as I understand it, normally developed
10 very early in the project to give...

11 CLAUDE JACOB: Hum hum

12 CHRISTINE MAINVILLE: ... to help develop
13 the design, the drawings, and it gives the concept of how
14 we intend to operate the system to then inform the design?

15 Was there anything like that, to your
16 knowledge?

17 CLAUDE JACOB: Surely. I never saw it,
18 because my late arrival in the project meant that it was
19 much later than the discussions that had taken place for a
20 document like this one. But yes, I was... I was made aware
21 of some of the conceptual elements that had been decided
22 upon, so I assume that it came from that exercise.

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1 CHRISTINE MAINVILLE: O.K. Was there a
2 maintenance concept that you would have seen?

3 CLAUDE JACOB: Well, the maintenance
4 concept was defined in the documents, in the PPP proposal,
5 and the others were the manufacturer's recommendation, so
6 that was mainly what dictated the content of the
7 maintenance plan.

8 CHRISTINE MAINVILLE: O.K. Was there, from
9 your perspective, was there... maintenance, were the
10 maintenance aspects sufficiently provided for in the
11 design and construction of the system?

12 CLAUDE JACOB: Yes, there is no doubt that
13 if we had been with reliable trains as we thought they
14 were until they were not, we demonstrated during the
15 summer and during the first weeks in service that all the
16 normal maintenance, normal inspection and cleaning
17 activities, which were normally the normal life of RTM,
18 were done in accordance with all the requirements every
19 night, because that is where most of the work was done,
20 despite the fact that these were busy schedules, which did
21 not pose a problem for RTM to meet these obligations.

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1 CHRISTINE MAINVILLE : O.K. So, from your
2 point of view, could we say that RTM and Alstom
3 Maintenance were ready to maintain a system that works
4 well?

5 CLAUDE JACOB: That's right.

6 CHRISTINE MAINVILLE: O.K. And there were,
7 in the end, more problems that were anticipated?

8 CLAUDE JACOB: That's right.

9 CHRISTINE MAINVILLE: Which had been
10 anticipated. And maybe we can talk about the... the
11 problems, though, that were coming up in 2019. So, when
12 the trains... how would you say, couraient, runnaient?

13 CLAUDE JACOB: Ran.

14 CHRISTINE MAINVILLE: Ran, when the trains
15 ran. Do you remember the kinds of issues that were coming
16 up, say, starting in the summer of 2019?

17 CLAUDE JACOB: Vaguely, there, at the
18 technical level, there, they had some... they had problems
19 with... with the speed synchronizer, they had problems
20 with... with stopping or positioning. So, it wasn't stuff
21 that was, you know, absolutely abnormal, considering all
22 the technology on board, they obviously had a number of
23 door problems, I remember.

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1 Otherwise, there were no major problems that could have
2 foreshadowed what happened next.

3 CHRISTINE MAINVILLE: Was that, in your
4 recollection, Alstom's point of view as well?

5 CLAUDE JACOB: That the problems that
6 occurred at that time were not abnormal or worrisome?

7 CHRISTINE MAINVILLE: Yes, or that they
8 didn't anticipate or at least that there were...that they
9 didn't anticipate a lot more problems or did they have
10 some concerns about that?

11 CLAUDE JACOB: Well, for the people from
12 Alstom to whom we spoke, that is to say the people from
13 Alstom Maintenance, we had the same point of view, that
14 there were many problems, but that many people were
15 working on them and that they were being solved quietly
16 and not quickly. We were just worried about... we just
17 wish it would have been fixed six months sooner rather
18 than later, but it was moving along, there were solutions,
19 there were software updates that were being done, and
20 every time, it was fixing problems. We would correct
21 three, one would come up, at least two would remain, and
22 so on.

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1 So, it was moving in that direction, so
2 that it would be reassuring, to the point of thinking that
3 we were going to have trains that were at the level of
4 reliability and safety that the contract required for us in
5 order to hope to succeed in our part of the mandate, to
6 maintain it as a reliable train, once it is manufactured,
7 brand new.

8 CHRISTINE MAINVILLE: O.K. And so, you
9 didn't really have any contact with... or reports on this
10 subject, from Alstom Manufacturing or the engineers?

11 CLAUDE JACOB: No. As I said earlier, one,
12 because we were all under the same impression, you know,
13 we saw a series of defects being corrected towards zero,
14 reliable, successful commissioning, and suddenly, wham,
15 new problems arose that are much more important and which,
16 from our point of view, in any case, had never been
17 observed of this nature, at least before.

18 So, for us, there was nothing to suggest
19 that problems like these would arise afterwards, especially
20 after we managed to repair the ones we had, to commission,
21 to have a period of reliability like this, it's quite rare
22 that we... you know, like... people talk about the famous
23 bedding-in period, the problem is that we had a honeymoon
24 phase where everything was going very well, so it suggested
25 that we had reached the end of that loop since everything
was working with the planned reliability.

1 CHRISTINE MAINVILLE: Do you have a...
2 given your previous experiences, do you have a sense of how
3 long, normally, one would want a bedding-in for a new
4 system like this?

5 CLAUDE JACOB: Well, if we had followed a
6 regular process, building from start to finish and
7 transferring all the information, knowledge, documents, a
8 few months would have been... the longer the better,
9 there, we agree, on a project like this, we never have
10 the... the number of months, there, you know, one year, it
11 would be super fantastic, it will never happen; a few
12 months, it is advisable. But when... you know, you have to
13 take into account that the project was very advanced in
14 its construction, very long before September 2019, you
15 know.

16 So all the facilities that were finished
17 building in early 2019 and then a little bit before or
18 after, somewhere along the line, that made it a bedding-in
19 period, that, because there were trains that had been
20 running for a very long time as there were stations that
21 had been in service for a very long time before they went
22 into service in September.

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1 So, I think that played a role, and I
2 wasn't in people's heads when I said that, but I think that
3 people were reassured by that element. It's not like
4 everything was brand new the day before it went into
5 service, there were several fixed and rolling assets that
6 had been built for months and months.

7 CHRISTINE MAINVILLE: And did you
8 understand if the trains had been able to run on the
9 entire line during the winter before... before
10 commissioning?

11 CLAUDE JACOB: Yes, we did -- the trains
12 on the previous winter, so winter 2018-2019.

13 CHRISTINE MAINVILLE: And at that point,
14 it would have been on certain parts of the line, as I
15 recall, and not the whole thing?

16 CLAUDE JACOB: I would tend to say that on
17 the whole line, there were snow removal problems, which
18 were... which were one of the observations and the
19 objective of operating the trains during that winter, but
20 from memory, we had access to quite a lot of the railway
21 right-of-way for that period.

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1 CHRISTINE MAINVILLE: Were you receiving
2 reliability reports from Alstom, either because you were on
3 the RAMP committee or afterwards, the trial running?

4 CLAUDE JACOB: Reliability reports? We had
5 several graphs and indicators that were monitored on
6 reliability, different components that we saw, which were
7 prepared by Alstom Construction, and which were presented
8 to everyone, at the request of either the City, RTG or
9 OLRTC. So we saw some of these documents, which almost
10 always took the form of PowerPoint presentations with
11 graphics.

12 CHRISTINE MAINVILLE: That was in the
13 context of RAMP?

14 CLAUDE JACOB: Or the other follow-up
15 committees on the various deficiencies we were talking
16 about earlier. There was a series of other meetings that
17 we had with different engineers from Alstom where they
18 came to present us the progress on the work they were
19 doing on one or another of the things to be corrected.

20 CHRISTINE MAINVILLE : O.K. And that was
21 up until the time of commissioning or even afterwards?

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1 CLAUDE JACOB: No, it was until before...
2 from memory, there, before the trial running period, so
3 probably until June, something like that.

4 CHRISTINE MAINVILLE: O.K. And so, during
5 that period, there were problems with the reliability or
6 performance of the trains?

7 CLAUDE JACOB: Yes. In the summer of 2019,
8 there?

9 CHRISTINE MAINVILLE: Yes.

10 CLAUDE JACOB: Hum hum.

11 CHRISTINE MAINVILLE: And... well, tell me
12 this: did you think the trains were ready for the trial
13 running phase?

14 CLAUDE JACOB: At the time we finally went
15 into trial running, yes. I would say to you that the big
16 issue was safety, the story of the cameras on the
17 platforms, all that, that was the big subject of
18 discussion, beyond the faults, that caused unexpected
19 train stoppages, that were all monitored by technical
20 committees.

21 So, we could see the work that was being
22 done, we could see Alstom presenting us with an update of
23 an XY software, there, we implemented it, and there we
24 could measure that we had addressed the problems, and
25 there were still some, and there we worked on the next
patch.

1 So, things were moving in that direction,
2 so there was nothing to suggest that, apart from the
3 elements identified there, which we collectively agreed to
4 commission with, the others would be a problem once in
5 service.

6 CHRISTINE MAINVILLE: And the door
7 problems, were they the same kind of problems or at least
8 at the source that appeared afterwards?

9 CLAUDE JACOB: Well, no, I think the
10 problem with the doors was a surprise, there, the first
11 time someone held them. So, for a while there, there was
12 this imbroglio; was it the door or the effort that people
13 put into it that was the cause? But it took a few weeks to
14 see clearly the two causes, and after that, Alstom worked
15 technically to analyze and solve the problem.

16 So the good news is that they had found
17 the problem; the bad news is that the repairs and the
18 parts required and all that took a while, so that's what
19 made the repair take longer as such, not the analysis. But
20 it was not a problem that was in the preparation of the
21 trains, there were no passengers, if you want, so...

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1 CHRISTINE MAINVILLE: So these were
2 different problems, say, of doors?

3 CLAUDE JACOB: That's right.

4 CHRISTINE MAINVILLE: And when you say the
5 time it takes to get parts and repair, you mean after
6 commissioning?

7 CLAUDE JACOB: Hum hum.

8 CHRISTINE MAINVILLE: Can you talk about
9 the pre-trial running period? There was a pre-trial
10 running where there were incidents, scenarios were
11 executed, did you participate in that?

12 As I understand it, there was a period
13 before where we were running trains, but we were doing
14 drills and incidents so we wouldn't... so we wouldn't do
15 them during the trial running period where we just wanted
16 to run the trains?

17 CLAUDE JACOB: O.K. Well yes, that was
18 part of the demonstration that OLRTC had to pass, to
19 demonstrate that in different emergency scenarios, the
20 processes that were put in place would work. It was also
21 an opportunity for OC Transpo to demonstrate that their
22 response processes were operational, just as ours are. So,
23 yes, there were a few of those, actually.

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1 CHRISTINE MAINVILLE: O.K. And how did it
2 go, those exercises, in terms of... challenges encountered
3 or... or problems with the trains?

4 CLAUDE JACOB: Unfortunately, I don't
5 remember any significant problem there. There was always,
6 as is always the case, a report, and there were little
7 things to improve in everyone's reactions, but I don't
8 remember that there were necessarily any problems with
9 that. Otherwise, a smoke problem, I think, there in the
10 tunnel, which was... which had occurred there in a
11 simulation at the tunnel.

12 CHRISTINE MAINVILLE: Are you aware of any
13 problems with... I don't know if they were coordination
14 problems, but with... in... if there were incidents on the
15 line, following the commissioning, in terms of... I'll say
16 coordination, there, between OC Transpo and RTM or Alstom,
17 to respond to those incidents?

18 CLAUDE JACOB: Uh... No, there were...
19 then there, it's far in my memory, but there were in those
20 events, communications that had to happen, that happened,
21 there, but there were in the debriefing, there, sometimes
22 we observed that there were so many minutes there, that we
23 could do better the next time, stuff like that. But
24 otherwise, I don't see anything else.

25

1 CHRISTINE MAINVILLE: What was the
2 arrangement, finally, when something happened, what was to
3 happen... what was to happen between the two entities or
4 the three entities?

5 CLAUDE JACOB: Between OC Transpo, RTM
6 and...?

7 CHRISTINE MAINVILLE: And Alstom.

8 CLAUDE JACOB: O.K. Well, if it was an
9 event on the main track, it was the OC Transpo operator on
10 board who had to contact their dispatch center, depending
11 on the circumstances, because they had a protocol there to
12 try to see if they could debug the fault in question and
13 resume service right away.

14 If it was a more serious problem, we were
15 notified at the dispatch center in Belfast Yard. Most of
16 the time, what it meant was that there was a train that
17 was going to come back home earlier than expected at a
18 reduced speed or not, depending on what was observed, and
19 there we were asked to prepare another train, there, to
20 replace it, there, as soon as possible.

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1 CHRISTINE MAINVILLE: And were there
2 scenarios where RTM and Alstom would go to the site, some
3 problems that could be fixed on the line itself more
4 quickly?

5 CLAUDE JACOB: Yes, that's right, once the
6 driver had exhausted his list of... quick trouble
7 shooting, if you like, that he could do on the train, well
8 then, we dispatched an Alstom Maintenance technician from
9 our dispatch to go to the place where the faulty train was
10 located.

11 CHRISTINE MAINVILLE: O.K. And as a
12 general rule, did he have to try to fix the problem where
13 the train was?

14 CLAUDE JACOB: That's right. That's what
15 was going on, there, the vast majority of the time, there.

16 CHRISTINE MAINVILLE: Maybe we'll take a
17 break, so we can go... we can stop recording.

18 CLAUDE JACOB: That's fine.

19 -- SUSPENSION AT 3:32 P.M. --

20 -- RESUMPTION AT 3:47 a.m. --

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1 CHRISTINE MAINVILLE: O.K. Let's talk about
2 trial running, train traffic, operating trains. So you were
3 a member of the... of the trial running team, if I
4 understand correctly?

5 CLAUDE JACOB: Yes.

6 CHRISTINE MAINVILLE: And what was your
7 role on this team?

8 CLAUDE JACOB: Demonstrate RTM's readiness
9 specifically on maintenance and maintenance feedback for
10 stations and tunnel facilities.

11 CHRISTINE MAINVILLE: And I imagine that
12 the Alstom maintenance crew, therefore, was fully involved
13 in this?

14 CLAUDE JACOB: In this, yes.

15 CHRISTINE MAINVILLE: And what tasks were
16 there for the maintenance crews during this period?

17 CLAUDE JACOB: So, we had to perform all
18 the maintenance tasks as prescribed in the tender
19 documents, so all the tasks, frequencies, types of
20 maintenance that we can think of, all the inspections.

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1 If ever there was a breakdown or an
2 emergency of any kind, well, a fire extinguisher going off,
3 a door not opening or whatever, we had to demonstrate our
4 ability to intervene within the time frame prescribed in
5 the contract as well.

6 CHRISTINE MAINVILLE: And from your
7 perspective, were the maint... the maintenance crews ready
8 for trial running?

9 CLAUDE JACOB: Yes, there were some issues
10 at the beginning, the first few days, when we ran a lot,
11 because there were a lot of problems with the doors,
12 because as we mentioned earlier, there were some stations
13 that had been built a long time ago, and therefore, some
14 doors had been left unoperated.

15 So, the first days we operated them, the
16 doors weren't all in agreement to cooperate with us. So,
17 we did a lot of running around in the first few days to
18 fix door problems, but that gave us the opportunity to
19 show our ability to respond quickly, and then after that,
20 it kind of settled down in the last few days.

21 CHRISTINE MAINVILLE: So, the doors of the
22 stations?

23 CLAUDE JACOB: Yes.

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1 CHRISTINE MAINVILLE: And how would you say
2 it went afterwards? Let's start with... maintenance.

3 CLAUDE JACOB: Are we talking about trial
4 running or after?

5 CHRISTINE MAINVILLE: Yes, trial running.

6 CLAUDE JACOB: Well, the trial running
7 period, as I said, went relatively well for us,
8 notwithstanding this little challenge.

9 I remember that there was an issue that
10 arose, I think it was with the programming of the tunnel
11 ventilation systems, but that was the responsibility of
12 Alstom Maintenance, so within the ... trial running,
13 there, they had set their ... their SOPs, there, on that,
14 and then they had demonstrated that the new one worked
15 well.

16 CHRISTINE MAINVILLE: And what was the
17 problem with the ventilation?

18 CLAUDE JACOB: I don't remember, to be
19 honest, right now, if it had to do with the sequence of
20 the ventilation system or how the alarms were... had gone,
21 right now it's too vague.

22 CHRISTINE MAINVILLE: O.K. And you, being
23 part of the team, you see and participate in...

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1 CLAUDE JACOB: At the daily meetings.

2 CHRISTINE MAINVILLE: ... to meetings and
3 scorecards, score?

4 CLAUDE JACOB: Hum hum.

5 CHRISTINE MAINVILLE: And there are
6 still... I don't know if you've had a chance to refresh
7 your memory, but there are still a lot of days where there
8 are... failures, finally, in terms of the maintenance,
9 "Fail"?

10 CLAUDE JACOB: Hum hum.

11 CHRISTINE MAINVILLE: Can you talk about
12 that a little bit and why, what caused that?

13 CLAUDE JACOB: Not with much more detail,
14 unfortunately, than the door problems there.

15 I remember we had days where we didn't
16 get past the reaction times or things like that, but I
17 don't have any more... details, there, on the technical
18 causes.

19 CHRISTINE MAINVILLE: And how did that
20 work in terms of scoring for... what you had to do to...
21 in terms of the maintenance, to pass, either pass one day
22 and then pass the trial running in total?

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1 CLAUDE JACOB: Well, what I remember is...
2 we had daily scores, but we also had cumulative averages,
3 if you will, for the different systems, and it was a
4 combination of the two parameters that meant that at the
5 end of the 12 days, if I'm not mistaken, the passing score
6 was awarded or not. So, you could pass either by average or
7 the total, there, there was also a daily minimum, there,
8 but... that's where my memory stops.

9 CHRISTINE MAINVILLE: And when you say,
10 you're talking about those scores and the average, you're
11 talking about the aggregate, not just maintenance, right?

12 CLAUDE JACOB: Well, we were all... it was
13 a major validation process of our ability to do
14 maintenance and operation. So most of the tasks, the
15 measures had to do with... to some extent, reliability or
16 our ability to respond or do the maintenance there that we
17 were supposed to do.

18 So, it was mainly that, there were
19 certain operational elements that I remember, there, in
20 that document, that we validated every day too, but the
21 rest, it was... it was basically our ability to do the
22 maintenance and the inspections and to respond in the
23 allotted time.

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1 CHRISTINE MAINVILLE: O.K. So, the... there
2 was an average as well that... that was considered for the
3 maintenance specifically?

4 CLAUDE JACOB: For... I think they had...
5 there was a score, there, for each item, there, because
6 there were, I don't know, about twenty items that were
7 measured on the card, each item had its passing score, and
8 there were averages as well, there, for some groups of
9 items together, I think, there, but...

10 CHRISTINE MAINVILLE : O.K. So, maybe
11 we'll name one -- Emily, if you're able to go get document
12 COW270758. I'll ask you some questions in the meantime,
13 but...

14 CLAUDE JACOB: That's fine.

15 CHRISTINE MAINVILLE: Did the...and I know
16 there were changes in criteria during the trial running,
17 we'll talk about that again, but did the...let's start
18 with this: if maintenance didn't succeed one day, did that
19 necessarily mean failure for you for the day?

20 CLAUDE JACOB: I think not, because not
21 everything had the same weight there either. That means
22 that there were... criteria that were more important,
23 there, sine qua non; others were, as I said, there, more
24 in a dynamic of averages.

25

1 So, if over two or three days you managed to get an
2 average, you could afford to have a bad day, and then at
3 the end, pass anyway.

4 CHRISTINE MAINVILLE: For maintenance?

5 CLAUDE JACOB: Hum hum.

6 CHRISTINE MAINVILLE: You, you mean the
7 maintenance specifically?

8 CLAUDE JACOB: Yes.

9 CHRISTINE MAINVILLE: O.K.

10 CLAUDE JACOB: Yes.

11 CHRISTINE MAINVILLE: O.K. So it didn't
12 take 12 consecutive days where the maintenance had a
13 passing score, a success score?

14 CLAUDE JACOB: That's what I remember..
15 Not all the systems were "Fail", if you will, there were
16 some that you could have a bad score one day, but if you
17 had two or more good days in a row... but you know, there
18 was a question of averages in that, but if you show me the
19 card, it might help.

20 CHRISTINE MAINVILLE: Okay, we'll take a
21 look.

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1 And what had more weight, in terms of the
2 maintenance, what weighed more and what weighed less, as
3 you recall?

4 CLAUDE JACOB: Well, obviously, there was
5 the whole question of the trains, their reliability and
6 availability, the cleanliness was measured of course, the
7 same for the stations. I don't remember the other items
8 there.

9 CHRISTINE MAINVILLE: O.K. So, was it
10 fairly subjective, the evaluation of the maintenance in...
11 at the end of the day, was there a subjective element in
12 that or was it fairly objective criteria?

13 CLAUDE JACOB: Depending on the elements,
14 there were fairly precise criteria. You know, there was...
15 on reaction time, for example, there is a prescribed
16 number of minutes, there, you know, it's not subjective,
17 it's yes or no.

18 There were others, depending on the
19 nature of the fault and the description of the maintenance
20 task, if you will, where there was room for
21 interpretation, and that's where the committee, there,
22 with... we were, I think, close a dozen on that
23 committee, 10 or, 12, we had discussions of interpretation
24 on the text, there, of the... the tender documents or the
25 reference, et cetera.

1 So, sometimes, there were... there was a
2 margin of appreciation, there, on the nature, there, of the
3 event or the fault as such before qualifying it as
4 acceptable or not, there.

5 EMILY YOUNG: I have the document ready.

6 CHRISTINE MAINVILLE: O.K. We can show it.
7 So, this is a document that includes the...the scorecards.
8 So, maybe just to give you an example, we can go to the...
9 towards the end, let's say, August 19, that's towards the
10 end; August 19, 2019. There are dates at the top.

11 Unfortunately, I don't have the page
12 number, but... so, it's going to be page twenty... 27. So,
13 if... well, then we see, well, at the operational level.
14 If you go down a little bit, "Maintenance delivery" is for
15 storage -- maintenance, I mean.

16 So there were two, let's say, overall
17 criteria, according to the form, maintenance practices and
18 demonstration of the IMIRS process.

19 CLAUDE JACOB: Hum hum.

20 CHRISTINE MAINVILLE: So maybe you can
21 explain these two components to us?

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1 CLAUDE JACOB: Well, "Maintenance
2 practices", there, I guess it's: did we meet the
3 maintenance descriptions that day, in whole or in part, I
4 couldn't say.

5 IMIRS was... that was the response times,
6 so did we respond within the prescribed response times?

7 CHRISTINE MAINVILLE: O.K. And so, we see,
8 for example, here, there's a... a failure for maintenance
9 practices.

10 CLAUDE JACOB: Hum hum.

11 CHRISTINE MAINVILLE: So... but if we go
12 up, for the day, it is a "Pass" day?

13 CLAUDE JACOB: Hum hum.

14 CHRISTINE MAINVILLE: So how does that
15 play out, the fact that there's a failure at the
16 maintenance level, and whether or not that's reflected in
17 whether or not the day is a success?

18 CLAUDE JACOB: Well, sure, you had to go
19 into the details, you know, obviously, what everybody was
20 looking for was to make sure that you ran the trains, ran
21 the number of trains you wanted to run, made the number of
22 trips you wanted to make, because that's what the...
23 everybody was going to appreciate every day, once they
24 were in service.

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1 If there were some maintenance or other
2 tasks, there, I didn't see what was at the bottom of the
3 chart, but that were not successful that day, if it didn't
4 prevent the trains from operating normally, well, it was
5 seen as a more minor thing, obviously, there.

6 So, that's a bit of a hint, if all the
7 trains are running in Ottawa tomorrow morning and everyone
8 is happy with the trains, if there was a dirty window on
9 the third door of the car, that's not going to stop people
10 from appreciating the service. So, I'm caricaturing a
11 little bit by saying that, but that was kind of the scope,
12 there, of the elements, there. They didn't all have the
13 same weight in that sense.

14 CHRISTINE MAINVILLE: O.K. And then there
15 are footnotes, for example...

16 CLAUDE JACOB: Yes.

17 CHRISTINE MAINVILLE: ... where it's going
18 to say, here, "Maintenance practices due to an incident,
19 procedures and processes will be adjusted -- are being
20 adjusted"?

21 CLAUDE JACOB: That's kind of what it's
22 like, you could get the whole maintenance right one day,
23 but if a procedure wasn't done exactly as planned or if
24 you missed a frequency of something, well, that's where
25 there was a failure, it doesn't mean that the rest of the
day you didn't do the maintenance as planned.

1 So it could be fairly minor to "fail" there, if you will.

2 But if you go back a little bit further,
3 there was still, I think, some level of detail that was
4 given on the maintenance activities or the systems that
5 were being measured. That's more like the trains.

6 O.K. No, that's it. That made it really
7 just... it was... you know, it was pretty demanding to...
8 but at the same time, it was for all the stations and
9 tunnel systems, so it took a lot of systems for a small
10 box, so it didn't take much out of all of that to get a
11 "Fail" considering the amount of infrastructure involved.

12 You see that the number of lines here,
13 from the beginning, this document, which was a contract
14 document, was always defined with demonstrating delivery
15 of the service in mind rather than the details of each of
16 the tasks, because everyone agreed that if the maintenance
17 is done, well, the... the trains will run, and that's the
18 demonstration that was done here, there, the maintenance
19 tasks that could be defective were minor, there, and had
20 nothing to do with running trains.

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1 CHRISTINE MAINVILLE: O.K. And so, do you
2 know how we read this sheet in terms of what... what was
3 necessarily running?

4 Because we see, for example, "Travel time"
5 for the operational category, that this too was a failure,
6 but for the day, it is a "Pass".

7 So, what had to be successful for the day
8 to be successful and what was... how was that evaluation
9 done?

10 CLAUDE JACOB: Well, the number of trains,
11 that was key. The travel time, there, I remember that
12 there were long discussions, there, of interpretation, the
13 averages, PM versus AM, or just each of the two times, et
14 cetera. We see here, there, that the time was longer in
15 the morning than in the afternoon, the average is between
16 the two.

17 So, I don't remember the details, it was
18 more the discussions that took place between OC Transpo,
19 OLRTC and RTG, precisely for what you mentioned earlier,
20 you know, your system design book, where all the travel
21 times, all that, had been defined, with their issues, how
22 they were measured, why, and so on, and it was those
23 people who had those discussions, because we didn't have
24 that detail, there, of how the travel times had been
25 constructed and then why they could or could not be, with
what tolerances, and so on.

1 CHRISTINE MAINVILLE: You, your focus was
2 the maintenance category?

3 CLAUDE JACOB: Facilities. CHRISTINE
4 MAINVILLE: And facilities. And was there any meaningful
5 discussion in terms of what was...what was to be
6 considered minor or not in terms of the maintenance, was
7 there any discussion in that regard of... among the team?

8 CLAUDE JACOB: Yes, well, I remember the
9 first few days, there, it's... every item was discussed at
10 length because we were learning to understand and measure
11 the parameters, there, all in the same way. So, yes, there
12 was a lot of discussion on each of the items, but after
13 that, each... depending on what was going on, from one day
14 to the next, there might be more discussion on one item
15 than another, there, when they were borderline or in a
16 position of being a "Fail".

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1 CHRISTINE MAINVILLE: O.K. And how would we
2 know if... well, let me rephrase that... Is there a
3 possibility that the day will be a failure if the
4 maintenance is a failure on some level, there, let's say?
5 Could maintenance performance lead to a failure for the
6 day?

7 CLAUDE JACOB: Honestly, off the top of my
8 head, right now, I'd say yes, but I'm really not sure.

9 CHRISTINE MAINVILLE: O.K. And there was
10 no... to your recollection, was there a minimum that had
11 to be met by maintenance, like a minimum number of days
12 where you had to have passed maintenance to...to
13 ultimately complete the trial running successfully?

14 CLAUDE JACOB: Yes, you mention that, then
15 indeed, there was a question of averages, the number of
16 days out of the total, and so on, then it seems to me that
17 there was a mini accompanying booklet on the other
18 criteria to help us measure each of the boxes here,
19 because here, it was still quite factual, it is the
20 activity and its measurement.

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1 But we had reference documents to explain
2 the content and context of each of these elements to help
3 us, beyond what we see here, there, which is just green or
4 red, there were sometimes nuances in the text to help us
5 qualify the line in question.

6 CHRISTINE MAINVILLE: And do you recall
7 any particular disagreements in terms of different
8 people's views of what the maintenance, maintenance
9 performance, should be?

10 CLAUDE JACOB: Not on maintenance, no. I
11 think there was some discussion at one point about the
12 number of trains or the reliability of the trains, and I
13 think there was even a pause at one point in the trial
14 running. Uh...

15 CHRISTINE MAINVILLE: Hum hum. O.K. Let's
16 move on to those discussions. What were those concerns and
17 discussions?

18 CLAUDE JACOB: Well, unfortunately, it's
19 been three years, I don't remember much about the
20 discussions that took place, but from memory, it was very
21 similar to the issue of the trains, or that... that there
22 was a lack of, you know, the "Actual Number of Trains"
23 versus the "Scheduled Number of Trains", there were issues
24 some days, there. Was it that element or the minutes?

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1 I don't remember, there were different issues on one or
2 the other, there, within that period, but I don't have a
3 very precise memory, there, of that detail.

4 CHRISTINE MAINVILLE: O.K. But there were
5 performance or reliability problems with the trains during
6 the trial running?

7 CLAUDE JACOB: Yes, from one day to the
8 next, there were different parameters that were lower than
9 desired.

10 CHRISTINE MAINVILLE: O.K. And eventually,
11 it would lead to a change in criteria? Do you remember a
12 change in how the score was going to be... was going to be
13 done?

14 CLAUDE JACOB: Well, there were, as I say,
15 a lot of discussions that took place, there, that we
16 weren't necessarily involved in, you know. There was the
17 committee, there were these measures, there were these
18 interpretations that took place in the committee, but
19 there were other issues that were more technical, that had
20 to be addressed with other jurisdictions before they could
21 be... come back with a recommendation or an analysis or an
22 action.

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1 So I can't say that we were aware of all
2 the discussions that everyone had on this subject, because
3 there was obviously work, considering all the technical
4 elements that were measured here, there was obviously work
5 that involved technical experts to help us sometimes, who
6 were not those who sat on the committee as such.

7 CHRISTINE MAINVILLE: Did you... so you
8 weren't part of that discussion, but do you remember that
9 there was a change in procedures during the trial running?

10 CLAUDE JACOB: Yes, my memory tells me
11 that there were some adjustments, there, especially in
12 terms of some contractual interpretations, but not... not
13 much more specific than that, there, beyond that.

14 CHRISTINE MAINVILLE: Have you been
15 informed of the reasons behind this change?

16 CLAUDE JACOB: Well, that it was as a
17 result of the review of the text, that people had come to
18 an understanding, an interpretation that was presented to
19 us there. We relied on these people because, as I said, it
20 was often in the specialties, and we were not responsible
21 for demonstrating the performance of the trains, but OLRTC
22 was responsible for that.

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1 So, they were piloting this a lot with
2 Alstom Construction and a little bit with Maintenance, but
3 it was mainly the construction group that was in charge of
4 passing the tests for the trains.

5 CHRISTINE MAINVILLE: O.K. Do you know who
6 initiated the change or adjustments to the criteria?

7 CLAUDE JACOB: Listen, I'd say it was a
8 group discussion there. Who initiated it, then it was the
9 actors, there, who were around the table, who... who
10 initiated the conversation, there, not necessarily always
11 the same one or another, there.

12 CHRISTINE MAINVILLE: O.K. Was there a...
13 you understood that there was a...that people realized
14 that it would be difficult to pass or meet the...the
15 initial criteria that had been set and so that led to the
16 adjustment?

17 CLAUDE JACOB: Well, I think there was
18 some concern in the early days that led to the pause,
19 which gave time, I think, for all the teams involved to
20 make some adjustments to address some of the reliability
21 issues. But I think that when we got back to work, which
22 led, if memory serves me correctly, to the success of the
23 last 12 days, I think that people were in agreement on the
24 measure and also on the fact that the systems were
25 performing up to the expectations of everyone around the
table.

1 CHRISTINE MAINVILLE: Then do you remember
2 that... among the adjustments, we now had to meet 9... we
3 had to... we were going to take the 9 days of 12, the...?

4 CLAUDE JACOB: If I remember this? When
5 you tell me, I say yes, but actually, I think it was
6 something like that that happened at the end, and that
7 too, I think it was a contractual interpretation.

8 CHRISTINE MAINVILLE: O.K. Then just to
9 refresh your memory, there would be a change to the...
10 what they call AVKR, aggregated vehicle kilometre
11 availability, where the average required over the 12 days
12 or 9 of 12 was reduced from 98% to 96%, does that refresh
13 your memory?

14 CLAUDE JACOB: I don't have the figure,
15 but I remember that there were discussions about this
16 interpretation of the AKVR.

17 CHRISTINE MAINVILLE: And in the first
18 instance, did you understand why AVKR, the average was
19 originally set at 98%?

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1 CLAUDE JACOB: This was explained to us, at
2 the time, when the table was presented to us, because
3 obviously the criteria were defined contractually, but they
4 still had to be expressed in a measured table and all that.

5 So, there was some discussion at the
6 beginning about what the table should contain, what the
7 parameters should be, how to indicate them, how to
8 understand them, all that. So, there was, if you will, a
9 crash course 101, there, the first few days, to tell us:
10 well, here's why this is the chart we have, the components
11 are there, here's how they're measured, here's where they
12 come from, all that kind of stuff, there.

13 So, yes, I would have a hard time
14 answering the exam question today, but it was explained to
15 us at the time.

16 CHRISTINE MAINVILLE: O.K. And was AVKR a
17 relevant criterion for RTM?

18 CLAUDE JACOB: From memory, it was, there,
19 because it was... it was part of the billing there. So, if
20 we didn't perform on this item, we were penalized.

21 CHRISTINE MAINVILLE: Yes. And did you
22 understand, if I... maybe I'm refreshing your... I'm
23 trying to refresh your memory, if the 98% was just the
24 level where RTM would be evaluated following
25 commissioning?

1 CLAUDE JACOB: That's it, we're going to
2 keep working together!

3 From memory, 98% was the threshold that
4 meant that there were no penalties on train operation. And
5 after that, there were different criteria, there, that
6 brought certain penalties, up to system penalties, I
7 think, that they called it, that were more important in
8 terms of trains missing from operation, and so on.

9 CHRISTINE MAINVILLE: And so, when it got
10 down to 96%, was that a concern for RTM, like it would be
11 below the level where you would be judged afterwards?

12 CLAUDE JACOB: I can't say it's a concern,
13 obviously it's not a concern anymore, but my recollection
14 of it is that it seemed to me that there was a framework
15 to it, you know, temporal or otherwise, where there were
16 criteria that defined the 96.

17 I think it had to do with -- and here I'm
18 remembering, so I say this with a caveat, but it seems to
19 me that it had to do with a period of time when we were
20 bringing more trains back into service and I don't
21 remember why and according to whom, but I think that the
22 96 was like acceptable for a period of time, but we had
23 conditions to meet, after which there would be financial
24 consequences on that threshold too, here, but I could be
25 completely off target.

1 CHRISTINE MAINVILLE: And in the event that
2 you're not, was that a period of time that you mean prior
3 to commissioning?

4 CLAUDE JACOB: No. Well, my recollection
5 was that we had a number -- a number of months to add to
6 the City's request, I think, there, the other two trains,
7 and I think that's when the... the 98 was coming back into
8 the picture, there, but...

9 CHRISTINE MAINVILLE: Okay, I understand.
10 But when you commissioned, you were always going to be
11 tried at the...

12 CLAUDE JACOB: (Indiscernible).

13 CHRISTINE MAINVILLE: Were you going to
14 have penalties if you didn't do the 98 or was there an
15 agreement to reduce?

16 CLAUDE JACOB: Well, I think there was a
17 penalty there that was... that was there every day and
18 heard by everyone, just so it's not a surprise every day,
19 because we were operating at 96, there, if that's the
20 number, there, I have no doubt that it's the right one.

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1 CHRISTINE MAINVILLE: So you may be
2 referring to the fact that the number of trains had been
3 reduced from 15 to 13, so there would be fewer miles?

4 CLAUDE JACOB: That's right.

5 CHRISTINE MAINVILLE: Fewer trains
6 available. So, this penalty, you were expecting it, it was
7 going to be...

8 CLAUDE JACOB: This had been agreed by the
9 parties, so it was no longer a decision of RTM or a result
10 of the work that RTM was producing where our ability was
11 ready or not, it was...

12 CHRISTINE MAINVILLE: Hum hum

13 CLAUDE JACOB: ...we wanted 13 trains in
14 service, that was the agreement between the City and RTG,
15 so...

16 CHRISTINE MAINVILLE: And that was because
17 there were two trains that weren't ready or reliable
18 enough to run, to run?

19 CLAUDE JACOB: I think the trains were
20 ready there. The question is: did the ridership demand it
21 on the City's side, and if the ridership wasn't there,
22 according to their measurements, did that also leave time
23 to make the fleet more reliable by not putting more trains
24 in than were needed?

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1 So, there was a gain on both sides, but I
2 think that the argument for the decision was mainly that
3 the City did not need the 15 trains at the beginning.

4 CHRISTINE MAINVILLE: But since there were
5 going to be deductions or penalties, necessarily, there
6 was... as you say, there was an interest on the part of
7 the consortium not to run these trains, otherwise you
8 would have made them available?

9 CLAUDE JACOB: Yes, I think that there
10 were interests on both sides, because there was a list of
11 things to repair, to correct, to install on the trains. So
12 it was a bit of a bargain for the consortium in that sense
13 too, because the penalty, as we say, did not kill anyone
14 and in the medium term allowed us to hope to have more
15 trains with new equipment installed on board and so on.

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1 CHRISTINE MAINVILLE: And were there two
2 trains that had more difficulty performing or was it just
3 that you were going to take any 13 and leave the others for
4 repairs and upgrades?

5 CLAUDE JACOB: No, there were no two
6 trains in particular that had problems, it was evenly
7 distributed there.

8 CHRISTINE MAINVILLE: O.K. So, that's in
9 terms of the... the number of trains that were going to
10 run, which impacts the penalties, but in terms of the 96%
11 itself...

12 CLAUDE JACOB: Hum hum.

13 CHRISTINE MAINVILLE: ... performance,
14 isn't that a separate element that...?

15 CLAUDE JACOB: Well, to the extent that it
16 was an element that looked at total miles traveled,
17 whatever the reason, the number of trains is an input, but
18 there were a lot of operational decisions, for example, if
19 a train was faulty at station X and then the City decided
20 to return the train to the garage rather than have it run
21 to the garage, well then, we lost miles that we said,
22 well, we should have had those miles, the train ran those
23 miles, those distances, we could have made the stops, all
24 of that, you just decided not to do that.

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1 So, there was a little bit of everything,
2 there, in this indicator, there were elements of the number
3 of trains, but there was the number of kilometres traveled,
4 how to build the schedules, there was a way to calculate
5 the kilometres for light engines, in the morning and in the
6 evening as well.

7 So, there were several elements that
8 generated kilometres in the indicator, some of these
9 elements had different people that could influence them,
10 if you will, there. So, it wasn't as simple as the number
11 of trains to follow, there.

12 CHRISTINE MAINVILLE: But I guess the
13 percentage, we were calculating it on a total of 13
14 trains, when we did the... once we narrowed it down to 13?

15 CLAUDE JACOB: No, from what I remember,
16 the schedule was built on a given number of trains on a
17 given number of stops, because obviously, you understand
18 that the number of... of train circuits that we make in a
19 day in the schedule, the number of stations that we decide
20 to stop, you know, there are several networks, for
21 example, where in the evening, we don't make all the
22 stations, so that reduces the number of kilometres
23 sometimes covered by certain trains.

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1 If a decision is made to run more trains at interpeak,
2 well, that generates more miles, and those decisions, in
3 many cases, were the City's prerogative to operate the
4 train schedule it wanted.

5 So there was always this kind of
6 negotiation to reach agreement on all the parameters that
7 influenced this indicator.

8 CHRISTINE MAINVILLE: Do you agree with me
9 that ultimately the adjustments to the criteria have,
10 let's say, reduced the... to some extent, the... the
11 performance requirements?

12 CLAUDE JACOB: Well, that's how the 96,
13 there, appeared, there, I think. I'm not sure about the
14 96, but I know we dropped the 98 number there, but I think
15 96 is right. And that was to reflect that, among other
16 things, there, but why it wasn't lower than that, well,
17 it's because there were a lot of other parameters that
18 were working well, schedule adherence, number of stations
19 and all that too.

20 CHRISTINE MAINVILLE: But wouldn't there
21 have been a concern on the part of RTM that the system had
22 not been tested to 98%, and therefore, that there would be
23 a concern about having additional deductions once the
24 trains were in service?

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1 CLAUDE JACOB: Well, there would have been
2 if it had been demonstrated that Alstom would not have been
3 able to make the trains available at the agreed time, the
4 last two, if you like. The decision to operate 13 trains
5 was made between the City and RTG, so for us, it's... as
6 they say, a moot point, there, it was the decision for
7 their parameters, their own decision. We commissioned with
8 that, understanding that we were explaining the penalty
9 gaps with the decision that everyone had made, and there
10 was a game plan to get the last two trains back in service.

11 So, we were following this with Alstom
12 Maintenance, and for us, it was normal, this was the plan
13 to be delivered, we operate 13, we add two soon, then
14 after that, life goes on. So there was no... you know,
15 discussions to be had or quibbling or anything, there was
16 the game plan, and then after that, there was a step up,
17 if you will, and that was it.

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1 CHRISTINE MAINVILLE: O.K. So, is it... if
2 I understand correctly, RTM had no say in the change even
3 from 98 to 96%?

4 CLAUDE JACOB: We are accountable to
5 our... to the board, so if the shareholders agreed with
6 that decision, well, we didn't have to justify anything to
7 anyone. The City and our partners agreed to operate in
8 this scenario, so where we were operating.

9 CHRISTINE MAINVILLE: But when you say
10 your partners, the... not the board of RTM, but of RTG?

11 CLAUDE JACOB: It was all the same
12 partners in the end, we agree. So, obviously the... the
13 RTM board members were in the same company as the three --
14 the other two boards. So, even though they weren't the
15 same people, they all work for the same three companies in
16 the end, so these people had their own board of directors
17 at RTG, which was often where the final decisions were
18 made. So, once these people said: "Okay, well, for the
19 best, everybody, in agreement with the City and all that,
20 this is the alignment we're taking," well, whether it was
21 us, OLRTC or the other players in the equation, well, that
22 was... that became our marching orders.

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1 CHRISTINE MAINVILLE: Yes. So, I guess
2 in... given that it's the same companies down the road and
3 the same shareholders, I guess the calculation is
4 somewhere, well, is it better to get to the service date
5 and risk there being deductions for maintenance than to
6 continue the trial running for longer, I guess that was
7 part of the consideration?

8 CLAUDE JACOB: Well, I imagine it like you
9 do. As I said, we were not necessarily part of these
10 discussions, which took place mainly between RTG and the
11 City, and sometimes with OLRTC, because they were the ones
12 who brought the rolling stock to term, if you will.

13 But actually, there were several
14 parameters depending on the parties, everyone had their
15 balls in the game which were not necessarily the same, you
16 know. There was the benefit to everyone of going into
17 service early, there was the benefit to everyone of having
18 reliability, but what's the marriage of all that, versus
19 what do we really need to have in service on day 1 anyway.
20 So, through all these analyses of all these parameters, at
21 some point, these people made decisions.

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1 CHRISTINE MAINVILLE: And in terms of
2 special interests, am I right in saying that for RTM, their
3 interest is not that the system is commissioned as quickly
4 as possible?

5 CLAUDE JACOB: Well, in an ideal world,
6 the maintainer always wants a perfect system, and then
7 there is almost nothing to do to make it work, there, it's
8 obvious. But insofar as our mission was to deliver the
9 service that RTG asked us to provide in the interest of
10 the City, and these people decided that the parameters of
11 the game are XY, well, we delivered XY and everyone was
12 happy.

13 CHRISTINE MAINVILLE: O.K. So, if I
14 understand, given those dynamics, you, it's not like you
15 went to your board and said: "Just a moment, we should
16 slow down"?

17 CLAUDE JACOB: I would have done it if it
18 was money coming out of my pocket, but it's not there. I
19 was there to manage the interests of the stakeholders in
20 this equation, and as soon as the stakeholders told me
21 that this was what they wanted to do regarding operation,
22 well, this, then everyone was happy, you know. If I had
23 been asked to deliver 17 trains and then I had 17 trains,
24 I would have been happy to commission them as well. So
25 that was the deal...

1 CHRISTINE MAINVILLE: O.K. And were you
2 aware, though, that it's... the fact that we hadn't
3 reached, say, 98% and then the.. .we had reduced the number
4 of trains because of reliability concerns, did you have, at
5 least, the concern that there would be increased pressure
6 on maintenance, on RTM?

7 CLAUDE JACOB: Of course. Everyone,
8 including, you know, RTG, Alstom Maintenance had gotten.
9 Everyone was aware. After the two weeks of happiness at
10 the beginning of September, when we started to have the
11 door problems at the beginning and then the other
12 reliability problems on the trains afterwards, it quickly
13 became a concern to be able to deliver the daily service
14 at the same time as repairing the trains and then at the
15 same time, to put the trains back into service and all
16 that, but once we were there, we were in the storm, and
17 this wasn't a storm that was predictable, as we said, at
18 the beginning.

19 But there, it was us, all of a sudden, we
20 had to understand it first, we had to have Alstom's
21 engineers, and there everyone, Construction came back
22 massively to try to help, to understand what was going on
23 with the reliability problems, but obviously, we
24 understand that there we were in operation, so every
25 minute counted.

1 So, then, people studying engineering problems for days on
2 end, it seemed like an eternity. So, yes, we collectively
3 had a series of concerns.

4 CHRISTINE MAINVILLE: During the trial
5 running, you were running coupled trains?

6 CLAUDE JACOB: Yes, there were exceptions,
7 there, just to test.

8 CHRISTINE MAINVILLE: O.K.

9 CLAUDE JACOB: But most of the time, we
10 tried to replicate the normal operation.

11 CHRISTINE MAINVILLE: And at some point,
12 it changed from 15 trains to 13 that were running at the
13 same time, right, during the trial running, if I
14 understand correctly?

15 CLAUDE JACOB: I think there were even
16 more configurations than that that were tested there.
17 Maybe not all of them during the trial running, the others
18 were before, for the reasons we mentioned earlier, but
19 during the trial running, it was a combination mainly of
20 those two sets, 13 and 15, I think.

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1 CHRISTINE MAINVILLE: Then if I... as I
2 understand it, it was partly because of reliability issues,
3 running the 15 trains, it was... it posed some additional
4 challenges?

5 CLAUDE JACOB: Well, not at that time,
6 because as I said, the understanding was that the problems
7 identified that risked making trains inaccessible at that
8 time were under control with the various committees and
9 work that was underway to correct them, whether through
10 software versions or others, there was an interest in
11 testing the other operating mode precisely to understand
12 that if at a given time there is no - because the City was
13 also benefiting, if the ridership is not there, well, they
14 could save money by operating a system with fewer trains
15 as well, if they could find common ground to negotiate it
16 with the partners.

17 So, there were other positive financial
18 interests for the City to go in that direction as well,
19 hence their interest, I guess, in testing the scenarios
20 with that, especially if they didn't think they needed
21 more.

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1 CHRISTINE MAINVILLE: And were the
2 improvements that... the modifications that Alstom
3 indicated they were going to make, did you expect that to
4 be completed before the commissioning date?

5 CLAUDE JACOB: From memory, it was not
6 planned, I think, to be completed before the
7 commissioning, there. So, there was a timeline there,
8 but...

9 CHRISTINE MAINVILLE : O.K.

10 CLAUDE JACOB: It was beyond... the
11 launch, there,

12 CHRISTINE MAINVILLE: So in terms of the
13 predictability of the storm, as you described, wasn't
14 there still some predictability that there were going to
15 be some concerns, once the trial running was completed?

16 CLAUDE JACOB: Well, you know, in the
17 perspective of what we could see, so, you know, I'm going
18 back to the context of the beginning, where we didn't have
19 the opportunity to look for a very long time at the plans
20 and specifications, the technical documents, to go and see
21 the trains ourselves and then to enter, if you like, into
22 the intelligence of the train and all that, what we saw
23 was the reliability curve which improved up to the trial
24 running, which was maintained for several weeks at very
25 high levels during the trial running and the first two
weeks of September while we were in the middle of a
"normal" operation, in quotation marks.

1 So, at this point, no one expected that we
2 would experience what apparently happened later, and
3 especially that it was in many respects new problems,
4 there.

5 CHRISTINE MAINVILLE: And were there any
6 disagreements on that, some people who expressed...
7 concerns?

8 CLAUDE JACOB: To the effect that?

9 CHRISTINE MAINVILLE: That there would
10 be... that we should expect problems during commissioning?

11 CLAUDE JACOB: No, I think everyone had
12 a... a healthy concern, there, towards the end of the
13 summer, because everyone realized how much work had been
14 done in such a short time around that time, but at the
15 same time, obviously, no one had any evidence or tangible
16 demonstration that there was any reason to think that
17 there were problems that would persist after
18 commissioning, there, on the contrary. All the work that
19 everyone had been following, you know, you have to
20 understand that we were in meetings with engineers and we
21 were talking about pretty detailed stuff with graphs,
22 measurements, et cetera, and as we saw from one
23 improvement to the next, from one software version to the
24 next, the stuff was improving, there was no reason to
25 think that all that could go back, there, for...

1 CHRISTINE MAINVILLE: And was Alstom part
2 of that conversation?

3 CLAUDE JACOB: Of course.

4 CHRISTINE MAINVILLE: And what was their
5 position, if you recall, of... in terms of whether the
6 system was ready and reliable?

7 CLAUDE JACOB: Well, they were the... the
8 general contractor at the end of the day, there as a
9 builder and soon to be maintainer. So, they brought,
10 there, not always at the speed that we would have wished
11 perhaps, there, the experts, the best that they had, for
12 the various systems in play, and these people there,
13 clearly, there, made us the demonstration that they worked
14 on systems that they knew, and that they proposed
15 situations that we had the demonstration, after having
16 implemented them, that they addressed the problems in...
17 that were in front of us.

18 So, you know, as they say, the proof was
19 in the pudding that they had diagnosed the problems well,
20 that they knew how to identify effective corrective
21 actions, implement them, and demonstrate that they worked,
22 and that's what brought the reliability improvement curve
23 up to the most excellent levels that we were experiencing
24 at the end of summer 2019.

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1 CHRISTINE MAINVILLE: Do you remember if
2 the City asked RTM and or Alstom Maintenance to increase
3 their staffing levels prior to going into service?

4 CLAUDE JACOB: Absolutely. That's what we
5 did, by the way.

6 CHRISTINE MAINVILLE: Did you increase due
7 to... as a result of trial running or due to problems
8 with...?

9 CLAUDE JACOB: No, it was... as I was
10 saying earlier, I'll call it the healthy concern that we
11 collectively had that having seen all this colossal work
12 there being done on all the systems, there, up to the last
13 minute -- sorry -- we just wanted to make sure that if
14 anything ever happened, because it could happen, there,
15 with so much stuff that had been worked out up to the last
16 minute, the City had asked us to be... to be a good player
17 in the equation, and even though they didn't have any
18 demonstrated reason to ask us that just the moral element
19 of the situation, if you will, they were asking us, there:
20 "Well, look, are you able to get more people on there, on
21 there, on there?"

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1 And we responded favourably to these requests, we had
2 created a whole support structure, if you will, for all the
3 systems, where we had added our contractors to the
4 stations, OLRTC brought back from its employees and
5 subcontractors the systems they had built, Alstom
6 guaranteed the availability of the construction team to the
7 maintenance team.

8 So I wouldn't go so far as to say that we
9 had doubled the number of people available, but it was a
10 significant number at the end of the day, and it was
11 reassuring, because there were people on all the systems,
12 whether it was the trains, the catenary, the track, the
13 stations and others.

14 CHRISTINE MAINVILLE: So you're saying
15 that Alstom also increased its workforce towards the...
16 approaching the commissioning date?

17 CLAUDE JACOB: Right, and even after.

18 CHRISTINE MAINVILLE: And... but still,
19 you weren't ready for what came next?

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1 CLAUDE JACOB: Yes, because unfortunately,
2 what followed were engineering problems, and then, well, as
3 we said, I wasn't there very long. But obviously, there,
4 you know, it wasn't... it's not problems of nature, for
5 example, there, you know, if the doors had been badly
6 greased, that's why they were dropping, you could have put
7 a blitz, there, of greasing the doors for two weeks, to
8 solve the problem, and that's where the notion of staff
9 level could have helped.

10 But the problems that were experienced
11 were technical problems that had to be investigated first,
12 so that required a limited number of specialized engineers
13 to do the work while... you can have an army of people
14 outside who are ready to do work, but we don't have any
15 work for them.

16 CHRISTINE MAINVILLE: O.K. So, at least in
17 terms of the problems that occurred earlier, after
18 commissioning, so before you left, from your perspective,
19 it was... it wasn't maintenance problems at the base?

20 CLAUDE JACOB: Not at all.

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1 CHRISTINE MAINVILLE: And... but there may
2 have been additional delays in getting the trains, let's
3 say, back into service, or in responding to problems that
4 were related perhaps to the number of staff, perhaps not
5 foreseeable, but from... from the response of Alstom and
6 RTM, the response that you were able to give?

7 CLAUDE JACOB: In my opinion, it was never
8 a question of the staff level. The times when it took
9 longer to put trains back into service, even in the first
10 few weeks I was there, it was because we were
11 troubleshooting.

12 So we had, you know, an electronic box,
13 it's an electronic box, and sometimes it doesn't take much
14 to generate an error message, and the specialized
15 technician had to be there and do his test protocol until
16 he found out where the bad code was coming from or
17 whatever, to be able to reset and all that.

18 So, we can have 20 mechanics in the shop
19 ready to do work, it was not the nature of the
20 interventions that made the trains unavailable, every
21 time, it was... well, "every time", at a very high level,
22 it was always electronic problems like that where it took
23 a limited number of very efficient technicians to be able
24 to do this troubleshooting, to put the trains back in
25 service.

1 The amount of maintenance, cleaning, inspection and all
2 that has never been an issue here on train availability.

3 CHRISTINE MAINVILLE: And did you perceive
4 any problems with OC Transpo's performance in this regard?

5 CLAUDE JACOB: On the reliability of the
6 trains?

7 CHRISTINE MAINVILLE: No, incident
8 response and coordination with maintenance crews.

9 CLAUDE JACOB: No, apart from the... you
10 know, the normal ramp-up, the first interventions, where
11 we did the debriefings and then we could have improved
12 certain communications, this and that, but that's quite
13 normal in the first few weeks of a service like that. So,
14 it works well.

15 CHRISTINE MAINVILLE: O.K. Then you didn't
16 have any problems with access to information for you from
17 OC Transpo and the operators?

18 CLAUDE JACOB: No, we had very few...
19 contractual or commercial documents between us, it was all
20 operational, so we were rather even collectively
21 interested in what is shared to increase the... the
22 expertise of our two groups of controllers.

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1 CHRISTINE MAINVILLE: O.K. Do you recall on
2 the term sheet -- have you seen the term sheet, the
3 agreement that was made between RTG and the City for
4 commissioning, despite the fact that there were still some
5 items to be addressed, are you aware of that?

6 CLAUDE JACOB: I don't think I saw the
7 document, no.

8 CHRISTINE MAINVILLE: No? O.K. So, on
9 that, there's an item called an updated... an updated
10 maintenance plan for the equipment in the MSF. Does it
11 tell you what, like what, that was to... that was to be
12 done?

13 CLAUDE JACOB: Yep. I remember that there
14 was some equipment, there, in the garage, there, that...
15 as a result of inspections, had been the subject of some
16 improvement measures. Does it mention if it was in the
17 workshops or in... outside?

18 CHRISTINE MAINVILLE: I don't have it in
19 front of me, no.

20 CLAUDE JACOB: O.K. No, I couldn't say.
21 But of course, what was happening was that the City was
22 doing its inspections for the final acceptance of the
23 facilities and all that.

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1 Therefore, these inspections, which took place during the
2 summer, but also during the whole trial running, went far
3 beyond the elements measured on the card we saw earlier.

4 So, these inspections generated a long
5 list each day of all sorts of little things to be
6 corrected, sometimes they were requests that were
7 erroneous in the sense that it was not an obligation of
8 the consortium to deliver something; sometimes there were
9 requests that were made on an item that was already
10 registered to correct, transform or adapt in the project's
11 deficiencies list.

12 So, I think that's probably where some of
13 those comments came from, but it was all about similar
14 equipment or measures.

15 CHRISTINE MAINVILLE: Yes. And there were
16 difficulties, if I understand, on the... we'll call them
17 work orders, which were put forward by the City or their
18 team?

19 CLAUDE JACOB: Yes, indeed, because
20 earlier we touched on it briefly, you know, the IMIRS
21 system, which was a system, there, that basically
22 implemented all the text, all its text came from the PPP
23 contract.

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1 And so, often, there were duplicate work orders that were
2 done at the same time or especially sometimes the work
3 orders were sent, but with the wrong description, so we
4 would send people to fix something, but it was not the
5 right place or it was not the right kind of repair that has
6 been requested, so we had to come back, or it was not the
7 right person who had been assigned the work.

8 So, there was also a running-in period
9 with the City because they received most of the requests
10 from citizens, users and train drivers, because everything
11 went through their control center. It was a long learning
12 curve, because obviously we were the ones doing the
13 maintenance, who knew the details of these ramifications,
14 and they were trying to learn to understand from someone
15 who was in the field, who said: "Well, listen, the red
16 patent is broken", then there, the guy who is in the
17 control center tries to understand what can be the red
18 patent, then there he makes a work order with that, we, we
19 received that. Often, it was necessary to recall: "Can you
20 give me a little more detail?" So, there was a lot of
21 that, there, in the first weeks, actually.

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1 CHRISTINE MAINVILLE: And did you feel that
2 the City was, let's say, putting too much pressure on this
3 system or using it in a way that was not envisioned?

4 CLAUDE JACOB: Well, I don't think it was
5 ill-intentioned, but there was clearly a... a willingness
6 to enforce every single clause of everything that was
7 received. Often, we... we wondered if people looked at the
8 request before sending a work order, because often, it
9 didn't require one under the terms of the contract. Many
10 times we got involved in things that didn't even concern
11 us, just to be a good player.

12 So, yes, I think that at the beginning,
13 it ... clearly, it was demonstrated that people were not
14 ready to use this system in an efficient way, but
15 nevertheless, they persisted in pushing everything through
16 it, while the production system, the generation of
17 purchase orders, was perhaps not mature. So, it made us
18 expend a lot of energy.

19 CHRISTINE MAINVILLE: And this problem of
20 work order generation, it started during the trial
21 running, if I understand correctly?

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1 CLAUDE JACOB: That's right.

2 CHRISTINE MAINVILLE: And did it get
3 lighter after a while?

4 CLAUDE JACOB: Yes, because... I have a
5 memory that you bring to mind, these inspectors who were
6 everywhere, spending all day inspecting stations,
7 whatever, and then they came back in the evening to an
8 office, and there they generated all the purchase orders
9 one after another. But there, we have a response time. So,
10 now it's like all of a sudden someone is telling you: "Ah,
11 ah, I send you 12 purchase orders in five minutes and then
12 you have a half hour to respond to all 12."

13 So, we were trapped for the first few
14 days before we understood the process and the City and its
15 inspectors made these adjustments to say: "Listen, spread
16 them out, don't send them all at once or measure them
17 better," et cetera.

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1 So, there was... and I think it's normal
2 also in a contract of this magnitude, when everybody's
3 trying to measure such complex systems, to make them work
4 through little forms on an 8½ by 11 page thinking that
5 everybody who's responsible for filling out those forms
6 there or those cards is going to have the judgment, the
7 expertise and the sophistication to interpret and express
8 all of that correctly the first time to the person who's
9 going to read it and then read it correctly.

10 I think that there was... if there was a
11 wrap up, which was not foreseen, it was the contractual
12 and commercial one after the commissioning to give
13 ourselves time collectively to learn how to manage the
14 contract and its measurement elements rather than, the
15 next morning, applying, there, to the letter, all the
16 possible and imaginable penalties rightly or wrongly, you
17 know.

18 CHRISTINE MAINVILLE: Did this approach
19 continue, however, during the commissioning period, at
20 least...?

21 CLAUDE JACOB: Yes, it took a few weeks
22 there before people got the first reports and realized the
23 magnitude of what was being said for people to decide to
24 say: Okay, well, we have to do something.

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1 But obviously, by the time it was done, well, it went
2 through another cycle, so it took like two months or so for
3 people to understand why they needed to do it, how they
4 needed to do it, implement it, and then wait a little while
5 to see if the measures were successful.

6 CHRISTINE MAINVILLE: And... but in terms
7 of the impact that it had, did it... did it prevent RTM or
8 Alstom from focusing their attention on things that were
9 perhaps more important than... given the avalanche of
10 purchase orders?

11 CLAUDE JACOB: Well, it had two impacts,
12 the first was to create tremendous pressure on RTM and the
13 other partners, and obviously every time we ran to fix
14 something that wasn't required, well, that was resources
15 we didn't have to run on something that was. So, yes, it
16 certainly had an impact there on some days on our ability
17 to address things that would have served the community
18 better than what was asked.

19 CHRISTINE MAINVILLE: Hum hum. So you knew
20 about the minor deficiencies list?

21 CLAUDE JACOB: Hum hum.

22 CHRISTINE MAINVILLE: During
23 commissioning?

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1 CLAUDE JACOB: Yes.

2 CHRISTINE MAINVILLE: And were there any
3 items on there that were of concern to you from a
4 maintenance perspective?

5 CLAUDE JACOB: No, as I mentioned, the
6 stuff that was most important was followed in other
7 forums, and that list there that we went over a few times,
8 that had dozens and dozens of pages, but that was really
9 that, there, minor deficiencies list, so somebody goes to
10 a station, they see a concrete crack on a piece of slab, I
11 mean, everything was in there.

12 So, it was not a concern as a type of
13 defect, there, in our opinion, there was nothing in there,
14 beyond what was followed in other committees, that
15 prevented any of the systems from working, there, to its
16 intention.

17 CHRISTINE MAINVILLE: And even the scope
18 of the test did not raise questions?

19 CLAUDE JACOB: Not in terms of customer
20 satisfaction and our ability to deliver service on a daily
21 basis, no.

22 CHRISTINE MAINVILLE: O.K. But if I
23 understand correctly, you were not completely aware of the
24 term sheet?

25

1 CLAUDE JACOB: Uh... you know, I'd have to
2 see it, you know, but we... I'm sure we've heard in some
3 meetings about some of the stuff that's in there, but if
4 you're asking me did I see this before it was signed, no;
5 did I sign it, no; did anyone tell me about it, yes. So,
6 it's really... it's more the level of the answer on the
7 question, there, but it's not... it's not me who didn't
8 have the responsibility to sign it or endorse it, there.

9 CHRISTINE MAINVILLE: O.K. Do you recall
10 if there were any...any problems in terms of available
11 parts, the amount of spares that there were for repairs
12 and maintenance in the MSF, going into the service date?

13 CLAUDE JACOB: I don't have a specific
14 memory on this beyond the... the new actions, as we talked
15 about earlier, the straps for people to hold on to. I
16 remember that there was a delay on this, because it was
17 not planned and the normal delays were not possible, so
18 there was a longer delay on this. But we probably had,
19 there, in front of the many defects that occurred after
20 commissioning, at some point, problems of availability of
21 parts that we did not expect to have to replace, but
22 nothing more specific, there.

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1 CHRISTINE MAINVILLE: And did you know
2 when... well, when did you know what the start date was
3 going to be there for the public?

4 CLAUDE JACOB: The DSEN, the...

5 CHRISTINE MAINVILLE: RSA?

6 CLAUDE JACOB: (Indiscernible), RSA?

7 CHRISTINE MAINVILLE: No, RSA, that's --
8 well, maybe if that informs your answer, go ahead, but
9 really -- because the date that the system was made
10 available to the public, it was still almost two weeks, I
11 think, later, after RSA.

12 CLAUDE JACOB: Hum hum.

13 CHRISTINE MAINVILLE : When did you know
14 that this would happen?

15 CLAUDE JACOB: That the revenue would come
16 about two weeks before the RSA, these are discussions that
17 took place, from memory, quite early in the summer, that
18 we were going to plan, there, about that two weeks when we
19 started talking about the date, there, that would look
20 like the end of August, beginning of September, there.

21 CHRISTINE MAINVILLE: Okay, so you knew...

22 CLAUDE JACOB: A few months in advance.

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1 CHRISTINE MAINVILLE: ... a few months in
2 advance that the system would become public in... at least,
3 in... well, was that final, that, or was that conditional?

4 CLAUDE JACOB: Well, that's part of the
5 discussions that took place, there, in several places,
6 there, then I'm sure, in the Mayor's office as well,
7 there, everyone wanted to intervene on that date, everyone
8 wanted to give themselves a level of confidence on the
9 test period, there, after the RSA, all that.

10 So, there were a lot of people involved
11 in a lot of discussions in a lot of places over the summer
12 about this, but I think by mid-summer, before the trial
13 running, we were all pretty confident about the date and
14 the length of the test that was going to happen, although
15 it was a discussion that stayed open until much later
16 before we said: it's finished, it's final, two weeks.

17 CHRISTINE MAINVILLE: And do you remember
18 if there was any discussion about a soft start to the
19 system?

20 CLAUDE JACOB: Yes, there have been
21 requests for this from the consortium to the City.

22 CHRISTINE MAINVILLE: Do you know
23 approximately when?

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1 CLAUDE JACOB: Listen, conversations that
2 I've had, there, certainly, there, in the spring, early
3 summer, there, that's stuff that was discussed. Has this
4 been discussed in other boards before? I couldn't tell. But
5 no, several months before, there was this discussion at
6 some point if there was no need or interest to.

7 CHRISTINE MAINVILLE: What if you... do
8 you remember the City's response?

9 CLAUDE JACOB: It was a categorical "No"
10 at 95.2%! So, it wasn't final, you know, but it was like:
11 look, I don't think so, here, arrange for it, but if
12 anything ever happens, we can look at it, but don't lose
13 any sleep over it, like.

14 CHRISTINE MAINVILLE: O.K. And did the...
15 what did the consortium have in mind in terms of a
16 progressive start, where did it go, there, what would it
17 look like?

18 CLAUDE JACOB: I didn't have any...I never
19 heard any details that were given about a time period or
20 intensity, the discussion was at a high level just to see
21 if there was any point in having that discussion.

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1 CHRISTINE MAINVILLE: O.K. And how did
2 the... the trains perform, if you know of them, after the
3 trial running, but before the service was made available to
4 the public?

5 CLAUDE JACOB: So, in the first two weeks
6 of September?

7 CHRISTINE MAINVILLE: That's right.

8 CLAUDE JACOB: It went very well.

9 CHRISTINE MAINVILLE: It was going well.
10 And the trains were running like... at the same... at the
11 same level as during the trial running or...?

12 CLAUDE JACOB: At least, I...I don't
13 remember us having...I think the biggest concern we had
14 during that period was the odours at the Parliament
15 station.

16 CHRISTINE MAINVILLE: O.K.

17 CLAUDE JACOB: We were collectively and
18 pleasantly surprised by the system's performance.

19 CHRISTINE MAINVILLE: O.K. And were there
20 any discussions about postponing the commissioning date
21 from trial running? No?

22 CLAUDE JACOB: There was no reason,
23 everything was working fine.

24 CHRISTINE MAINVILLE: Were there any
25 maintenance challenges with the system you received?

1 So in terms of the design, the way the trains were...had
2 been manufactured, were there...were there any elements
3 that presented challenges for maintenance?

4 CLAUDE JACOB: There's one thing I
5 remember about the... about how the nose of the train was
6 configured for snow, so it wasn't a very effective design
7 for pushing snow as is done with North American
8 locomotives, for example, where there's always a snowplow
9 in front of the locomotive or the equivalent. And so, they
10 explained to us, probably going back to the design
11 documents that you mentioned earlier, they explained that
12 what had been designed from the beginning that explained
13 this design element was that they would use the snow
14 removal equipment during heavy precipitation, but during
15 the same heavy precipitation, they would also always use
16 or rather favour the continuous running of trains to, on
17 the one hand, keep and clear the track, but also ensure,
18 on the other hand, that they prevented the construction
19 of... of ice accumulation rather on the catenary.

20 CHRISTINE MAINVILLE: Are you aware of a
21 document called "Operation Restrictions", the restrictions
22 that were to be applied there following the commissioning
23 at the operational level?

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1 CLAUDE JACOB: Was it in the railroad
2 signaling?

3 CHRISTINE MAINVILLE: That is to say...
4 well, are you aware of... the role played by SEMP?

5 CLAUDE JACOB: Yes.

6 CHRISTINE MAINVILLE: And they prepared
7 the safety case, do you know about that?

8 CLAUDE JACOB: Hum hum. Yes...

9 CHRISTINE MAINVILLE: Just say it.

10 CLAUDE JACOB: Yes, sorry!

11 CHRISTINE MAINVILLE: So, have you been
12 briefed on the... let's say, the... the outcome of their
13 work?

14 CLAUDE JACOB: Yes.

15 CHRISTINE MAINVILLE: So, did you
16 understand that in order to meet the... the safety
17 criteria, let's say, the safety requirements of the
18 system, that there were changes to the standard operating
19 procedures, for example, so there were things to implement
20 in the way of operating to meet the safety criteria?

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1 CLAUDE JACOB: I remember there was a long
2 list of recommendations, there, of all kinds of levels,
3 there, you know, in terms of importance. So, collectively,
4 we all had duties to perform as a result of this audit, as
5 much us as OLRTC, RTG and the other parties involved.

6 So, there was, I think, in terms of
7 operational restrictions, a discussion at one point about
8 how the railway signaling allowed trains to cross or
9 change tracks depending on the configuration. And this was
10 a point that was raised, not as a safety issue, but as a
11 design issue, to encourage more train traffic.

12 So, there was a discussion about that,
13 and it's a design element that was included in the
14 signage, so, in the end, we didn't change it.

15 So, there are all sorts of
16 recommendations in there, we had some things, there, on
17 our health and safety measures, interventions or
18 inspections, that had been raised, there, that we had
19 adjusted in our SOPs.

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1 So, that was the goal of the process, at
2 the end of the race, to come and verify everything that had
3 been produced, both for the facilities and especially for
4 the procedures at the operational level, to make sure that
5 all of this made a whole, from an outside eye, and that all
6 of this effectively reached the objectives sought by the
7 contract, and the expectations of the contract.

8 CHRISTINE MAINVILLE: Okay. And I know
9 we're running out of time, but if I can... if I can get a
10 few more minutes.

11 CLAUDE JACOB: Yes.

12 CHRISTINE MAINVILLE: I have... I'm going
13 to... we might... I want to show you the document just to
14 see if you recognize it. Emily, if you can find
15 COW0459399.

16 And I just want to understand if this is
17 something that was brought to your attention specifically.
18 Have you worked with SEMP yourself or RTM?

19 CLAUDE JACOB: Yes, we were met by SEMP,
20 there, they had divided their mandate according to the
21 different responsibilities of all the parties, so we had
22 an interview with them where we presented documents at
23 their request, we answered questions and all that.

24
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1 CHRISTINE MAINVILLE: And am I right that
2 you prepared the maintainer safety case with them?

3 CLAUDE JACOB: Yes, actually, I think it
4 was us who... it would be more correct to say that we
5 prepared it, they reviewed it and then we approved it,
6 yes.

7 CHRISTINE MAINVILLE: O.K. Is this
8 something that was prepared a little late in the game, in
9 the...

10 CLAUDE JACOB: No, in the sense that most
11 of the work was done well in advance. Yes, in the sense
12 that some elements were added at the end, because it was
13 the inputs that were missing there, but it was... it was
14 minor, there, as elements that were missing.

15 CHRISTINE MAINVILLE: O.K. Then the
16 maintainer safety management system, did you have time to
17 develop it sufficiently?

18 CLAUDE JACOB: Yes, we had... we had
19 someone at home, there, a health and safety director,
20 whose mandate was more or less exclusive, there, for the
21 last few months.

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1 So, even though there were some small
2 pieces missing until the very end, we were quite aware that
3 we had a document that was solid, because we had been
4 working on it for several months with the City and other
5 stakeholders. So the core of the document was quite robust.

6 CHRISTINE MAINVILLE: O.K. And do you
7 remember seeing the operator safety case?

8 CLAUDE JACOB: It's not a document name
9 that rings a bell here.

10 CHRISTINE MAINVILLE: O.K.

11 Emily, do you need the number again? The
12 number, do you need the number again?

13 EMILY YOUNG: No, it's okay, I got it.

14 CHRISTINE MAINVILLE: O.K.

15 EMILY YOUNG: Thank you.

16 CHRISTINE MAINVILLE: So if we go down,
17 it's prepared by OLRTC, "Operational restrictions
18 document", maybe we can see if your name is named there.

19 So maybe come down just to give you an
20 idea. So, you see, well, right now, that date is August
21 2019.

22 Continue. So, it simply explains that in order to meet
23 the... the... system safety certification plan, there are
24 these restrictions on operations.

25

1 CLAUDE JACOB: Hum hum.

2 CHRISTINE MAINVILLE: I don't know
3 if...you see several pages, but is this a document that
4 would have been brought to your attention?

5 CLAUDE JACOB: No, it's in the context
6 that we were expressing earlier, you know, it's... you
7 see, it's a document that is clearly for the mainline
8 operation, so it was a document that OLRTC prepared for
9 the mainline operator, which was OC Transpo, so that's why
10 we had very little involvement on it.

11 CHRISTINE MAINVILLE: O.K. So the
12 restrictions on maintenance in this document would not
13 have been brought to your attention?

14 CLAUDE JACOB: Well, I can't speak to the
15 exceptions there, which I can't think of, but this is not
16 a document that I was asked to authorize in whole or in
17 part there.

18 CHRISTINE MAINVILLE: Okay, we can take it
19 down. Do you recall any complaints from Alstom Maintenance
20 about certain things that were preventing them from doing
21 their maintenance work, particularly in connection with
22 the MSF?

23 CLAUDE JACOB: I want to say yes, but
24 you'll have to tell me more!

25

1 CHRISTINE MAINVILLE: O.K. For example,
2 electrification, any problems with that?

3 CLAUDE JACOB: At the MSF?

4 CHRISTINE MAINVILLE: Yes.

5 CLAUDE JACOB: No, that's too vague.

6 Sorry!

7 CHRISTINE MAINVILLE: O.K. Or cracks or
8 the paint booth? No, doesn't that tell you something?

9 CLAUDE JACOB: No. Well, I'm not saying it
10 didn't happen, but I didn't...

11 CHRISTINE MAINVILLE: Yes. O.K., O.K. Were
12 there any items where you expected OLRTC to complete or
13 make improvements to assist maintenance crews after
14 commissioning?

15 CLAUDE JACOB: Yes, well, by the way, the
16 minority deficiencies list, there, it was agreed that the
17 vast majority of the items that were there were going to
18 be corrected by OLRTC and its contractors, there. So...

19 CHRISTINE MAINVILLE: O.K. And there
20 were...there were some things that were barriers to the
21 maintenance, from your perspective?

22 CLAUDE JACOB: Surely!

23 CHRISTINE MAINVILLE: Surely? Yes, O.K. Do
24 you know of a meeting between... I don't know if this
25 rings a bell, Albin Hussein, who worked for Alstom...

1 CLAUDE JACOB: Hum hum.

2 CHRISTINE MAINVILLE: ... and where he
3 had... he would have had a meeting with the Mayor, does
4 that tell you what, that he would have been called in?

5 CLAUDE JACOB: No, I don't know about a
6 meeting like that.

7 CHRISTINE MAINVILLE: O.K. I think that...
8 maybe one last question: do you... in your opinion, the
9 fact that the court at the MSF was not automated at the
10 end of the day as it was intended, what implication, that,
11 that had...?

12 CLAUDE JACOB: O.K. Now, I... to the
13 question: were there things that were preventing me from
14 functioning normally? Yes, indeed. That was something that
15 was planned, the automation of the yard, and that was
16 heard by everyone to be postponed until after
17 commissioning.

18 So, that, that had caused us more work,
19 so it wasn't a problem in itself, it made just a more
20 manual operation than expected. So, in fact, that was...
21 that was something we would have liked to have had, but
22 well, we did without it every day without any problem
23 either.

24

25

1 CHRISTINE MAINVILLE: O.K. Well, I've kept
2 you long enough, I think we'll stop there, unless there are
3 questions either from my colleague or your attorney that
4 are important to...to follow up on.

5 EMILY YOUNG: I had a question and it was
6 about what you mentioned as a process that happened
7 between RTM, RTG and the City to design how IMIRS was
8 going to work as a penalty, and I wanted to know if Alstom
9 was part of those discussions.

10 CLAUDE JACOB: Alstom Maintenance, yes.

11 EMILY YOUNG: Yes? Okay, thank you.

12 CHRISTINE MAINVILLE: And actually, I
13 thought of one last question I wanted to ask: was it a
14 problem that there was no... agreement, well, from your
15 perspective, agreement or business relationship, let's
16 say, between Alstom Maintenance and OC Transpo, the
17 fact...? No?

18 CLAUDE JACOB: No, it was not a problem

19 CHRISTINE MAINVILLE : Did it... did they
20 have the opportunity to have direct communication there,
21 did it...

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1 CLAUDE JACOB: Was it... in the last few
2 weeks, there, and probably even starting a little bit
3 before the trial running, when we had the RAM meetings,
4 Alstom Maintenance always accompanied us, there, RTM.

5 CHRISTINE MAINVILLE: Kartiga, is there
6 anything? Is there anything?

7 KARTIGA THAVARAJ: No, no questions.

8 CHRISTINE MAINVILLE: Thank you, O.K. We
9 can stop the recording.

10 --- End of interrogation at 5:11 p.m.

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416-413-7755

1 I, the undersigned, CHRISTOPHE BOLDUC, official
2 stenographer, declare under my oath of office that the
3 foregoing pages are and contain a true and accurate
4 transcript of my stenographic notes, taken in this case by
5 means of computerized stenotype, all in accordance with
6 the law.

7
8 Christophe Bolduc, O.S..
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