

Ottawa Light Rail Commission

Sam Berrada
on Monday, April 25, 2022



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OTTAWA LIGHT RAIL COMMISSION
CITY OF OTTAWA - SAM BERRADA
APRIL 25, 2022

--- Held via Zoom Video Conferencing, with all
participants attending remotely, on the 25th day of
April, 2022, 2:00 p.m. to 5:05 p.m.

1 COMMISSION COUNSEL:

2

3 Kate McGrann, Co-Lead Counsel Member

4 Anthony Imbesi, Litigation Counsel Member

5

6 PARTICIPANTS:

7 Sam Berrada - City of Ottawa

8 Peter Wardle and Betsy Segal: Singleton

9 Urquhart Reynolds Vogel LLP

10

11 ALSO PRESENT:

12

13 Janet Belma, Official Court Reporter

14 Elizabeth Deasy, Virtual Technician

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1 -- Upon commencing at 12:00 p.m.

2 SAM BERRADA: SWORN

3 KATE MCGRANN: Good afternoon,
4 Mr. Berrada. My name is Kate McGrann. I'm one of
5 the Co-Lead counsel for the Ottawa Light Rail
6 Public inquiries. I'm joined by my colleague,
7 Anthony Imbesi, who is a member of the counsel
8 team.

9 The purpose of today's interview is to
10 obtain your evidence with your solemn declaration
11 for use at the public hearings. This will be a
12 collaborative interview such that my co-counsel may
13 intervene to ask certain questions. If time
14 permits, your counsel may also ask follow-up
15 questions at the end of the interview.

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

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

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

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

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

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

1 of the Canada Evidence Act.

2 If you need to take a break at any time
3 during this interview, please just let me know.

4 COURT REPORTER: Ms. McGrann, you're
5 kind of cutting out at times, and I'm not sure why.
6 I don't know if that's been an issue before in this
7 or if Ms. Deasy can address that or if your
8 Internet is a bit unstable.

9 MS. MCGRANN: Well, let's go off record
10 for a second.

11 (DISCUSSION OFF THE RECORD)

12 KATE MCGRANN: Mr. Berrada, we asked
13 your counsel to provide us a copy of your C.V. in
14 advance of this interview. I'm just going to share
15 the screen with you. I am showing you one-page
16 document with your name and confirmation at the
17 top, and then a heading, Summary of Qualifications.
18 I'm just going to scroll down to the bottom of this
19 page so you can see what's on it. Do you recognize
20 this document?

21 SAM BERRADA: Yes. Yes, I do.

22 KATE MCGRANN: And is this a copy of
23 your C.V.?

24 SAM BERRADA: Yes, it is.

25 KATE MCGRANN: Okay. So we will enter

1 that as Exhibit 1 to your examination.

2 EXHIBIT 1: C.V. OF MR. SAM BERRADA.

3 KATE MCGRANN: I'll put that up on the
4 screen, if you like, but would you please give us a
5 summary of your professional experience as it
6 relates to the work that you're doing as the
7 regulatory monitor and compliance officer on
8 Stage 1 of Ottawa's Light Rail Transit System.

9 COURT REPORTER: Ms. McGrann, you are
10 still cutting out for me at times, and I think if
11 you can call in, that might help.

12 (DISCUSSION OFF THE RECORD)

13 KATE MCGRANN: When I left you, I had
14 asked if you could please provide a summary of your
15 professional experience as it relates to the work
16 that you do as the regulatory monitor and
17 compliance officer for Stage 1 of Ottawa's Light
18 Rail Transit System.

19 SAM BERRADA: Certainly, I -- I will do
20 that. Appreciate the opportunity for this
21 interview with the Commission, and I'll be pleased
22 to give you the overview of my background and
23 experience and answer questions that you may have,
24 of course, afterwards.

25 I think it's also relevant if you have

1 planned for that, that I give you a very high-level
2 summary of the RMC0 role since it is very specific.
3 It's mandated by the City, and it is relevant, of
4 course, to this inquiry.

5 So I could start off with my background
6 and experience. I've been working for 40 years in
7 the railway industry. This is my 40th year. After
8 completing my first degree at McGill University, I
9 started to work for Canada National Railway in
10 1982. I worked in a number of operational and
11 staff positions during my 35-year career at CN both
12 in Montréal and Edmonton.

13 With respect to my operational
14 experience, I was responsible for operations of
15 various sizes at CN including the greater Montréal
16 area as well as Eastern Canada, and the greater
17 Montréal area included responsibility for several
18 commuter lines including an electrically powered
19 commuter line.

20 And the last 20 years of my career at
21 CN were heavily focused on safety and regulations
22 where I was responsible for CN's safety management
23 systems, the audit teams, the regulatory
24 department, the training department, and the rules
25 and operating practices department.

1 And my last position at CN was vice
2 president of safety and sustainability where I was
3 responsible for safety and sustainability for all
4 of CN's operations in Canada and United States.
5 And I retired from CN in 2017, was approached by
6 the City of Ottawa in the second half of 2017 for
7 the RMC0 role. And that was firmed up with a
8 contract that was signed in the beginning of 2018
9 where I started my responsibilities in preparation
10 for revenue service which was expected that same
11 year, as you may know.

12 So that's sort of a high-level summary
13 of my experience, and I would like to provide a
14 summary of the role of the regulatory monitoring
15 compliance officer, if that's okay.

16 KATE MCGRANN: Yes, please go ahead.

17 SAM BERRADA: All right. So the first
18 point is that the RMC0 role is focused on assessing
19 compliance relative to City regulations relative to
20 safety and security after revenue service, and I
21 underline after revenue service.

22 It's important to emphasize that the
23 RMC0 started monitoring only after revenue service
24 and that the RMC0 was not involved in any aspect of
25 the design, construction, testing, commissioning,

1 or independent certification or other such
2 activities which took place before revenue service.

3 So after being hired in 2018, and as
4 requested by the City and the mandate, the RMCO
5 prepared a work plan which described the monitoring
6 approach to be used, and this work plan was
7 approved by City Council in September of 2018,
8 again, with the expectation that revenue service
9 would be imminent.

10 Subsequently, the RMCO started to
11 perform monitoring only after revenue service,
12 which, as you know, was in September of 2019, and
13 I'll bring some further information about the RMCO
14 responsibilities which are relevant to this inquiry
15 first.

16 The RMCO monitoring covers only the
17 Confederation Line, so it does not cover the
18 Trillium Line or Line 2, the bus operations, or any
19 other part of the City's operation.

20 The second point is that the RMCO
21 duties are focused on monitoring compliance
22 relative to City regulatory programs, and they do
23 not include a broad assessment of safety or risks
24 nor does it assess the adequacy of regulations or
25 the programs or the equipment or the technology or

1 the contract or performance or competence.

2 As well, it's important to recognize
3 that the RMC0 monitoring mandate is not the same as
4 an audit because audits would typically encompass a
5 review of issues such as governance and risks and
6 their respective controls.

7 Third, I'll point out that the RMC0
8 monitoring represents one of several layers of
9 oversight for the City since, as you may know,
10 OC Transpo performs oversight activities internally
11 and on contract because they do have an oversight
12 plan, and as well, the City hires external experts
13 such as TRA, which is currently performing some
14 oversight monitoring activities, and other
15 consultants that have performed audits in the past.

16 And finally in terms of the RMC0
17 reporting, the RMC0 mandate specifies that
18 quarterly updates are provided to the City manager,
19 which I've been doing, and that an annual
20 compliance report is provided to Transit Commission
21 and City Council once per year. So the last one
22 that I provided that I submitted was the third one.
23 First one was in the beginning of 2020 reflecting
24 the work that was done after revenue service until
25 the end of the year, so September 2019 'til the end

1 of 2019.

2 The next annual compliance report was
3 in the beginning of 2021 which was for the
4 monitoring done in the full year of 2020. And
5 finally, the last one was just reviewed, the
6 Transit Commission and City Council reflecting the
7 work that was done in 2021.

8 So this completes the background and
9 relevant information on the RMCO, and I'll be
10 pleased to answer any questions that you may have.

11 KATE MCGRANN: Thank you. For
12 starters, just so that we're all clear on what the
13 acronym RMCO is, what does that stand for?

14 SAM BERRADA: Regulatory monitor and
15 compliance officer.

16 KATE MCGRANN: Okay. And then the
17 information that you just provided where you
18 referred to the RMCO doing something, who carried
19 out those activities?

20 SAM BERRADA: It was myself.

21 KATE MCGRANN: At any point since your
22 retainer, have you been assisted by any employees
23 of yours or staff members?

24 SAM BERRADA: No.

25 KATE MCGRANN: So all of the activities

1 of the RMC0 have been carried out by you from when
2 you started to date?

3 SAM BERRADA: That is correct.

4 KATE MCGRANN: Do you know how the City
5 learned of you and how they came to contact you in
6 respect of this position?

7 SAM BERRADA: I was approached by a
8 firm, a headhunter, so to speak, as I said in the
9 second half of 2017, and that culminated in the
10 contract in the beginning of 2018.

11 KATE MCGRANN: Do you know if you had
12 any competitors for the position?

13 SAM BERRADA: I do not know the names,
14 but I do know that there were other candidates, and
15 I can tell you that there was a pretty substantive
16 interview process including a selection committee,
17 including an interview with the selection committee
18 as well as the mayor that was involved in the -- in
19 the interview.

20 KATE MCGRANN: You mentioned other
21 layers of oversight including OC Transpo and
22 consultants including TRA. What other consultants
23 are you aware of that have been -- assisted in the
24 oversight of Stage 1 of the LRT?

25 SAM BERRADA: Now, I have not worked

1 with the other consultants, but I am aware that
2 about a year, year and a half ago, there was a firm
3 that was hired to do an audit of the City's safety
4 management system and security management system.
5 And that was required as part of the delegation
6 agreement and a tri-annual audit and reporting
7 requirement to Transport Canada, so that was
8 performed by an independent consultant that did
9 just that.

10 KATE MCGRANN: And do you know the name
11 of that consultant?

12 SAM BERRADA: I don't know offhand, no.

13 KATE MCGRANN: And tri-annual, three
14 times a year or once every three years?

15 SAM BERRADA: Once every three years.

16 KATE MCGRANN: Any other consultants
17 that you're aware of that have been involved in the
18 oversight of the system on behalf of the City?

19 SAM BERRADA: I couldn't give you any
20 names. You'd have to ask that question to
21 OC Transpo. I do know that they deal with a number
22 of experts, but I'm not sure the specific oversight
23 or how much oversight they would have done.

24 KATE MCGRANN: Well, you noted that you
25 didn't work with the third-party who conducted the

1 audit of the City's safety management system and
2 security reporting system. Have you worked with
3 any of the other consultants that the City has
4 engaged to perform oversight in the system?

5 SAM BERRADA: So I had some limited
6 involvement with TRA, as an example. And this was
7 subsequent to last August's derailment and the
8 September derailment. And there was -- the City
9 was searching for a firm that would come in and be
10 able to assess the adequacy of the
11 return-to-service plan, and I was in those
12 discussions, had discussions with TRA, and I am
13 aware that they are continuing to work today at
14 performing oversight activities and reviews of
15 programs being used by RTM and their
16 subcontractors.

17 KATE MCGRANN: I think you said that
18 you were involved in some discussions with TRA.
19 Did I hear that properly?

20 SAM BERRADA: That is correct, yes. We
21 did have some conference calls together to have
22 discussions about the return-to-service plan and,
23 you know, the actions that were proposed by RTM in
24 order to ascertain that the return-to-service plan
25 is safe.

1 So although, as I said, my role was not
2 to assess the adequacy of that return-to-service
3 plan, that was TRA that was responsible for that
4 formally hired by the City to do that and to
5 perform oversight.

6 KATE MCGRANN: Let me start with this:
7 About how many calls with TRA did you attend?

8 SAM BERRADA: I would have to sort of
9 look back, but -- but several calls. You know,
10 we're probably talking in the range of at least
11 half a dozen, I would think. So this would be with
12 the City and with TRA to have discussions about,
13 you know, the elements that we understood at that
14 point relative to those derailments as well as, you
15 know, what the requirements, what sensible
16 requirements would be for a safe return-to-service
17 plan.

18 KATE MCGRANN: Now, I do believe that
19 the City is asserting privilege over at least some
20 of the work done by TRA. Do you know, Peter?

21 PETER WARDLE: No. That's not been our
22 position, and that's why I haven't -- that's why
23 I've been staying quiet.

24 KATE MCGRANN: Okay.

25 PETER WARDLE: So there's no claim -- I

1 believe there's a claim for confidentiality
2 outstanding with the Commissioner with respect to
3 TRA's work product, but there's no claim of
4 privilege being advanced.

5 KATE MCGRANN: Thanks very much.

6 When you say you would need to look
7 back, do you have notes or records of these calls,
8 Mr. Berrada?

9 SAM BERRADA: I would have some of the
10 them, but maybe not all of them.

11 KATE MCGRANN: And what was the purpose
12 of your attendance at these calls?

13 SAM BERRADA: So the role of the RMC0,
14 as I said, is about monitoring compliance relative
15 to City regulations. But because of my railway
16 experience, the City did give me a supplemental
17 mandate through the City manager to provide some
18 advice to the City relative to the derailments and
19 relative to the investigations that were taking
20 place by the contractors. So I would review that
21 information with the City and give them my thoughts
22 and advice on information that was put forward.

23 KATE MCGRANN: Was that mandate put in
24 writing? Like, it was a new contract, or a new
25 document --

1 SAM BERRADA: Yes.

2 KATE MCGRANN: -- that outlines it?

3 SAM BERRADA: Yes. Yes.

4 KATE MCGRANN: And do you recall when
5 approximately that mandate was put in place?

6 SAM BERRADA: Well, there were actually
7 two mandates. There was one in 2020, and these are
8 special mandates that are supplemental separate
9 from the RMCO role; 2020, there was an issue with
10 wheels that were cracking, and there are some
11 TSB -- not reports, but TSB records and letters on
12 that.

13 And there was an investigation that was
14 being performed by the contractor followed very
15 closely by the City, so I provided some -- you
16 know, my advice to the City relative to the
17 information that was being put forward, and the,
18 you know, potential issues that may be related to
19 those cracked wheels. And that -- following that,
20 there was that second supplemental mandate
21 following the derailments of August and September
22 of 2021.

23 KATE MCGRANN: Okay. So with respect
24 to these two special mandates, did you enter into a
25 separate contract or agreement with the City in

1 respect of each of them?

2 SAM BERRADA: Yes.

3 KATE MCGRANN: Did you give any
4 consideration to whether taking on that role
5 directly advising the City would create any
6 potential conflict with your role as the RMCO?

7 SAM BERRADA: Yes, this was discussed
8 significantly with the City including the legal
9 department of the City, which has --

10 KATE MCGRANN: Can I just interrupt you
11 for one second only to say I'm not looking for any
12 legal advice that you sought or any legal advice
13 that was provided to you, but I am interested in
14 hearing about the considerations otherwise. Sorry
15 for the interruption.

16 SAM BERRADA: Yes. No problem. No
17 problem. So a few things: In terms of
18 independence, the reporting relationship was
19 directly to the City manager, so does not report to
20 OC Transpo.

21 The information reviewed was really
22 about, you know, providing insight on, you know,
23 the issues that may have -- may be related to those
24 technical difficulties and the derailment in -- in
25 August of 2021.

1 The role of the RMCO is independent and
2 in parallel to that in the sense that, you know, it
3 is about assessing compliance relative to City
4 programs, City regulations and programs. So there
5 are specific programs that are identified in the
6 City regulations, and that performs -- that
7 activity was performed in parallel without any
8 intersection, so to speak, with this separate role
9 for the derailments and the technical advice.

10 I may also say that there are, you
11 know, in one of the key principles of the
12 monitoring approaches by the RMCO, is a risk-based
13 approach in the selection of programs to be
14 monitored, and that requires ongoing input from
15 different areas including the City about, you know,
16 derailments and technical issues so that the
17 selection of the area to be monitored by the RMCO
18 is consistent with the potential hazards and their
19 potential consequences, i.e., risks.

20 So -- so in -- in a sense, what I'm
21 saying is that I am continuously in communication
22 with different parties to collect information which
23 would help the RMCO determine what are the most
24 appropriate areas to monitor using a risk-based
25 approach.

1 So this information on derailments is
2 relevant to the RMCO role in the sense that it
3 helps to identify key issues and to ensure that the
4 monitoring is generally aligned with -- with the
5 information being collected.

6 KATE MCGRANN: And so, I guess, then,
7 the question would be, how did you satisfy yourself
8 that your advisory role wouldn't conflict with your
9 role as the RMCO? And I'll give you a hypothetical
10 which may be ridiculous, but you can let me know.

11 You know, did you consider whether
12 there would be a situation in which you are called
13 upon to review compliance in an area where you had
14 provided advice directly to the City about how to
15 proceed before or during the time that you were
16 monitoring?

17 SAM BERRADA: I'm just trying to think
18 of that hypothetical situation because that -- that
19 would not be related to the derailment. So I do
20 perform monitoring. I do inform the City as well
21 as the contractors of the findings.

22 They -- OC Transpo is responsible to
23 develop remedial actions or to request them from
24 contractors if those are required, but the
25 derailments are a completely different set of

1 activities where it's more about, you know, design
2 and maintenance activities being performed by
3 contractors as well as, you know, the compliance of
4 those contractors in performing those activities.

5 So the design is something that I don't
6 get involved in, and the performance of the
7 activities by the contractors is something that I
8 monitor on a program level but not on a detailed
9 level. It's not sort of boots on the ground,
10 day-to-day monitoring compliance to those
11 activities that they are expected to do.

12 KATE MCGRANN: Okay. So stepping away
13 from the hypothetical for a second, and I do mean
14 for this question to apply to both of your special
15 mandates, did you give any consideration to whether
16 the advice that you were providing may later be
17 subject to review by the person in your role as
18 RMCO?

19 SAM BERRADA: Well, the -- again, the
20 advice was only there to enable the -- to provide
21 insight to the City on understanding, you know,
22 what would potentially have caused the derailment
23 and what, you know, actions would be required in
24 order to mitigate them. But it wouldn't take shape
25 in terms of something that the RMCO would be

1 expected to assess afterwards in terms of the
2 adequacy of the remedial action for addressing,
3 let's say, a derailment cause because that's very
4 distinct from the programs that the -- that are
5 stipulated in the City regulations.

6 KATE MCGRANN: And could it not be the
7 case that reactions taken to the derailments may
8 find their way into adjustments in the City
9 programs?

10 SAM BERRADA: I mean, the -- I can tell
11 you from what I've seen that the -- the level of
12 activities that have taken place following the
13 derailments would be -- I mean, obviously, the
14 City's very involved in the investigation, very
15 close to the contractors trying to understand the
16 root cause of contributing factors.

17 And the City has also, as you know,
18 stepped up their level of oversight in response to
19 the fact that, you know, they want to ascertain
20 those activities that are related to derailments
21 are being performed in a complete and quality
22 manner.

23 So I don't think it's something that's
24 changed a program as such, such as, for example,
25 the maintenance and rehabilitation plan. But it

1 is -- it is more something that the City is
2 monitoring closely to ensure that the actions that
3 have been committed to by the contractors are
4 actually being performed as per their commitments.

5 So just something to distinguish here
6 is that the RMCO does not get involved in the
7 follow-up to those investigations and those
8 remedial actions that address the causes and
9 contributing factors of those derailments. This is
10 something that the City does and not the RMCO.

11 The RMCO is more about, you know, the
12 City has a safety management system. The safety
13 management system has objectives and initiatives.
14 It has a risk-assessment process, and it's to
15 ensure that those activities are compliant relative
16 to the City program which is very distinct from,
17 you know, actions being taken either by the City or
18 by the contractor to remedy something that may have
19 caused the derailment.

20 So, you know, in talking about this, I
21 don't see how the RMCO would -- would be in a
22 conflict of interest because this -- on one hand,
23 we're monitoring programs, but the RMCO is
24 monitoring programs; but on the other hand, the
25 City is working closely with the contractors to

1 address the derailment causes which may take shape,
2 for example, as, you know, changes in technologies,
3 modifications to equipment, et cetera, which I
4 would not be involved in at all.

5 KATE MCGRANN: The two special mandates
6 that you've mentioned, did you take those on in
7 your role as RMCO? Like, were you RMCO acting on a
8 special mandate, or did you take them on outside of
9 your role as RMCO?

10 SAM BERRADA: It would be outside of
11 the role as RMCO.

12 KATE MCGRANN: With respect to the
13 wheel-cracking special mandate, what specifically
14 were you asked to do in that instance?

15 SAM BERRADA: To -- to participate in
16 conference calls with the City mostly in helping
17 them understand the information they've been
18 provided; to also participate in some calls with
19 the contractors to understand the analysis that
20 they did relative to those derailments and, you
21 know, where they are landing relative to the causes
22 and contributing factors; and -- and I did not go
23 any further in terms of the implementation or, you
24 know, the -- sort of the finality to those
25 investigations and the remedies to the causes that

1 were identified. So it was -- it was for a limited
2 period of time while the City was gathering
3 information to provide them with insight relative
4 to, you know, what is done in the railway industry,
5 what should be expected, and so on.

6 KATE MCGRANN: So focusing specifically
7 on the first special mandate for now, the
8 cracked-wheel issue, was there a derailment
9 associated with the cracked wheels?

10 SAM BERRADA: To my knowledge, there
11 were some cracks that were identified, and those
12 were identified. They were remedied through some
13 retrofits on the wheels, and that basically, that's
14 my knowledge on that.

15 KATE MCGRANN: Okay. I'm just trying
16 to clarify your first answer, and it may be that we
17 had a miscommunication. I asked you a question
18 with respect to your first mandate, and you
19 referenced derailments, and that's why I'm asking
20 you --

21 SAM BERRADA: Yeah.

22 KATE MCGRANN: -- to your knowledge,
23 with respect to the cracked-wheel issues, were
24 there any derailments related to the cracked
25 wheels?

1 SAM BERRADA: Not that I know of.

2 KATE MCGRANN: Okay. And you said you
3 participated in conference calls with the City
4 regarding the information that they had received
5 regarding the cracked wheels. What information are
6 you referring to?

7 SAM BERRADA: I'm sorry. Repeat the
8 question again.

9 KATE MCGRANN: Yeah, I believe you said
10 that you participated in conference calls with the
11 City regarding information that the City had
12 received about the crack wheels. What information
13 are you referring to?

14 SAM BERRADA: So in their
15 investigation, the City was engaging very closely
16 with the contractors since, you know, the vehicles
17 are manufactured by Alstom, and they have
18 subcontractors that perform assemblies.

19 So the City was being kept appraised of
20 Alstom's investigation, and, of course, because RTM
21 is the primary contractor, they were there as well.
22 So you had RTM, and then you had Alstom. And
23 Alstom was -- had performed some analysis to be
24 able to understand what the cause and contributing
25 factors would have been.

1 And that would have been in the form of
2 analysis that they did in terms of measurements
3 that they would have taken, and that would take
4 shape in terms of, you know, material and
5 presentations that would have been presented by
6 Alstom and RTM to the City that I would have been
7 reviewing with the City through these conference
8 calls.

9 KATE MCGRANN: Okay. And what was the
10 purpose of your review?

11 SAM BERRADA: As I said, it's to
12 provide an -- I guess, an independent set of eyes
13 to the City with, you know, some railway
14 perspective as to, you know, the information being
15 presented by Alstom and its, you know, relevance to
16 the issues.

17 And -- and then subsequently, when
18 Alstom was proposing some remedial actions to
19 address those findings, or those -- I should say
20 those causes and contributing factors, I would be
21 reviewing that in conference calls with the City
22 and having discussions as to the appropriateness of
23 those actions.

24 KATE MCGRANN: Okay. What form did
25 your advice to the City take? And by that, I mean

1 did you provide a written report? Did you provide
2 feedback via email? How did you fulfill your
3 function?

4 SAM BERRADA: Yeah, so there were
5 primarily conference calls. There were
6 discussions, and, you know, there may have been
7 email exchanges. I would have to look at that
8 and -- and get back to you.

9 KATE MCGRANN: Okay. We will ask that
10 you do that, please, and let us know?

11 U/T SAM BERRADA: M-hm.

12 KATE MCGRANN: And then what was your
13 advice to the City as a result of -- or coming out
14 of your first special mandate regarding the cracked
15 wheels?

16 SAM BERRADA: So my recollection was
17 that, you know, the issue was caused with some
18 fasteners that had been improperly applied by a
19 subcontractor of the -- of Alstom. So some
20 manufacturer in Europe that had performed had
21 inserted those fasteners in a manner that they were
22 causing stress on a component of the wheel, and,
23 therefore, the solution that was being proposed by
24 Alstom was to remove those fasteners to remove that
25 stress point, that stress that was being caused by

1 them.

2 So, you know, my discussions with the
3 City were basically reviewing that information and
4 having discussions as to whether it would
5 reasonably address the issues that were identified.

6 KATE MCGRANN: And what was your view
7 as to whether it would reasonably address the
8 issues identified?

9 SAM BERRADA: My view was that the --
10 you know, actions being taken by Alstom at the time
11 were -- were sensible and reasonable, and -- and
12 that, of course, you know, there was a solution
13 that was put forward by Alstom and by the City to
14 remove all wheels that had been stressed. And this
15 is something that the City has continued to push
16 for as well.

17 So I guess you'd need to address the
18 problem in two ways: The first one is to ensure
19 that the wheels that have been stressed are
20 addressed, remedied by not having wheels that --
21 not continuing to have wheels that were
22 overstressed in service. And this was something
23 that the City insisted on and did obtain from
24 Alstom and RTM.

25 And then the -- the second point was to

1 ensure that the manufacturing process on a
2 go-forward basis would not have these stress points
3 remaining in the new wheels being supplied.

4 KATE MCGRANN: And who at the City were
5 you involved in discussions with on this special
6 mandate?

7 SAM BERRADA: So this would have been
8 with the Chief Safety Officer, and it would have
9 been with his team.

10 KATE MCGRANN: Who is the Chief Safety
11 Officer that you spoke to?

12 SAM BERRADA: It was Brandon Richards.

13 KATE MCGRANN: And then I didn't quite
14 catch the second part of your answer. You said it
15 would be by the safety officer and?

16 SAM BERRADA: And his team.

17 KATE MCGRANN: Oh, and his team.

18 SAM BERRADA: Yeah.

19 KATE MCGRANN: Did you speak with
20 anybody else at the City while you were working on
21 this special mandate about what you were working
22 on?

23 SAM BERRADA: Well, as I said, the
24 conference calls had different parties involved,
25 and that included RTM; it included Alstom, and it

1 included primarily the Chief Safety Officer and his
2 team. I think those were the key players.

3 There might have been -- yeah, there
4 was the person in charge of operations, so that
5 would be -- it would be Troy, so in essence,
6 that -- so those -- so basically, the -- the
7 OC Transpo operating team as well as safety team
8 were the key players.

9 KATE MCGRANN: Okay. And when you say
10 Troy, are you referring to Troy Charter?

11 SAM BERRADA: Yes.

12 KATE MCGRANN: Do you recall if there
13 was any aspect of the investigation that Alstom did
14 or its proposed response and remedial measures that
15 you didn't agree with?

16 SAM BERRADA: Well, it was a -- a work
17 in progress so that, you know, as they performed --
18 as their investigation continued, they provided the
19 information that they had, and then they provided
20 different aspects of how their investigation
21 concluded that that was the issue.

22 So as an example, they did some
23 finite -- what they call finite element analysis to
24 demonstrate that, when you tighten those little
25 fasteners, that they do cause stress points on the

1 wheels and that those stress points were reasonably
2 associated with those cracks.

3 So that information was being provided
4 progressively, and so it was a -- it was a -- it
5 was a discussion. It was a dialogue. It was a
6 question about, you know, what is appropriate to
7 do. And as I said, the City is responsible to make
8 the decisions on, you know, whether the proposals
9 from Alstom are appropriate.

10 And as I said, the City insisted on two
11 things: to remove the wheels that were stressed
12 from service or not to put them back in service as
13 well as ensuring and confirming that the new wheels
14 coming in would be stress-free in those areas.

15 KATE MCGRANN: Now, you say that the
16 City insisted on those two points. Were those two
17 points part of the remedial measures proposed by
18 Alstom?

19 SAM BERRADA: Yes.

20 KATE MCGRANN: Okay. So when you say
21 the City insisted on those, those were part of the
22 plan, and the City agreed with them; is that right?

23 SAM BERRADA: Yeah, and I just want to
24 bring some perspective here is that, you know, this
25 is, you know, to a certain extent, everybody

1 fulfills their role to protect their interests.
2 But on the other hand, there is some dialogue.
3 There is some conversation, and there is some
4 getting together the minds as to what is
5 appropriate. So all those points had been
6 discussed by all parties, and I think there was an
7 understanding that this was the appropriate course
8 to take.

9 KATE MCGRANN: So I think I had asked
10 you, but I don't think I got an answer to it. So
11 was there anything in the mitigation plans proposed
12 by Alstom that you didn't agree with or that you
13 felt weren't appropriate?

14 SAM BERRADA: I would say that -- that
15 in the decisions that the -- that were obtained by
16 the City in terms of removing those stressed wheels
17 and ensuring that new wheels are supplied without
18 any stress, that there was no issue whatsoever.

19 But -- but in getting there, there was
20 a lot of discussion, so it's not like, you know,
21 there's an absolute disagreement, and then there is
22 a -- you know, a -- sort of everybody goes to
23 their -- back to their camp and -- and then comes
24 back.

25 It's more about an ongoing dialogue

1 where different scenarios are discussed, different
2 solutions are reviewed, and then there is a
3 determination as to what is appropriate. And this
4 is something that, you know, from what the City
5 asked for that I was in agreement with that.

6 KATE MCGRANN: Was there anything that
7 you advised the City ought to be done that wasn't
8 ultimately done?

9 SAM BERRADA: Not to my recollection.

10 KATE MCGRANN: Before I move away from
11 your first special mandate, I'll just ask my
12 colleague, Mr. Imbesi, do you have any follow-up
13 questions on this topic?

14 ANTHONY IMBESI: No, I don't. Thank
15 you.

16 KATE MCGRANN: With respect to the
17 second special mandate that you took on, this is in
18 respect of one derailment that took place in 2021
19 or both derailments?

20 SAM BERRADA: So the August derailment
21 of 2021 was related to a bearing that burnt off,
22 and I was involved in discussions with the City not
23 immediately at the point of the derailment but
24 after that special mandate was given to me a few
25 weeks afterwards.

1 So -- and then I remained involved with
2 the City; and, of course, there was a point when
3 TRA was hired by the City, and -- and at that
4 point, I pursued for purposes of continuity with
5 the City and TRA, and then TRA took over from there
6 in terms of the return-to-service as well as the
7 monitoring.

8 So I was involved -- I'm aware of both
9 derailments and the issues surrounding them, but
10 was involved again -- one of the key points I want
11 to make here is that the -- that role, that special
12 role that the City gave me outside of the RMCO role
13 was more in terms of sharing my insight having
14 worked in the railways for so long as to, you know,
15 what may have caused or contributed to those
16 derailments and what would be a sensible approach
17 in mitigating those risks.

18 Now, I'll just add that the -- the role
19 that the City gave me does not take those
20 investigations right to their conclusion including
21 the remedial actions. So it's a limited period of
22 time where the City's gathering information and --
23 and getting insight, and I would be part of that,
24 you know, providing the City with that insight, but
25 I would not follow through the derailment until its

1 completion of investigation and completion of
2 mitigation.

3 KATE MCGRANN: And was that set out
4 when you took the second special mandate on, that
5 limitation of your involvement?

6 SAM BERRADA: Yes, it was understood
7 that it would be to provide insight to the City
8 relative to the causes and the appropriate actions
9 to mitigate them, but it was understood that the
10 City would, from that point on, with their other
11 consultants, take over, continue, pursue the
12 investigation, and the RMC0 would go back to their
13 normal role.

14 When I say go back to their normal role
15 is that this -- these conference calls that were
16 taking place, you know, did not interfere, as we
17 said earlier, with the role of the monitoring that
18 the RMC0 was doing, and at the time, so we're
19 talking about August of -- you know, or the summer
20 of 2021, that the RMC0 was performing monitoring on
21 safety management systems. So that was concluded.

22 But then the monitoring was interrupted
23 during that system shutdown, so between September
24 and November, the RMC0 did not perform monitoring
25 activities because all the resources that are

1 required by the RMC0 to perform monitoring are all
2 absorbed in the investigation, development of
3 remedial action, assessment of the adequacy of the
4 return-to-service plan.

5 KATE MCGRANN: And the resources that
6 you mentioned, could you just give us a general
7 description of what those are?

8 SAM BERRADA: So it would be OC
9 Transpo's safety and operations team, and it would
10 be, of course, RTM's team, and it would be Alstom.
11 So all those people that I work -- that I require
12 from a resourcing point of view to provide me with
13 the documents and records and data and program
14 documents were -- are absorbed in the, you know,
15 development of the return-to-service plan and the
16 discussions with the City in terms of its adequacy,
17 and TRA, of course, until the determination that
18 the plan is acceptable and that the
19 return-to-service plan, you know, comes back
20 online, which was in -- in November, as you know.

21 KATE MCGRANN: And who was your point
22 of contact with respect to the second special
23 mandate at the City?

24 SAM BERRADA: It was also the Chief
25 Safety Officer, so Brandon Richards, again.

1 KATE MCGRANN: And who did you work
2 with predominately during your work on the second
3 mandate?

4 SAM BERRADA: So it would have been
5 Brandon Richards. It would have been Troy Charter
6 and some of their people involved in the conference
7 calls that were taking place with RTM as well as
8 Alstom and subsequently, of course, with the
9 involvement of TRA, as I said earlier, to ensure
10 that there was continuity in the information that
11 was available at the time I was involved with TRA
12 for a limited period of time.

13 KATE MCGRANN: And what form did your
14 advice to the City take -- or your work product on
15 the second special mandate take? How was it
16 delivered?

17 SAM BERRADA: So once again, it was
18 about, you know, reviewing the information that was
19 being provided by RTM and Alstom and providing the
20 City with my insight on the accuracy of those
21 potential causes and contributing factors as well
22 as the remedial actions, and that is the -- the
23 mitigations to those causes.

24 KATE MCGRANN: And how did you provide
25 your views on this to the City? Did you do it in

1 writing?

2 SAM BERRADA: So there were some
3 conference calls, and there were some emails as
4 well, yes.

5 KATE MCGRANN: Mr. Wardle, do you know
6 if we have received from the City, first of all,
7 the agreements with Mr. Berrada in respect of these
8 two special mandates?

9 PETER WARDLE: I don't know the answer
10 to that.

11 KATE MCGRANN: Okay. If they aren't
12 covered in what you have produced or what's being
13 produced, we'll ask that you produce those to the
14 Commission.

15 U/T PETER WARDLE: Yes.

16 KATE MCGRANN: And then with respect to
17 the emails that he's referenced in respect of his
18 work on the two special mandates, if those haven't
19 been provided, would you please ensure that those
20 get provided as well?

21 U/T PETER WARDLE: Yes, we'll do that.

22 KATE MCGRANN: Thank you.

23 What was your, if you could summarize
24 for us, your views on the potential causes of each
25 of the derailments?

1 SAM BERRADA: Right. So the first one
2 which was in August of 2021, and I was made aware
3 of that a little bit after the derailment, all the
4 evidence that I saw pointed to a bearing that had
5 been overheated and overheated to the point that it
6 basically got damaged and resulted in the
7 derailment. So it's called in railway terms a
8 burnt-off bearing.

9 All of the evidence that I saw
10 afterwards confirmed that, and there was, as you
11 probably know, a lot of discussion about, you know,
12 how -- how does the -- how do we know ahead of time
13 when a bearing is being stressed to the point that
14 it could result in a derailment? And I shared my
15 insight with the City that this is actually a
16 problem that is -- that does happen in the railway
17 industry. It is something that there is -- there
18 are technologies that mitigate the risk that --
19 that provide information on the bearing condition
20 and the bearing temperature.

21 Now, the challenge on this particular,
22 you know, instant derailment is that the bearings
23 are not easily visible from the outside from the
24 track because they're being hidden inside some, you
25 know, bogie components; and that is also common in

1 some passenger equipment and some commuter
2 equipment, and some of those commuter equipments
3 that have that particular situation where a hot
4 bearing detector placed on the track on the wayside
5 would not be able to get in there to see the
6 temperature.

7 They would -- they would normally have
8 technology that would detect the bearing
9 temperature from the vehicle itself, so it's called
10 onboard bearing detection.

11 But the general idea is that you want
12 some sort of information that is going to give you
13 some insight relative to the condition of the
14 bearing and whether it's in distress and its
15 potential for causing a derailment.

16 So this is something that I shared with
17 the City, and the City, I know, pushed very hard
18 with -- with Alstom and RTM to install this, to
19 install such a system because, from what I could
20 see, the -- this type of issue was identified in
21 the initial Alstom risk assessment where they
22 understood that you can have a bearing that gets in
23 distress, and they understood that you needed a way
24 of checking on it. And they provided a means of
25 inspections, but it would be more of sort of a

1 person-type inspection while the vehicle is in the
2 shop for its maintenance.

3 But obviously, that wasn't sufficient.
4 So, therefore, recognizing that, the City requested
5 that something be done from the technological means
6 by RTM and Alstom in order to be able to monitor
7 the condition of those bearings.

8 This is also probably something that
9 you have seen in the TSB letter that came out
10 afterwards that -- that suggested the same thing,
11 so this is something that I know the City has been
12 following through with Alstom and RTM to obtain
13 this type of technology.

14 KATE MCGRANN: So that was based on all
15 of the evidence that you saw. What evidence was
16 provided to you?

17 SAM BERRADA: So I guess the most
18 obvious one is the -- the pictures of the
19 derailment and its component where clearly you
20 could see that the bearing had been overheated and
21 then worn out to the point that it -- the metal
22 starts to rub on the axle itself to the point that
23 it gets damaged and it derails.

24 So it had been -- that was totally
25 consistent, although the design of the bearings and

1 so on were different than the ones that I had seen
2 with the passenger equipment and freight equipment.
3 The failure mechanism is the same, is that the
4 bearing, for various reasons, can start to
5 overheat, and -- and then that overheating
6 continues to the point that it accentuates and
7 causes deterioration and damage resulting finally
8 in the derailment.

9 So the physical evidence in terms of
10 the pictures that had been provided were very
11 consistent with that. And, you know, then there
12 was obviously a lot of work that was submitted
13 following that by Alstom in terms of how they
14 proposed to mitigate that.

15 And -- and I know that that wasn't
16 quite consistent with what the City was looking
17 for. The City really wanted some -- something more
18 direct in terms of monitoring bearing condition.
19 And to my best knowledge, this is something that
20 the City continues to push for to implement with
21 the vehicles to provide visibility on the bearing
22 condition through some means of technology.

23 KATE MCGRANN: I asked you what
24 evidence you saw, and you mentioned pictures. Were
25 you provided with any other information to assist

1 you in your assessment and review?

2 SAM BERRADA: Certainly. So there were
3 some presentations, materials, that were provided
4 by Alstom. So Alstom was performing a detailed
5 investigation. The City was reviewing all that
6 information, so that would be in the form of, you
7 know, documents as to how that risk had been
8 identified in the past by Alstom, so a sort of a
9 risk assessment that Alstom had used to point to
10 that as a potential hazard and how they propose to
11 mitigate it, so that was a technical document, we
12 could say.

13 The presentations included not only the
14 pictures, but also the follow-up in terms of what
15 field measurements were being taken to understand
16 the bearing condition. So it was a number of, you
17 know, different types of materials including slides
18 and technical documents to ascertain that this was
19 indeed a burnt-off bearing.

20 KATE MCGRANN: This is a question that
21 your counsel may want to answer on your behalf, but
22 will you provide us with a list of all of the
23 materials that you were provided, materials and
24 information, in respect of the first derailment as
25 part of your work on your second special mandate to

1 help us understand what was available to you and
2 what you looked at?

3 U/T PETER WARDLE: Sure, we can do that. I
4 think -- I suspect that this information's already
5 been provided by us in connection with other
6 individuals, but in any event, we'll provide you
7 with whatever was given to Mr. Berrada.

8 KATE MCGRANN: And just to be clear,
9 like, provided to us in a fashion so that we can
10 see that this is the material that was provided to
11 Mr. Berrada as part of his special mandate too?

12 U/T PETER WARDLE: Yes, we'll do that.

13 KATE MCGRANN: Thank you.

14 Mr. Berrada, you mentioned that the
15 City was seeking a technological solution to the
16 issue. What was Alstom's response to that request,
17 to your knowledge?

18 SAM BERRADA: So my recollection on
19 that is that, you know, the -- Alstom did take the
20 request seriously and -- and looked at the
21 different means that that issue could be mitigated.
22 And they proposed some measurements that would be
23 indicative of the bearing condition that would be
24 taken at a periodic basis based on mileage, and
25 so -- so there wasn't necessarily an agreement in

1 the beginning as to what would be the appropriate
2 means of mitigation.

3 And, of course, based on, you know, my
4 experience and knowledge with the fact that this is
5 an issue that is found in railways, not only in
6 North America but across the world, that, you know,
7 some -- that there are technologies out there
8 that -- that can be used to mitigate this more
9 effectively. And that's the insight that I shared
10 with the City, and the City followed through with
11 Alstom and RTM to request such technologies.

12 In fact, if you look at the TSB letter
13 that was issued around, I guess, in the fall of
14 2021, it says exactly that, that there are
15 technologies out there, and that the -- this should
16 be reviewed.

17 KATE MCGRANN: Did you recommend any
18 specific technologies?

19 SAM BERRADA: Yes. Yeah, the
20 technologies that I was familiar with, which is
21 bearing temperature detection through either
22 onboard means or wayside if there is access to
23 those infrared beams because it works with
24 infrared, so it really had to be investigated, and
25 I did not do the investigation, but there are

1 different ways that bearing temperature can be
2 obtained, and -- and my advice was to seek one of
3 those means that would be technically feasible.

4 KATE MCGRANN: And what was the reason
5 that you provided that advice or that you thought
6 that those technological means should be
7 implemented? Would it be in addition to Alstom's
8 proposal or instead of Alstom's proposal?

9 SAM BERRADA: Well, I guess that that
10 could be a risk-mitigation decision that would be
11 taken ultimately, but, you know, once you have a
12 positive means of monitoring bearing temperature,
13 you know, do you need redundant methods is
14 questionable.

15 But you need at least one positive
16 means of bearing temperature detection, and that
17 would be sufficient in terms of mitigating the
18 risk, and that's the means that is used by
19 railways, both passenger, freight, and many
20 commuter lines as well.

21 KATE MCGRANN: What was your view on
22 the mitigation response that Alstom implemented to
23 the extent that you formed one?

24 SAM BERRADA: It's -- you know, my
25 response to that was that the level of certainty of

1 its effectiveness may not be high enough for the
2 City, and that you'd want -- the City would need to
3 go further to use the technology since, you know,
4 these technologies are not something that is
5 uncommon. So these technologies are available, and
6 they would provide more certainty, and -- and that
7 was the direction that I recommended.

8 KATE MCGRANN: Did you have any
9 concerns about, first of all, the safety of the
10 system if it went back into revenue service with
11 the mitigation efforts that it did go back into
12 service with?

13 SAM BERRADA: With the mitigation that
14 was provided by Alstom in terms of taking
15 measurements of the looseness of the bearing or --
16 or its -- I guess it's -- it's a direct indication
17 of bearing condition, that that method would be
18 adequate for, you know, a significant period of
19 time.

20 But there's always a degree of
21 uncertainty, and I think this is a situation where
22 the City, given its mandate to have, you know, a
23 transportation system with the highest level of
24 safety possible, it only made sense that if there
25 is some technology available that would take you

1 that extra level of risk mitigation, that that
2 should be the reasonable course of action.

3 KATE MCGRANN: And can you be more
4 specific as to what you mean when you say a
5 significant period of time, that it would be
6 adequate for a significant period of time?

7 SAM BERRADA: I can only say that --
8 that, you know, if once you have a technology,
9 that -- that this method that is proposed and used
10 by Alstom, in my view, has always been that it
11 should be an interim measure until a technology is
12 implemented.

13 So, you know, I didn't do -- and, of
14 course, you need the data, and even when you have
15 the data, it's very, very scientific, very, very
16 complex; so, you know, it is possible that the
17 means that Alstom suggested could work fine
18 forever, but it's about uncertainty. Risk is about
19 bringing risk down to the lowest level possible.

20 So my view has been that, although the
21 proposal may work forever, if you can do better
22 through technologies that exist, then it's the
23 sensible course of action.

24 KATE MCGRANN: Did you give the City
25 any advice as to how long it should be content to

1 wait before a technological solution is introduced?

2 SAM BERRADA: No. No, I didn't give
3 them specific advice as to what is the satisfactory
4 or what is an acceptable period of time until such
5 technology is implemented. But my view has always
6 been that the City should push to the maximum
7 extent possible to get this technology as quickly
8 as possible. And this is, to my best knowledge,
9 what they've been doing.

10 KATE MCGRANN: When you say that the
11 City has been pushing, it suggests that perhaps
12 there's been some pushback against the technologies
13 that you suggested be implemented. Do you know
14 where the pushback is coming from and the reasons
15 given for it?

16 SAM BERRADA: Well, I mean, to
17 implement this type of technology takes a review.
18 It takes a technical feasibility. It takes an
19 identification of the right instrumentation. It
20 takes some testing, so that all takes time to do;
21 although, again, there are technologies which work
22 exactly like this on other vehicles, but they'd
23 have to be customized for these vehicles.

24 So, you know, when we talk about risk,
25 it's not black and white. It's many shades of

1 gray. And, you know, from Alstom's perspective, my
2 best knowledge that I can recall is they felt that
3 their proposal of taking measurements on a periodic
4 basis, mileage-based approach, would be sufficient.

5 And as I said, it may very well be
6 sufficient. However, because there's a better way
7 to do things and that because there are
8 technologies that are available, it would be, in my
9 mind, the sensible thing to do, and I know that the
10 City was on board with this.

11 KATE MCGRANN: Okay. So to your
12 knowledge, the only rationale given by Alstom for
13 pushing back against a technology to monitor these
14 bearings is that what they have proposed to do is
15 enough?

16 SAM BERRADA: I would suspect that that
17 is their view. If you asked them, they would
18 probably say that.

19 KATE MCGRANN: And I don't want you to
20 guess what their view is. I just want you to tell
21 me, to the extent that you know --

22 SAM BERRADA: Yeah.

23 KATE MCGRANN: -- what they have said
24 to the City about not doing anything further on the
25 technological front, what they have said.

1 SAM BERRADA: Yeah, they've -- they've
2 said that their proposal will mitigate the risk to
3 an adequate level. So they didn't see the need to
4 do anything further.

5 KATE MCGRANN: Before I leave the
6 question of Derailment Number 1 in August of 2021,
7 Mr. Imbesi, do you have any follow-up questions on
8 that?

9 ANTHONY IMBESI: I just had one
10 follow-up question. As I understood your evidence,
11 you had noted that, with respect to the bearing
12 issue, the initial Alstom risk assessment that
13 identified that potential risk, I just wanted to
14 clarify what you were referring to when you were
15 speaking of the initial Alstom risk assessment.

16 SAM BERRADA: So there is a document, a
17 technical document, that Alstom provided to the
18 City that they, in turn, shared with me while I was
19 having those discussions through that technical
20 role, and that I would have to look at what the
21 name of that document is, but it's a
22 risk-assessment document which identifies the
23 potential hazards that such equipment would face
24 and that would determine, you know, what the
25 frequency of those potential hazards would be, what

1 the potential consequences would be, and,
2 therefore, what the risk level is. And then it
3 would propose -- would look at different means of
4 mitigating those risks, and then they would land on
5 one that they would adopt that would mitigate
6 sufficiently those different risks that are
7 identified.

8 So it's a technical document, and I
9 don't have the name in front of me, but it's a risk
10 assessment -- an initial risk-assessment document
11 preservice.

12 ANTHONY IMBESI: Sorry. So just to
13 clarify, this is a risk assessment done pre-revenue
14 service for the system or post the derailment in
15 the context of their investigation?

16 SAM BERRADA: No. No. This would have
17 been -- this would have been as part of their
18 vehicle design. So -- so it's something that, you
19 know, in selecting the right, you know, equipment
20 and technology and components, they would try to
21 anticipate the potential hazards that could occur
22 through this risk assessment. That's what risk
23 assessment is about. And they would ensure that
24 those potential hazards are adequately mitigated,
25 so -- so it's a document that is used to ensure

1 that they use the right components and processes
2 and means to mitigate potential hazards and risks.

3 ANTHONY IMBESI: Thank you. That's all
4 I had.

5 SAM BERRADA: Yeah.

6 KATE MCGRANN: With respect to the
7 second derailment, in terms of who you were
8 receiving information from and/or working with at
9 the City, does that continue to be Mr. Richards and
10 Mr. Charter?

11 SAM BERRADA: So it would be -- it was
12 Mr. Charter and Mr. Richards that I was involved in
13 in the September derailment, again, in the same
14 capacity in terms of reviewing the information that
15 was provided by RTM, by Alstom, and providing my
16 insight from a railway perspective as to, you know,
17 what the potential causes would be and contributing
18 factors.

19 KATE MCGRANN: Okay. And, Mr. Wardle,
20 we'll ask that you also provide us with all the
21 information that was given to Mr. Berrada for him
22 to review as his role in the second special mandate
23 with respect to the September 21, 2021 derailment?

24 U/T PETER WARDLE: Yes, we'll do that.

25 KATE MCGRANN: Mr. Berrada, what can

1 you recall as far as what you reviewed for that
2 one?

3 SAM BERRADA: So all the information
4 that was provided including pictures, including
5 presentations that has been given by Alstom to the
6 City pointed to bolts that had been improperly
7 tightened in the gear boxes, and I'm aware that the
8 TSB did initiate -- was present in terms of
9 investigating this, so this would appear to be more
10 of a quality or workmanship issue.

11 KATE MCGRANN: You mention the acronym,
12 PSP [sic]. What does that stand for?

13 SAM BERRADA: Did I say PSP?

14 KATE MCGRANN: M-hm. I think you did,
15 at least.

16 SAM BERRADA: Yeah, I mentioned that
17 the -- there were slides. There was information
18 provided by Alstom and RTM on this derailment that
19 have pointed to the cause being quality or
20 workmanship.

21 ANTHONY IMBESI: You had mentioned that
22 someone was present in investigating this. Were
23 you referring to the TSB?

24 SAM BERRADA: Oh, I'm sorry.

25 PETER WARDLE: I'm sorry. TSB.

1 SAM BERRADA: Yes, Transportation
2 Safety Board, yes.

3 KATE MCGRANN: Thank you to you both.
4 And what was your view on the cause of
5 the second derailment to the extent that you formed
6 one?

7 SAM BERRADA: So to the extent that I
8 was involved, and, again, it's limited involvement,
9 and it doesn't follow through in the investigation
10 until its conclusion or its remedial actions, but
11 everything that I saw and the information provided
12 pointed to a quality and workmanship issue.

13 So this had been one of those vehicles,
14 one of those LRVs that was being monitored
15 following the August derailment that had gone into
16 the shop, maintenance facility, but then when it
17 came out of the maintenance facility, those bolts
18 had not been tightened properly. So it derailed
19 for a completely different reason, but it was
20 indirectly linked to the first derailment.

21 KATE MCGRANN: Okay. When you say
22 quality, quality of what? What are you referring
23 to there?

24 SAM BERRADA: All right. So if I -- if
25 I may give you this analogy, it's -- it's as if, if

1 you have your vehicle that has a bearing problem,
2 and you bring it into the garage, and you leave it
3 with the garage to do their inspections and
4 verifications, in order to perform those
5 inspections and verifications, they need to take
6 the wheels off your car. But then when you leave
7 the garage, the bolts holding your wheels in place
8 were not secured properly, and you have an accident
9 after you leave. So that's, in essence, the -- the
10 analogy to what happened.

11 So it came in for a reason related to a
12 bearing recall, let's say, but then, you know,
13 there needs to be processes, obviously, in the shop
14 to make sure that, you know, activities such as
15 tightening the bolts, the nuts on your tires are
16 done properly or else you're going to have another
17 issue, another type of issue. That's what I'm
18 referring to.

19 KATE MCGRANN: So when you say quality,
20 are you referring to the quality of the processes
21 that were in place by --

22 SAM BERRADA: Workmanship.

23 KATE MCGRANN: And would that be the
24 maintenance service facility, the process there?

25 Or --

1 SAM BERRADA: Yes, exactly. Yeah, so
2 the -- the parties that perform the light rail
3 vehicle inspection and maintenance are done in the
4 maintenance facility by people under the direction
5 of Alstom, so it's their employees that they hire
6 and they mobilize to perform those activities.

7 KATE MCGRANN: Okay. And then so the
8 quality of processes and then the workmanship, can
9 you just explain to me what you mean by that?

10 SAM BERRADA: So again, without having
11 done a thorough analysis of, you know, the
12 processes that are used at Alstom, clearly, there's
13 a -- there -- there are processes that they must
14 follow that need to be completed adequately and
15 that need to have the right checks and balances to
16 ensure that the work is performed in a complete and
17 proper manner. That's what we're talking about.

18 So this is a key area that I know the
19 City and TRA have engaged with RTM and Alstom to
20 ensure that they strengthen those processes. In
21 fact, following that derailment where the -- with
22 the loose bolts on the gear box, the -- Alstom went
23 through a very long process of analysis where they
24 identified a large number of what they called
25 critical connections. And those critical

1 connections were deemed to be important to ensure
2 safety. And Alstom committed to have the necessary
3 checks and balances to ensure that the work would
4 be done in a complete and proper manner. This is
5 something that, again, the City as well as TRA has
6 been following very closely with Alstom and RTM.

7 KATE MCGRANN: The critical connections
8 you said that they were deemed to be important.
9 Deemed by whom?

10 SAM BERRADA: Well, it was a proposal
11 that was put together following a technical review
12 by Alstom that they have submitted to the City that
13 was reviewed by the City as well as TRA. And there
14 may have been some adjustments along the way, but
15 there was a final list that was put together which
16 is the list of components that gets that extra
17 level of attention.

18 KATE MCGRANN: And when did Alstom
19 perform that technical review? Was it before the
20 derailment or afterwards?

21 SAM BERRADA: So this would have been
22 done after. Now, that's not to say that they
23 didn't have such a list before. So they may have
24 had a list before. What -- what I'm saying is,
25 following the derailment, there was a list that was

1 put forward by Alstom that reviewed this in a -- in
2 a complete manner and identified to the City what
3 those critical components are. So they may have
4 had something. I don't want to say that they --
5 they started with nothing. I'm sure they had
6 something, but they came up with this list that
7 identified those critical connections that was
8 reviewed and, you know, would be the subject of
9 special attention to ensure that the completeness
10 and -- and proper nature of the work is performed.

11 KATE MCGRANN: Do you remember what
12 that list was titled or what it was called?

13 SAM BERRADA: Critical connections, I
14 think, comes -- is -- is part of that, but it
15 was -- it was part of those presentations that was
16 delivered and document exchanged between Alstom,
17 RTM, and the City that TRA was -- was involved in
18 as well.

19 KATE MCGRANN: And how did you deliver
20 your -- your views and your work product in respect
21 of the second derailment to the City?

22 SAM BERRADA: So I want to say that on
23 the second one, I was not as involved as the first
24 one because the first one was really in my field
25 of, you know, expertise around technologies that I

1 had seen in the railway industry. And as I said,
2 I -- I was an -- immediately, you know, came to the
3 conclusion that there are technologies that could
4 likely be adapted to mitigate the risk to a lowest
5 level feasible, and that's what I proposed,
6 suggested.

7 This one, the September derailment, I
8 was aware of, you know, the evidence that indicated
9 that it had been loose bolts on these gear boxes
10 immediately also knowing that, you know, the -- if
11 they were able to point it back from -- whether
12 Alstom was able to point it back to the work
13 records of that vehicle and associated it -- had
14 shown that it had gone into the shop related to one
15 of these bearing verifications that I talked about
16 earlier, so was able to provide some, you know,
17 evidence that pointed to the bolts, also the
18 pictures being taken. There were some discussions
19 with the Transportation Safety Board as well that
20 pointed to that.

21 So at that point, that's where my
22 involvement started to go down, and since TRA was
23 heavily involved as well and the City was following
24 this very closely, at that point, the technical
25 input provided to the City must have been sometime

1 in the month of October, I want to say, that that's
2 when it basically was -- was ended.

3 KATE MCGRANN: Okay.

4 SAM BERRADA: But everything -- like,
5 everything that I had seen indicated that it --
6 that the, you know, loose-bolts cause was -- was
7 the -- the most likely one, and -- and certainly
8 one that by nature, if it's a -- if it's a
9 workmanship issue, this is something that it takes
10 courage from the contractor's point of view to come
11 back and say, you know, this is what the cause was
12 because it -- it points to their shop with -- for
13 inadequacy.

14 So with all those pictures and evidence
15 that was provided, it was -- it was pretty evident
16 that that was the cause and that the processes for
17 quality of workmanship were at issue and had to be
18 improved.

19 KATE MCGRANN: And how did you
20 communicate those views to the City? Was it via
21 telephone call? Did you send emails? Was there a
22 report?

23 SAM BERRADA: Well, again, it's -- the
24 involvement is all in a same fashion as I described
25 earlier, so there were some conference calls.

1 There were [sic] some material that was presented
2 by Alstom that was shared with the City, that was
3 shared with myself. There was some material later
4 on that was shared with TRA when they became
5 involved. That was more on the return-to-service
6 adequacy plan. So there would have been verbal,
7 and there would have been some email exchanges as
8 well and documents.

9 KATE MCGRANN: And so to the extent
10 that it hasn't already been produced, Mr. Wardle,
11 would you please produce the email exchanges and
12 documents that Mr. Berrada has referenced with
13 respect to his second special mandate?

14 U/T PETER WARDLE: Sure. Sure, we'll do
15 that.

16 KATE MCGRANN: Mr. Imbesi, any
17 follow-up questions on the second special mandate
18 before we turn back to the role and work of the
19 RMCO?

20 ANTHONY IMBESI: No.

21 KATE MCGRANN: Mr. Berrada, I'm going
22 to show you a copy of your annual report dated
23 February 4th, 2020, which we took from, I believe,
24 the Transit Commission's website.

25 SAM BERRADA: M-hm.

1 KATE MCGRANN: Just bear with me for
2 one second. Okay. So you should be seeing a
3 document that reads Annual Compliance Report -
4 Regulatory Monitor and Compliance Officer - Ottawa
5 Light Trail Transit, and then if I scroll down to
6 the bottom, it's dated February 4th, 2020. Can you
7 see that?

8 SAM BERRADA: Yes.

9 KATE MCGRANN: Please let me know if
10 you need me to zoom in at any point to allow you to
11 read what's on the screen. I'm going to move to
12 page 12 of this document which talks about
13 activities that the RMCO undertook prior to the
14 start of revenue service. Do you see that there's
15 a description with a bullet-pointed list here?

16 SAM BERRADA: Yes. Yes.

17 KATE MCGRANN: Do you recall when you
18 started working on these activities?

19 SAM BERRADA: So as I said earlier, the
20 RMCO was formally hired by the City in the first
21 half of 2018 in anticipation of revenue service,
22 which was imminent at the time.

23 So the first task that is identified by
24 the City for the RMCO was to prepare a work plan
25 that would identify the approach to be used for the

1 monitoring. So there was -- so what this
2 identifies is the inputs that were used in the
3 development of that work plan.

4 KATE MCGRANN: And do you remember when
5 you began working on these activities?

6 SAM BERRADA: Yes. So it would -- it
7 would have been, I want to say, second quarter of
8 2018.

9 KATE MCGRANN: Was there somebody
10 who -- like, did this role, the RMC0 role exist at
11 CN at any point while you were there?

12 SAM BERRADA: No. No. It's a very
13 different structure. I want to say that, you know,
14 if you look at the Federal regulatory model, you've
15 got Transport Canada that is the Federal regulator,
16 but then you have, of course, the TSB,
17 Transportation Safety Board, is tasked or -- with
18 performing investigations which is the same as you
19 would see here for the City of Ottawa.

20 But the -- in essence, the railway is
21 responsible to develop its own safety management
22 system and to implement it and to implement safety
23 initiatives to bring risk to the lowest level
24 possible. But there isn't a formal RMC0 role at
25 CN, and this is, to my best knowledge, also the

1 Confederation Line. Again, I haven't done a study
2 on which commuter lines have what type of
3 regulatory model, but everything I've seen
4 indicates that this delegation agreement, which
5 stipulates the creation of an RMCO, is something
6 that the City has that other commuter lines --
7 some -- at least other commuter lines, if not all,
8 may not have. So it's -- it's an additional layer
9 of oversight that the City has.

10 KATE MCGRANN: I appreciate that you --
11 that you haven't done a study. Are you aware of
12 any commuter lines that have an RMCO other than
13 Ottawa?

14 SAM BERRADA: Not to my -- not to my
15 best knowledge, no.

16 KATE MCGRANN: How were the RMCO
17 functions fulfilled at CN?

18 SAM BERRADA: Well, it's -- you'd have
19 to dissect the regulatory components and the
20 oversight components, and you would have to
21 determine how it's done on the Federal regulatory
22 model to answer that question.

23 And if I can offer my understanding and
24 insight on this, the OC Transpo would be the
25 equivalent of CN, so they would be responsible to

1 have their programs, and they would be responsible
2 to implement them. And then you'd have Transport
3 Canada that is the regulator, but it's important to
4 distinguish here that the RMCO is not the
5 regulator. The regulator for the City is the City
6 manager.

7 Now, the RMCO performs monitoring and
8 reports to the City manager as well as City
9 Council, so the monitoring that the RMCO does is
10 relative to the program, so the safety management
11 systems, the maintenance and rehab plan, and so on.
12 So that would be akin, let's say, to having
13 Transport Canada perform monitoring or audits.

14 In addition to that, of course,
15 Transport Canada performs field inspections, and
16 that would be performed by, you know, parties like,
17 TRA, among others. So there is the audit component
18 of the programs, auditing and monitoring of
19 programs, and then there's the boots on the ground
20 or field inspections. So, you know, there isn't an
21 RMCO as such at CN, but there is a Federal
22 regulator that would perform those functions.

23 In this case, if we look at the analogy
24 of the City, it would be the City manager that
25 would have that -- that the RMCO would report to on

1 the oversight of programs bearing in mind that
2 it -- it's not -- it's not all the oversight
3 equation because there are many lines of oversight
4 that I explained earlier.

5 KATE MCGRANN: Okay. So just to make
6 sure I understand, in this analogy that you've set
7 up, the City manager is performing the role of
8 Transport Canada. The RMCO reports up to the City
9 manager, and roles that you would see being
10 performed by Transport Canada that are not done or
11 carried out by the RMCO include audits and field
12 inspections; is that right?

13 SAM BERRADA: Not quite.

14 KATE MCGRANN: Okay.

15 SAM BERRADA: So the RMCO performs
16 monitoring of programs which would be the
17 equivalent of the monitoring performed by Transport
18 Canada on programs. So, you know, we use the term
19 'monitoring' in, you know, the City regulatory
20 framework. And, you know, part of that work is
21 what you see in the annual compliance report which
22 is reviewing the programs and assessing whether the
23 adoption, implementation, direction, oversight, and
24 records for those programs are compliant as
25 envisioned in the City regulations. That's what

1 the RMCO does.

2 And a big piece of that is the analogy
3 to Transport Canada, something that they would do
4 as well, again, bearing in mind that, you know, to
5 my best knowledge, the RMCO role, in terms of this
6 additional layer of oversight, is not something
7 I've seen in the other commuter lines, so this
8 is -- this is something that, in my mind, is a
9 positive for the Confederation Line.

10 KATE MCGRANN: The other commuter lines
11 that you're referencing, are they also
12 self-regulated as this one is by the City?

13 SAM BERRADA: Well, this one is unique
14 in that it's under the Federal jurisdiction, and
15 this is why the delegation agreement was put
16 together between The Minister of Transport and the
17 City of Ottawa, and this was before, of course, the
18 design and construction. This goes back to, like,
19 2011, if I'm not mistaken. And that's where the
20 terms of agreement relative to, you know, the --
21 the RMCO, the contents of the delegation agreement
22 were -- were put together.

23 So -- so this requirement for an RMCO,
24 to my best knowledge, is unique to this delegation
25 agreement and this Confederation Line.

1 KATE MCGRANN: I'm looking at the
2 second bullet point on page 12 of the document with
3 Doc I.D. COM1832. It says that, prior to the
4 start of revenue service, you familiarized yourself
5 with the Confederation Line. Can you explain to me
6 just generally what that means?

7 SAM BERRADA: So the -- the first few
8 months, again, were preparation of that work plan,
9 and so familiarization with the Confederation Line
10 was getting a general understanding of the physical
11 nature of the line, its -- its length, its -- the
12 track. You know, there's a -- there's a tunnel
13 where the stations are, what type of equipment.
14 It's to get the basic understanding of what the
15 line is so that, in the formulation of the
16 monitoring approach in -- and the work plan, that
17 that would be aligned with the specificity of the
18 Confederation Line, so it's -- it's general
19 physical knowledge of -- of the Confederation Line,
20 knowledge of -- of its -- you know, where -- where
21 the line is, where the stations are, and so on.

22 KATE MCGRANN: The work that you did to
23 familiarize yourself with the line, did that
24 involve field visits?

25 SAM BERRADA: Yes.

1 KATE MCGRANN: Did it involve
2 demonstrations of the vehicles and the technology
3 involved?

4 SAM BERRADA: No.

5 KATE MCGRANN: Was that something that
6 you had intended to do?

7 SAM BERRADA: No. No, because the
8 premise of the RMC0 from Day 1 was that it would
9 start the work after revenue service with the
10 understanding that all the components of the
11 Confederation Line, the equipment, the
12 infrastructure, and so on, are working.

13 KATE MCGRANN: I'm sorry. You cut out
14 a little bit for me there. Could you say that
15 again? It was based on?

16 SAM BERRADA: Yeah. Yeah, is basically
17 the -- the premise and assumption and mandate of
18 the RMC0 is about starting to monitor compliance
19 relative to the regulations and the programs
20 stipulated in the regulations after revenue
21 service.

22 It wasn't about the development of
23 those programs which was done before revenue
24 service. It wasn't about ascertaining any
25 demonstrations on the adequacy of the vehicles or

1 the track or the tunnels or anything like that. It
2 was the premise is that the RMCO would monitor
3 compliance relative to the programs such as safety
4 management system once the line has started to
5 operate with the understanding that all the
6 ingredients necessary for safe and reliable
7 operation had been put in place.

8 KATE MCGRANN: And did you receive any
9 information or confirmations of the assumption that
10 that safe and reliable service was what was going
11 to be delivered after -- like, when the system went
12 into revenue service?

13 SAM BERRADA: No. As I said earlier in
14 the beginning, the -- I did not at all get involved
15 in the independent certification, the
16 commissioning, the testing, you know, the safety
17 and reliability. I know a lot was done by the City
18 and by experts that they hired, but I did not get
19 into those details. I did not get the -- those
20 reports because my mandate was very specific, and
21 it would start after revenue service in terms of
22 monitoring.

23 KATE MCGRANN: I'm trying to understand
24 how the assumption that the system would be safe
25 and reliable functioned into your -- like, features

1 in your work or worked into your work.

2 So I think the answer to this question
3 is no, but just to make sure I understand, did you
4 receive any information from the City or otherwise
5 that either confirmed that that assumption was true
6 as you begin your work, the system is safe and
7 reliable, or did you receive any information that
8 changed that assumption at all?

9 SAM BERRADA: The answer is no, and it
10 was -- I was not in a position to -- you know,
11 through the mandate that was given to me, to
12 question the City on the -- the startup of the
13 Confederation Line. I was told, here's when it's
14 going to start. Here's when you start your
15 monitoring.

16 KATE MCGRANN: Would it have changed
17 the work that you did at all or your approach to
18 the RMC0's role if you had been provided with any
19 information that suggested that the system was not
20 yet as reliable as it ought to be, for example?

21 SAM BERRADA: Well, I mean, clearly, if
22 there is -- if I'm -- you know, if the City mandate
23 is changed and tells me that now part of your
24 mandate is to do your work in an environment where
25 there is uncertainty or doubt about the adequacy of

1 the equipment -- and that gets into, I guess, the
2 independent certification; it gets into the -- you
3 know, the delivery of the equipment, the
4 technologies -- yeah, certainly, it would change
5 things.

6 KATE MCGRANN: So how would it change
7 things?

8 SAM BERRADA: Well, I mean, it would --
9 there would have to be -- there would have to be an
10 understanding by the City as to where those areas
11 of uncertainty may be, how it may affect the
12 monitoring process and which elements would be at
13 issue; and -- and it may change using this
14 risk-based input that I talked about earlier, and
15 not only the approach that we'd use, but also the
16 areas that we'd monitor.

17 KATE MCGRANN: With respect to the
18 research and analysis described in the third bullet
19 point of this document, I'm curious as to what you
20 looked to given what you've told us about the fact
21 that this role is unique in what you see.

22 SAM BERRADA: Right. So the research
23 and analysis was more a literature review of, you
24 know, papers and documents that identify typical
25 issues identified by commuter lines that look like

1 this one.

2 So in essence, it's -- as I said, the
3 Confederation Line is unique in many ways, but I
4 set out to do a literature research and review of
5 documents that would identify, you know, what are
6 the typical issues and risks that are associated to
7 commuter line operations, so looking at, you know,
8 human-factors issues, looking at equipment issues,
9 looking at track issues, looking at
10 safety-management system issues to try to get this
11 formulation of an approach, this risk-based
12 approach on the selection of the regulations and
13 programs to monitor. So it was more about that.

14 There was also a component in terms of
15 looking at typical accidents, incidents, and their
16 causes to try to be ahead of the curve and to
17 anticipate what type of issues the commuter line
18 would typically face so that the monitoring would
19 be connected with not only the Confederation Line
20 itself -- and, of course, we don't have the -- we
21 didn't have the experience about its operation at
22 that time, but looking at other commuter lines to
23 try to understand what issues they may face so that
24 the selection of regulations to monitor would be
25 connected with those hazards and risks.

1 So to put things into perspective, you
2 know, there -- there are -- you probably have seen
3 this, but, you know, six key risk areas that were
4 identified through this -- this risk-based model of
5 selection, regulations to monitor. And, you know,
6 looking at the research and analysis and data that
7 was obtained for the work plan, we developed a
8 logical sequence, a risk-based sequence of what
9 areas to monitor starting with the most significant
10 ones and then going down the list of significant
11 ones as well from highest to lowest.

12 So you'll notice that the first area
13 that was monitored focused on the training and
14 qualification of employees involved in the movement
15 of light rail vehicles and trains encompassing both
16 the City that, as you know, the City, the operators
17 belong to the City; they're trained by the City.

18 The controllers are owned and trained
19 by the City as well as, you know, but there's also
20 movements of vehicles in the maintenance facility
21 under the control of both RTM as well as Alstom.

22 So this -- the analogy is that, you
23 know, there is -- there are many employees making
24 dozens, if not hundreds, of decisions every day,
25 and, therefore, the human-factors component is

1 typically a very significant one in any operation,
2 commuter or other. You'll find that in the
3 airline. You'll find that in the railways. You'll
4 find that in vehicles as well.

5 So that's the area that we started
6 with, so the -- the analogy would be that, you
7 know, if one is tasked with monitoring programs for
8 a transportation system that's starting with the
9 human-factors side -- or the human-factors
10 component would be the first one because that
11 typically is the most significant one.

12 And then following that logic, they
13 moved on in the subsequent years to track and light
14 rail vehicles which are also very significant ones
15 in any railway or commuter operation.

16 KATE MCGRANN: You mention that the
17 Confederation Line is unique in many respects.
18 What features or aspects of the system did you use
19 to identify comparator systems as part of your
20 research?

21 SAM BERRADA: Well, again, I didn't do
22 a comparison in terms of the technologies or an
23 exhaustive review of the technologies or equipment.
24 But I looked at it from a higher level largely
25 based on my knowledge of the railway industry,

1 and -- and I'll tell you the kind of things
2 immediately I noticed that the City had made some
3 very sensible decisions relative to the
4 technologies for this line because I will tell you
5 that, as vice president of safety and
6 sustainability at CN, the kind of things that would
7 keep me up at night would be things like
8 grade-crossing accidents.

9 Well, the City invested in an
10 infrastructure where you don't have any grade
11 crossings. It costs money to do, but they did
12 that. You'll find other commuter lines have grade
13 crossings. Many others do, not all of them, but
14 many do.

15 Another item is that operators, in many
16 commuter lines, have to comply with signal
17 indications as an individual driving a vehicle or
18 bus sees a red light, they have to stop. The City
19 invested in state-of-the-art CBTC,
20 communication-based train control systems which
21 controls the movement of trains to prevent
22 overspeeds or collisions or movements outside of
23 the authority.

24 And if you were to look at the
25 Transportation Safety Board which reviews all their

1 accidents and the causes, and -- and they have
2 something called the TSB watchlist which are issues
3 that they deem as having the biggest impact,
4 potential impact on the safety of Canadians, well,
5 those two items are in there.

6 So I immediately saw that the City had
7 done their homework in terms of selecting
8 reasonable, sensible technologies to mitigate risk
9 for those issues that are commonly found in
10 railways and commuter lines, and that's just one
11 example.

12 I mean, you've got trespasser controls,
13 and -- and, you know, the other point to keep in
14 mind is that the City -- I mean, I was not involved
15 in the project agreement itself. I have seen some
16 excerpts of it as part of my monitoring activities,
17 but the City went through a lot of detail to
18 describe what their expectations would be relative
19 to things like safety management systems or
20 emergency response plan. And then they went on to
21 select contractors' names that have worldwide
22 reputation. They didn't go with, you know, small
23 firms. They went with big names like Alstom that
24 have a worldwide reputation.

25 So all those things became evident, you

1 know, fairly early in my involvement. Again, I did
2 not do an assessment of the adequacy or the
3 effectiveness of those technologies.

4 But those are things that were apparent
5 to me based on my background and my experience
6 which made me understand that some of the issues
7 that would be faced by certain types of railways or
8 commuters may be less likely because of these
9 technologies, so you wouldn't expect any crossing
10 accidents. You wouldn't expect any movements of
11 trains outside of their authority because of the
12 CBTC, and there's other examples like that, I
13 think, have a bearing on the monitoring approach
14 and the selection of the programs to monitor
15 starting with the ones that are most at issue.

16 KATE MCGRANN: Okay. So you didn't do
17 a complete review of the technology and equipment
18 in order to form a basis for your research; is that
19 right?

20 SAM BERRADA: No. No, the -- the time
21 and mandate just did not provide for that. It was
22 a familiarization, I think, is the proper term.

23 KATE MCGRANN: But you have given us a
24 couple of examples of aspects of the technology
25 utilized that you were familiar with, and you've

1 explained how that affected your research.

2 I'd like to understand what aspects or
3 parts of the system did help guide your research.
4 You said that you took a higher-level approach.
5 Can you help me understand what you mean by that?

6 SAM BERRADA: Yeah, so it was basically
7 reviewing, you know, the physical layout of the
8 Confederation Line, its size, the speeds that it
9 would be operated, what type of infrastructure is
10 being used. You know, so -- so seeing, obviously,
11 that there is communication-based train control
12 system is a significant information that is going
13 to have a very positive influence on certain types
14 of accidents that you'd expect in other lines but
15 would be less likely here.

16 Nevertheless, you know, there are still
17 many decisions taken by people that our rules
18 qualified, you know, in the control centre and
19 trains particularly in the situations that are
20 outside of the normal. And that's where, you know,
21 the importance of having employees that are
22 properly trained and qualified was important. And
23 this is something that I started with.

24 But, you know, issues that are also
25 faced with -- with other railways and commuter

1 lines are -- are -- involve track, so, you know,
2 track is critical in terms of the safe and reliable
3 operation.

4 So without looking at the technical
5 nature of the track itself and its size and the
6 stresses and that kind of thing, I -- I was
7 familiarized with the fact that you have track
8 that -- that spans those 12 and a half kilometers
9 that goes over some overpasses, some tunnels, and
10 so on.

11 So it's a -- so general familiarization
12 with the equipment and the infrastructure and, you
13 know, the types of issues that could be associated
14 with other commuter lines that we would or would
15 not find because of the technologies and decisions
16 made on this Confederation Line.

17 So it's -- it's general review and
18 information gathering for purposes of identifying
19 potential issues and -- and hot spots.

20 KATE MCGRANN: Did anybody assist you
21 in your research or in the development of your work
22 plan?

23 SAM BERRADA: No.

24 KATE MCGRANN: The second last bullet
25 point on this list describes meeting stakeholders.

1 What stakeholder meetings did you attend prior to
2 revenue service?

3 SAM BERRADA: So this was primarily
4 engagements with the City, some limited involvement
5 with the contractors, so RTM and Alstom, but mostly
6 the City.

7 KATE MCGRANN: Okay. And what was the
8 purpose of the meetings with the City prior to
9 revenue service?

10 SAM BERRADA: Again, it was for
11 purposes of -- of familiarization and obtaining
12 information that would validate, cross-check the
13 information that I had obtained through other means
14 and help, also -- I'm sorry -- and also help me
15 better understand the -- you know, the -- the --
16 sort of the roles and responsibilities, which,
17 quite frankly, it's -- it's not obvious when you
18 come into that picture because you need to
19 understand that it's a divided responsibility where
20 the trains on the main line are operated by City
21 employees; the movements of trains are controlled
22 through the control centre by City employees.

23 But when the trains go into the
24 maintenance facility, they're handed off at that
25 point to the contractor that splits their

1 responsibility between RTM as well as Alstom, so to
2 be more specific, you know, when the vehicles come
3 into the maintenance facility, there are
4 controllers that direct the movement of those
5 vehicles in the maintenance facility tracks that
6 belong to RTM, but the people that actually move
7 the vehicles are actually Alstom employees.

8 So it's the -- you know, it's -- it's
9 about understanding roles and responsibilities and
10 information and facts to -- to gather this evidence
11 and information to help develop a -- a monitoring
12 plan and -- and an approach for selection of
13 programs to monitor which would be consistent with
14 the information gathered.

15 KATE MCGRANN: And did the limited
16 meetings that you had with the contractors serve
17 the same purpose as you've just described?

18 SAM BERRADA: Yes. So I was, for
19 example, visiting the maintenance facility, looking
20 at the tracks they have and how the vehicles are
21 moved, and so on.

22 KATE MCGRANN: Was it your expectation
23 when you started that the policies, procedures,
24 operating plans, et cetera, required by the project
25 agreement would be complete and in place

1 in conformance with the project agreement?

2 SAM BERRADA: Absolutely.

3 KATE MCGRANN: And generally speaking,
4 was that the case with the work that you've done to
5 date, that proved to be true?

6 SAM BERRADA: Well, I mean, first
7 things first is that, as I said, the City took a
8 great deal of care to detail their expectations in
9 the project agreement. There were some checks and
10 balances before the revenue service to confirm that
11 those programs had been developed, from everything
12 I could see, again, without getting involved in
13 that aspect. And -- and of course, the monitoring
14 would be in part to assess that.

15 So it would be to assess compliance
16 relative to those programs which includes the
17 review what contractors do to see whether they've
18 implemented those programs that are identified in
19 the City regulation and in ensuring that the
20 contractors also do their part, have completed
21 their part in accordance with the City's
22 expectations which are stipulated in the project
23 agreement.

24 KATE MCGRANN: And generally speaking,
25 did you find that everything that was supposed to

1 be there was there?

2 SAM BERRADA: I mean, you can see from
3 the annual compliance reports that there's some
4 areas of strength, but there's also some gaps, so
5 we can -- I'm sorry -- go ahead.

6 KATE MCGRANN: No. No. Please. You.

7 SAM BERRADA: Yeah. Yeah, so I mean,
8 if you look at the annual compliance reports, the
9 most recent one, you're going to find in there
10 that, you know, the safety management system of RTM
11 and Alstom had some gaps. You're going to find
12 that the implementation of their emergency response
13 plan had some gaps. They -- they have done some
14 good things, to be fair. They've implemented some
15 very important parts, but they didn't have
16 everything that they were supposed to have. So
17 that's just one example.

18 So I guess, to answer your question is,
19 there are, you know, areas of strength, but also
20 areas where some gaps were identified.

21 KATE MCGRANN: And we will go to your
22 reports, but just speaking generally with respect
23 to the gaps that you've identified, were you
24 surprised to find them given the checks and
25 balances you understood to be in place before you

1 began your role?

2 SAM BERRADA: Well, I'll say that, you
3 know, when there's a new operation, I think that,
4 you know, everything I've seen in my experience
5 with -- with new, you know, commuter lines sort of
6 looking back at the significant changes that were
7 done to a commuter line when I was in Montréal to
8 electrify it and make electrical go from standard
9 equipment to electric equipment, looking at new
10 vehicles that were designed over the years for
11 passenger equipment, there's always going to be --
12 when you have a new operation, new equipment,
13 there's going to be a learning curve and an
14 adjustment period.

15 And when you look at the Confederation
16 Line, it's a significant amount of advanced
17 technologies of equipment, of processes, people
18 getting used to those tasks.

19 So, you know, it is totally normal that
20 when there is a new operation, that there is going
21 to be a learning curve and an adjustment period.
22 There's going to be some design issues. There's
23 going to be some process rejigging. So it's -- I
24 think it's -- it's -- it would be unreasonable to
25 expect perfection on Day 1.

1 KATE MCGRANN: Okay. My question was,
2 were you surprised by any of the gaps that you
3 found given the checks and balances you understood
4 to be in place before you started your monitoring?

5 SAM BERRADA: Well, from an RMC
6 perspective, my role is to monitor and to identify
7 and assess compliance. So I think it would be
8 unreasonable to go into that kind of role and
9 expect that you're going to find nothing. So to a
10 large extent, I went in there -- like, if -- all
11 these audits that I've done in my career, they're
12 there for a reason. I would be a lot more
13 concerned if the audits or monitoring find nothing
14 especially if you have the issues that have been
15 faced by the Confederation.

16 And so, you know, to answer your
17 question at a high level, I did not go in there
18 with the expectation that I would find perfection.
19 I -- I went in there with the focus on performing
20 my role as RMC with the expectation that there'd
21 be some areas of strength and some areas of
22 opportunity that would need to be addressed, and
23 that's exactly what we found.

24 KATE MCGRANN: So what you found was
25 basically what you were expecting when you went in?

1 SAM BERRADA: You know, it's a
2 difficult question to answer because expectations
3 are subjective. It's not black and white. I mean,
4 I didn't go in with a detailed list of
5 expectations, but as I said, at a high level, my
6 expectations were that I would go in there to
7 monitor and find strengths and opportunities, and
8 that's what I found.

9 KATE MCGRANN: In the work that you
10 were doing prior to the start of revenue service to
11 prepare for your role as the RMCO, was there any
12 information that you expected to find or that you
13 needed that wasn't available to you?

14 SAM BERRADA: No. No. I mean, there
15 was -- you know, the -- the initial phase, as I
16 said, wasn't necessarily to review all the programs
17 in detail because my role, I understood, and is
18 specified by the City, is not to assess the
19 adequacy or effectiveness of the programs.

20 And I understood from the beginning
21 that the mandate requires the RMCO to put together
22 a plan, which is what I did, that was approved by
23 City Council in September of 2018 in expectation of
24 a revenue service imminently following that, and
25 that the programs stipulated and those regulations

1 would be monitored progressively. So, you know,
2 all the information that I needed was certainly
3 provided, and -- and as we entered into the
4 monitoring phase, we requested the up-to-date
5 programs at that point.

6 And again, without assessing the
7 adequacy or effectiveness of the programs, we
8 looked for -- we -- we performed an assessment
9 through the gathering of objective evidence as to
10 whether there was compliance relative to those
11 programs, so short answer is what I needed was
12 provided.

13 KATE MCGRANN: With respect to the
14 reporting that you do, I understand that you make
15 quarterly reports to the City manager. Are
16 those -- you're nodding. That's a yes?

17 SAM BERRADA: Yes.

18 KATE MCGRANN: Are those written
19 reports?

20 SAM BERRADA: Yes.

21 KATE MCGRANN: And what do those
22 reports cover with respect to the work that you're
23 doing that year?

24 SAM BERRADA: It's to provide an update
25 on the monitoring plan, the monitoring activities,

1 and the findings at various levels -- or at various
2 points in time as the monitoring is being
3 performed. And it's typically in the form of
4 slides that are provided to the City manager.

5 KATE MCGRANN: And do you know if
6 they're provided to anybody else?

7 SAM BERRADA: Yes. Yeah. I mean,
8 those slides would be provided also to other
9 players in OC Transpo for purposes of -- I mean,
10 maybe I should talk a little bit about the
11 principles of monitoring that -- that are used that
12 are totally consistent with, you know, the
13 Institute of Internal Auditors that I'm a member of
14 or, you know, other audits and -- and monitoring
15 activities that I've seen.

16 But, you know, the principles are
17 around, first of all, transparency. It's not
18 about, you know, playing gotcha. It's about
19 assessing compliance relative to programs looking
20 at, you know, gathering objective evidence,
21 engaging the stakeholders because we need the
22 resources to be able to perform those monitoring
23 activities, and using a fact and evidence-based
24 approach to make a determination as regards to the
25 assessment.

1 And, you know, one of the obvious
2 questions is, well, if you tell people ahead of
3 time that you're going to be monitoring something,
4 is that going to allow them to prepare ahead of
5 time? And I would say two things to that: I mean,
6 the first thing is that that approach is totally
7 consistent with the Federal regulator when they
8 perform an audit. They will tell the railway ahead
9 of time what they're monitoring.

10 Second point is the nature of the
11 programs that are being monitored cannot be
12 fabricated in a week or two. You know, we look at
13 records and data and documents that span
14 significant periods of time, you know, six
15 months and -- and plus in many cases. We look for
16 objective evidence of the documents having been
17 adopted, developed, and -- and implemented. So we
18 look for, you know, emails and -- and training
19 records and records that confirm that inspections
20 were performed.

21 So for all those reasons, I'm very
22 comfortable with the approach being used on the
23 monitoring front and the principles of structure
24 and transparency being used to engage the
25 stakeholders and using the fact and evidence-based

1 approach for determination of compliance.

2 KATE MCGRANN: So the quarterly reports
3 are provided to the City manager and OC Transpo.
4 Are they provided to anybody else?

5 SAM BERRADA: I mean, since the
6 regulatory regime is very specific, I have been
7 involving the City legal department to ensure that
8 all the activities that I perform are aligned with
9 the regulations themselves and the mandate of the
10 RMCO. So in many cases, the City legal department
11 would also have a copy of those.

12 KATE MCGRANN: And anybody else receive
13 the quarterly reports?

14 SAM BERRADA: I think that's about it.

15 KATE MCGRANN: Other than the quarterly
16 reports and your annual report, are there any
17 other -- is there any other reporting that you do
18 on a regular basis?

19 SAM BERRADA: No. Well, let me -- let
20 me maybe just clarify. One of the key principles
21 of monitoring which you will find in the reports,
22 which is described in the reports, is one of
23 engagement and sharing information relative to
24 findings as early as possible for purposes of
25 having the parties take the necessary mitigating

1 action to reduce risk.

2 So typically, there would be a
3 notification that -- that a monitoring activity is
4 starting. It would identify the process being used
5 for carrying out those monitoring activities. It
6 would request specific documents and records from
7 the different parties whether it's OC Transpo or
8 RTM, and so that the process is, once those
9 documents and records are provided, that there
10 would be a review and analysis of this information.

11 And then there would be periodic
12 conference calls with the parties involved in these
13 monitoring activities with the results
14 progressively shared with them so that they're, (a)
15 positioned to take appropriate action to mitigate
16 risk, and (b) that they start already formulating
17 their longer remedial action so that when we
18 conclude a monitoring segment, at that point,
19 there's no surprises.

20 You know, people -- all the -- all the
21 players involved in the monitoring have been kept
22 appraised of -- of the unfoldment of the monitoring
23 and the findings and should be quite advanced in
24 terms of preparing the remedial action.

25 So -- so there are -- you know, there

1 are engagements that happen on a regular basis
2 during monitoring activities.

3 KATE MCGRANN: Okay. You've already
4 explained to us that the work that you do should be
5 distinguished from audits and is not audit work,
6 correct?

7 SAM BERRADA: Yes.

8 KATE MCGRANN: Do you know who is
9 responsible for carrying out audits of the system?

10 SAM BERRADA: As I said, the -- the
11 City has a responsibility, through the delegation
12 agreement, to provide tri-annual, every three
13 years, audits of key programs such as safety
14 management systems and security management system.
15 And these are external experts that are hired to
16 perform those audits.

17 KATE MCGRANN: I've jumped ahead to
18 page 39 of COM1832 because I want to ask you a
19 question about the distinction that's made in the
20 last paragraph on this page between a high-level
21 risk assessment, which is what I understand
22 informed your work, as compared to a detailed risk
23 assessment which this document states was not
24 carried out. Can you just explain the difference
25 between those two things to me, please?

1 SAM BERRADA: Yeah, certainly. So it's
2 totally consistent with the discussion, the
3 questions that were asked and the answers that I
4 provided that all the work that the RMCO does is
5 focused around assessing compliance relative to
6 programs. And in order to do that, one of the
7 deliverables that was requested from the RMCO
8 through the City mandate that you may have is the
9 formulation of a work plan that describes how the
10 monitoring will be carried out and how the
11 selection of programs and regulations that will be
12 monitored will be identified.

13 So that's the -- the level of -- of
14 familiarization and high-level review that was
15 performed by the RMCO to make that determination
16 and to move forward with the selection of areas to
17 be monitored, which, as you know -- you know,
18 started with the human factors on training and
19 qualification of -- of operating employees involved
20 in the movement of trains and LRVs, moved on to
21 track, moved on to catenary, you know, moved on to
22 light rail vehicles, and then moved on to safety
23 management system and emergency response plan.

24 So, you know, these are very
25 significant components of, you know, the areas that

1 you typically find to be at issue with commuter
2 lines or any railway operation. So the level of
3 involvement in terms of reviewing risk by the RMCO
4 was only for those purposes to be able to get a
5 general understanding of what the programs do, what
6 type of risks they're intended to mitigate to
7 enable that selection of programs to monitor under
8 sequence.

9 It is not about reviewing the program
10 and finding strengths and weaknesses in the
11 program, and it is not about reviewing the
12 effectiveness of a particular process or -- or
13 technology or contractor effectiveness as a matter.

14 KATE MCGRANN: The areas of focus for
15 your first report, the human factors --

16 SAM BERRADA: M-hm.

17 KATE MCGRANN: -- I understand that
18 those were determined based on the overall approach
19 you took to preparing your work plan and risk and
20 things like that.

21 Did any information about the actual
22 operation of the system post-opening to revenue
23 service affect your selection of the areas that you
24 would monitor?

25 SAM BERRADA: I -- I would say no. No,

1 because -- and I'll qualify that in a minute, but
2 the information that I reviewed upfront of the work
3 plan was based on the programs that were available
4 then without having necessarily gone in detail into
5 reviewing them but understanding that they're
6 there, understanding the technologies and the
7 decisions on the infrastructure that were made and
8 so on, again, for purposes of prioritizing where do
9 we start in terms of monitoring. And that's where
10 we landed on human factors, which, if you look at
11 almost any mode of transport, human factors is
12 going to be on top whether it's airline or ships or
13 railway or trucks, as a matter of fact.

14 But as we moved forward into the
15 monitoring, remember one of the things that I said
16 is that, you know, we use several inputs to be
17 appraised [sic] of the key issues that the
18 Confederation Line is facing to be able to focus
19 the regulatory monitoring activities on the right
20 issues, the ones that are most significant.

21 So, you know, as the Confederation Line
22 started to operate, we were obviously looking
23 closely at, you know, what derailments were taking
24 place without necessarily getting into the
25 investigation piece but at least understanding

1 there's a derailment or collision that took place
2 in the maintenance facility, it's likely human
3 factors, okay, and then, you know, reviewing
4 through the -- the council meetings and the
5 presentations given there by OC Transpo as, you
6 know, the type of issues that were being faced with
7 doors and onboard computers and catenaries and so
8 on.

9 So that was helping to -- to steer the
10 prioritisation of areas to monitor and, you know,
11 obviously, would be issues being faced following
12 revenue service. It reaffirmed the importance of
13 keeping in scope the programs that relate to light
14 rail vehicles, to track, and to the catenary, which
15 was what was monitored in 2020.

16 KATE MCGRANN: You keep saying 'we'
17 when you refer to assessments, moving forward with
18 work, et cetera. Who is the 'we' that you're
19 referring to?

20 SAM BERRADA: I should say I.

21 KATE MCGRANN: Okay. I just wanted to
22 make sure that there wasn't somebody else --

23 SAM BERRADA: Yeah. Yeah.

24 KATE MCGRANN: -- involved that we
25 hadn't identified.

1 SAM BERRADA: Yeah. Yeah, my apologies
2 for that.

3 KATE MCGRANN: With respect to the
4 inputs that you referenced that helped you be
5 apprised of the issues facing the system, so you
6 said you looked at information about derailments
7 and collisions in the maintenance, the MFS,
8 Maintenance Service Facility, where did that
9 information come from, and how did it make its way
10 to you?

11 SAM BERRADA: So that would be
12 typically communicated to me from the OC Transpo
13 Chief Safety Officer that when there's a
14 derailment, typically, we would have a discussion
15 about that. And with respect to the other issues,
16 as I said, I would -- I would look at the
17 presentations that would be delivered by OC Transpo
18 to City Council and -- and, you know, other
19 meetings where they would describe the issues that
20 are being faced and what's being done to remedy
21 them.

22 KATE MCGRANN: Are there any formal
23 policies or processes in place that set out when,
24 where, or how the Chief Safety Officer should be
25 alerting you to information about how the system is

1 operating?

2 SAM BERRADA: No formal policy, no.
3 This was more, you know, regular communications.
4 As I said, one of -- it's -- it's important, you
5 know, to have those communications so that the flow
6 of information is -- is available to help steer
7 each party to fulfill their responsibilities.

8 In my case, it's about understanding
9 issues in steering the monitoring and -- and the
10 programs to be monitored.

11 But -- but there wasn't a formal policy
12 that was laid out. It was -- it was more regular
13 communications and engagement, which is, as I said,
14 necessary not only to prioritise, but also in the
15 monitoring process to make sure that everyone is
16 aware of, you know, what is being monitored, what
17 is being found, and to position everybody, all the
18 parties, in a -- you know, to allow them to take
19 expedient action to address the findings and,
20 therefore, mitigate risk and -- and improve safety.

21 KATE MCGRANN: How regularly are you in
22 contact with OC Transpo's Chief Safety Officer?

23 SAM BERRADA: It really varied quite a
24 bit. There would be times where it would be, you
25 know, once or twice a week. Other times might be

1 every two or three weeks, so it would really depend
2 on the activities and circumstances.

3 KATE MCGRANN: And based on your
4 experience to date, if there was an incident with
5 respect to reliability of service or otherwise on
6 the system, would he contact you to let you know
7 about it?

8 SAM BERRADA: So -- so the reliability
9 would not be there, so you need to distinguish it.
10 It was more a safety issue, so it would be
11 typically a derailment or collision.

12 KATE MCGRANN: Okay. Anything that
13 doesn't rise to the level of derailment or
14 collision, you're not receiving an update about
15 from the Chief Safety Officer?

16 SAM BERRADA: Typically not. There --
17 there may have been a case where I can recall an
18 incident with the catenary, the cables that are
19 used to provide power, where there was a break in
20 the catenary, and we may have had discussions
21 there. But typically, it was around the
22 derailments and the collisions with some
23 exceptions.

24 KATE MCGRANN: And then you said you
25 would also look at OC Transpo's presentation to

1 council. I take it that's City Council?

2 SAM BERRADA: Correct.

3 KATE MCGRANN: And so you're monitoring
4 those presentations in order to identify
5 information about the system that may inform your
6 selection of the next areas of focus for your
7 monitoring; is that right?

8 SAM BERRADA: Correct.

9 KATE MCGRANN: Any other sources of
10 information for you about the system that helped
11 you determine where to focus your monitoring for
12 the next year?

13 SAM BERRADA: Well, I think those would
14 be -- would be the ones.

15 KATE MCGRANN: Waiting for OC Transpo
16 to report to City Council seems like it could be an
17 indirect way for you to get information that might
18 be available more directly. Is there any reason
19 that you received information that way as opposed
20 to a different way?

21 SAM BERRADA: Well, it's an established
22 way. It's a way that -- that we knew the
23 information would be provided in a consistent
24 manner. So, you know, it was -- it was -- it was
25 satisfactory for purposes of keeping appraised

1 [sic] of the key issues.

2 Again, you know, if my role was to get
3 into the detail and investigations of those things
4 and under technical resolution, there would likely
5 be more engagements required. But this is really
6 maintaining being appraised of the -- the key --
7 the significant issues that are affecting the
8 Confederation Line, and this was satisfactory for
9 that purpose, that high-level sort of overview that
10 we're talking about.

11 KATE MCGRANN: I've taken you to page
12 35, but I'm going scroll up just to help you
13 understand the context in which these paragraphs
14 appear. So we're currently in Annex 2 to the
15 report that we've been looking at. This is the
16 RMCO duties and responsibilities, and it sets out
17 an excerpt of the contract signed between the City
18 of Ottawa and SAB Vanguard Consulting Inc. I take
19 it that's your company?

20 SAM BERRADA: Correct, yeah.

21 KATE MCGRANN: On March 2nd, 2018, so
22 there's the excerpt. And what I want to ask you
23 about is this last paragraph where it says: (as
24 read)

25 "The compliance officer will

1 also be responsible for quarterly
2 monitoring and reporting of any
3 potential regulatory compliance gaps
4 to the City manager in order for
5 City staff to correct any compliance
6 deficiencies."

7 My question is, any gaps identified as described in
8 this paragraph, would they appear in your annual
9 report?

10 SAM BERRADA: Yes.

11 KATE MCGRANN: So if I read your annual
12 report, I will be aware of all of the gaps that you
13 identified over the prior year?

14 SAM BERRADA: Yes.

15 KATE MCGRANN: I'm going to stop
16 sharing the screen for a second. I'm going to move
17 away from your -- that report to your annual
18 compliance report for 2020.

19 SAM BERRADA: M-hm.

20 KATE MCGRANN: So this is document
21 COM1855, the annual compliance report for 2020 --

22 SAM BERRADA: M-hm.

23 KATE MCGRANN: -- dated February 26th,
24 2021. My first question for you about this
25 document is with respect to some information on

1 page 19. But to help you position yourself within
2 the document, we're in Section 5, Monitoring of
3 Track Inspections and Repairs, and that was an area
4 of focus for this year's review for you, correct?

5 SAM BERRADA: I'm sorry. Repeat the
6 question again.

7 KATE MCGRANN: It's monitoring of track
8 inspections and repairs was an area of focus for
9 your monitoring for the year 2020?

10 SAM BERRADA: Correct.

11 KATE MCGRANN: So happy to scroll back
12 up to let you read any aspect of this that you need
13 to in order to answer my question --

14 SAM BERRADA: M-hm.

15 KATE MCGRANN: -- which is, this last
16 paragraph says: (as read)

17 "Further in the course of
18 carrying out the review of the
19 relevant documents and related work
20 activities, the RMCO observed and
21 noted potential or apparent
22 non-compliances with City
23 Regulations, the contractual
24 obligations of RTM and Alstom, the
25 requirement of RTM's and Alstom's

1 own documents (and apparent
2 inconsistencies with City
3 requirements) and with prevalent
4 industry sector practices for
5 similar activities in similar
6 operating conditions."

7 What are the industry's sector practices identified
8 there, and how did they find their way into the
9 standards that you are comparing your review
10 against?

11 SAM BERRADA: All right. So as I said,
12 in -- the thrust of the effort is really reviewing
13 the programs and assessing compliance to them
14 through these reports and these verifications.

15 However, in performing this review,
16 there were -- there was a gap that was apparent to
17 me on the track relative to Alstom's procedure for
18 addressing inspections of track when they're at
19 high temperatures.

20 And in essence, it was not consistent
21 with the maintenance and rehabilitation plan, and
22 it was not consistent with the RTM requirement. It
23 basically says that, when the temperature reaches a
24 certain level, that it requires an inspection.
25 This is something that is done to prevent buckled

1 rails or rail kinks. It's something that we find
2 in -- in all railways, but we didn't find it in the
3 Alstom documents, and I flagged that as something
4 that needed to be there because it is an industry
5 best practice.

6 KATE MCGRANN: So I'm just trying to
7 understand, like, how this works with your role as
8 you've explained it, which is you're not looking at
9 sufficiency. You're not looking at effectiveness.
10 You are just looking to see if the things that are
11 supposed to be there according to the project
12 agreement are there; is that fair?

13 SAM BERRADA: Yeah, it is with one
14 caveat, and -- and so, you know, one of the
15 discussion points early in my mandate was, well,
16 without doing a detailed technical review of these
17 documents and assessing their effectiveness or
18 adequacy, well, what if, based on my experience, I
19 see something that is lacking?

20 And the City, of course, being
21 interested in the highest level of safety said, if
22 you do see something like that, let us know. And
23 that's exactly what I did.

24 KATE MCGRANN: Okay. So your work is a
25 little bit broader than what described based in

1 part on your years of experience on the rail; is
2 that fair?

3 SAM BERRADA: Exactly, yeah. And
4 again, I'll just emphasize it's not a detailed
5 technical assessment of those documents and an
6 assessment of their adequacy. It's -- you know, it
7 is evident that when you have a significant amount
8 of experience in the railway environment, that
9 there are certain things that you expect to see,
10 and -- and that if I saw something which was an
11 anomaly in these program documents, you know, would
12 the RMCO would be expected to raise that to the
13 attention of the City?

14 And as I said, the -- from Day 1, when
15 the selection committee did that interview, you
16 know, in -- in City Hall, the mayor said very
17 clearly, we want the highest level of safety on
18 this line.

19 So recognizing that my role is not to
20 make that highest level of safety happen by myself,
21 there's many players in there; there's many layers
22 of oversight. There's technical experts. There's
23 a lot of different players.

24 But the City wanted to ensure that the
25 resources that were at their disposition, such as

1 myself, that, if some insight that could be of
2 value comes up that could help safety, they wanted
3 to hear about it.

4 KATE MCGRANN: Okay. And so the
5 arrangement, as I understand it, is if in the
6 course of your RMC0 work, you happen to notice
7 something that your prior experience or otherwise
8 flags for you as worthy of comment and attention,
9 you're going to bring that up even though it's not
10 strictly within the bounds of the work that you've
11 been asked to do as RMC0; is that fair?

12 SAM BERRADA: That is fair.

13 KATE MCGRANN: Those observations, are
14 those all caught in your annual reports as well?

15 SAM BERRADA: Yes.

16 KATE MCGRANN: And when you see
17 something along these lines, do you raise it right
18 away? Do you wait until the quarterly report?
19 Like, what approach do you take to these insights?

20 SAM BERRADA: It's raised right away so
21 that when we saw -- when we saw that that
22 inspection procedure for the main line for high
23 temperatures was not there in the Alstom documents,
24 and -- and, quite frankly, it was a bit of a
25 surprise to me when I started to monitor the track

1 to find out that it was Alstom that was performing
2 the inspection because most people that think of
3 Alstom, they think of vehicles. They think of
4 LRVs, but Alstom has a broader mandate than that.
5 And the key to understand is that it's -- their
6 people perform those inspections, and they have
7 technical documents that specify how to perform
8 those inspections and when to perform those
9 inspections.

10 So those -- there needs to be alignment
11 between those Alstom documents and the City's
12 program, the maintenance and rehab plan, and that's
13 what I looked for.

14 KATE MCGRANN: When you said that you
15 were surprised that Alstom was performing the rail
16 inspections, who did you expect to be doing it?

17 SAM BERRADA: Well, you know, maybe it
18 was -- my understanding is that before revenue
19 service, the roles and responsibilities were
20 divvied up differently, and I can't ascertain who
21 it was. But my understanding is there was another
22 party that was performing track or catenary work,
23 and that RTM gave that to Alstom at some point; I
24 can't say when, and I say this with, you know, all
25 sort of caution that's just what I've heard.

1 But all this to say that, in my mind,
2 maybe it was just me, that, when you think of
3 Alstom, you think of vehicles. But, yet, they --
4 they've got the people that are, you know,
5 performing other duties than vehicles.

6 KATE MCGRANN: Okay. And with respect
7 to the handover responsibility for that inspection
8 from another subcontractor to Alstom, if you don't
9 know, just say so, but did you have a sense whether
10 that was planned or whether that was a decision
11 that was sort of made in real time, any information
12 about that that you received?

13 SAM BERRADA: I do not know.

14 KATE MCGRANN: Okay. Turning back to
15 the insights that you -- we've looked at an example
16 of one here, you have, in the course of your work,
17 you said that you would raise those immediately
18 wherever you saw one. Who would you raise them
19 with?

20 SAM BERRADA: It would -- it would
21 typically be raised with -- you see, the monitoring
22 is carried out with -- in full transparency with
23 all the parties so that there is no surprises to
24 anyone so that when the monitoring is looking at
25 the execution performed by RTM or Alstom,

1 OC Transpo is always involved so that OC Transpo is
2 involved in every step at least being kept
3 appraised of every step of the monitoring
4 activities being performed by the RMCO.

5 So it would typically be raised to the
6 attention of the safety officer that would be
7 involved with the RMCO in the monitoring, and they
8 would be, of course, cascaded up to the Chief
9 Safety Officer and eventually the City manager.

10 KATE MCGRANN: So when you refer to the
11 safety officer who's involved with the RMCO and
12 monitoring, is there a representative of the Chief
13 Safety Officer who works alongside you in your
14 work?

15 SAM BERRADA: Yes.

16 KATE MCGRANN: Explain to me how that
17 works.

18 SAM BERRADA: So it's, in essence, to
19 observe what the RMCO does to be positioned to
20 understand what the approach being used is as well
21 as what the findings are on a real-time basis.

22 So that, again, there is no surprises,
23 and it provides the ability for all the parties,
24 including the contractor and OC Transpo, to
25 understand what's being found and to be able to

1 adjust to those issues to -- to mitigate risk.

2 KATE MCGRANN: So I'm focusing on the
3 transparency piece of what you just said. And you
4 have talked about the importance of all parties
5 becoming aware of issues as they're found so things
6 can be addressed quickly. How do you communicate
7 your findings to OC Transpo, RTM, and Alstom?

8 SAM BERRADA: So there would be regular
9 conference calls from the inception of the
10 monitoring activity until the conclusion, and when
11 I say regular, it's not every week. It's probably
12 more like once a month.

13 There would also be an exchange of
14 documents and emails that would say, here's what
15 was monitored, and here's what was found so far,
16 and there would be a table of findings that would
17 be shared with all the parties involved, the
18 players involved in those monitoring activities
19 with the understanding that there would be remedial
20 actions that would be requested by OC Transpo from
21 the contractors when there are gaps identified.

22 KATE MCGRANN: And what is the role of
23 the safety officer who's working alongside you in
24 real time in those communications and ensuring
25 transparency more generally? Help me understand

1 what that does.

2 SAM BERRADA: Well, some of it is
3 coordination because, as you know, the -- and you
4 can see it from the 2019 report, that some of these
5 monitoring activities involve OC Transpo directly.
6 Others involve the contractor, but since it is good
7 practice and -- and appropriate to have the City,
8 who's the operator, aware of issues as early as
9 possible, so it is to ensure that they're appraised
10 of how the monitoring is progressing, to be able to
11 intervene when it's necessary with the contractors
12 to expedite delivery of certain information, to
13 coordinate meetings, you know, to have -- when we
14 have the closeout meeting following a monitoring
15 segment completion, it is, again, OC Transpo that
16 requests the remedial actions formally from -- from
17 RTM and from Alstom. But it's not the RMCO's --
18 it's not the mandate of the RMCO to request the
19 remedial action to perform the monitoring and to
20 flag the findings.

21 So OC Transpo needs to be there every
22 step of the way to be appraised of how the
23 monitoring is progressing, to take action to make
24 sure that the monitoring progresses in the way that
25 it is planned and envisioned, and then to be there

1 early to take the necessary action to request
2 remedial actions, you know, and to ensure that the
3 issues identified are formally addressed by RTM and
4 Alstom.

5 PETER WARDLE: Just before we go on,
6 just going back to the observational role that you
7 asked the witness about, I just wanted to mention
8 that there is a formal document now that describes
9 the observational role. It's found at Appendix C
10 to a document which is called the City Manager
11 Designation dated February 17, 2021. I expect we
12 produced it, but if we haven't, we'll advise you.

13 KATE MCGRANN: Thank you.

14 PETER WARDLE: So I think the
15 observational role, as I understand it from
16 discussions with Mr. Berrada, that's something that
17 was added to the mandate after it commenced, but
18 it's now formally documented in this City Manager
19 Designation.

20 KATE MCGRANN: Thank you very much,
21 Mr. Wardle.

22 I am looking at the time and the number
23 of questions I have for you, and I am afraid that I
24 will not be able to get through them all in the
25 time we have allotted, but I will try to make the

1 best use possible of the 12 minutes we have left
2 here.

3 With respect to the remedial action
4 that follows your findings, I understand that it's
5 not the RMCO's mandate to follow along with those
6 remedial actions and ensure that they've taken
7 place; is that fair?

8 SAM BERRADA: Not really. It is
9 OC Transpo's responsibility to request those
10 remedial actions, but the RMCO is there since those
11 remedial actions need to address the findings of
12 the RMCO monitoring, and, therefore, the RMCO is
13 there to ensure that the finding is very clear to
14 all the parties and that, you know, the remedial
15 actions being developed by RTM and Alstom do
16 address those issues.

17 So -- so this is the follow-up that the
18 RMCO performs goes beyond just the handing out of
19 the findings. It's -- there's a continuity. There
20 are regular calls with all those parties to make
21 sure that there is a follow-up on those remedial
22 actions.

23 KATE MCGRANN: And is part of your role
24 to monitor the remedial action that's requested by
25 OC Transpo, and if you see a mismatch between

1 what's been asked for in your finding, do you
2 identify that?

3 SAM BERRADA: Absolutely.

4 KATE MCGRANN: Okay. So you are, in
5 fact -- you do review the adequacy of OC Transpo's
6 follow-up on your findings?

7 SAM BERRADA: Yes.

8 KATE MCGRANN: Pardon me while I jump
9 around in this document for a second. I'm going to
10 take you down to page 20, heading 5.2, Track
11 Inspections/Maintenance and Repairs - Findings.
12 This is the first page of a multipage chart which
13 sets out categories of monitoring, the element
14 monitored, the company engaged, your findings, and
15 then comments. Have I described this accurately?

16 SAM BERRADA: Yes.

17 KATE MCGRANN: Okay. And then also in
18 this document, there's an annex, Annex 5, that
19 starts on page 42. We may have to zoom in a little
20 bit here. This is titled -- there's another chart
21 titled Remedial Actions.

22 SAM BERRADA: M-hm.

23 KATE MCGRANN: For starters, can you
24 read what's in the chart?

25 SAM BERRADA: Yes. Yes.

1 KATE MCGRANN: Are all of the findings
2 that are captured in the tables that we just -- we
3 looked at one table. There's two. Are all the
4 findings captured in that table reflected in the
5 remedial actions chart found at Annex 5?

6 SAM BERRADA: Yes.

7 KATE MCGRANN: A couple questions about
8 the headings in this chart just so I can understand
9 how to read it: Third column across, QMSLI I.D.,
10 what does that mean?

11 SAM BERRADA: Yeah. Yeah, that is the
12 tracking number used by RTM and Alstom, and, you
13 know, it -- it's something that I realized
14 afterwards wouldn't mean very much, you know, to an
15 external reader.

16 So if you look at the 2021 report, it's
17 more succinct, and those columns are not there, but
18 it's -- it's information that was gathered along
19 the way to help track those items, so as part of
20 those regular meetings and calls that I described
21 earlier.

22 KATE MCGRANN: Do you know how that
23 tracking number is used by RTM and Alstom?

24 SAM BERRADA: No, I do not.

25 KATE MCGRANN: Okay. The next column

1 over is Person in Charge, and then for all the ones
2 that we can see on the page, it's MSC. What does
3 that stand for?

4 SAM BERRADA: So that would be RTM and
5 Alstom responsible for that. And -- and honestly,
6 the expectation -- the process was streamlined to
7 ensure that -- to reflect the fact that, since RTM
8 is the -- the main contractor, that we would expect
9 everything through them.

10 So, you know, if you look at the
11 subsequent remedial actions table that was provided
12 in the 2021 report, there is a -- you know, a
13 number which has been allocated relative to the
14 finding number, you know, with all the findings
15 that -- that have been found since revenue service
16 inception, the description of the finding, the
17 monitoring period, the relevant regulatory
18 documents, the updates that were provided, and the
19 status whether it's open or closed.

20 So, you know, when we put that
21 information in there, it was simply transposing the
22 information that was provided to me by RTM and
23 Alstom for those particular deliverables, but I
24 realize, looking at it now, that it doesn't mean
25 much to the reader, so I think the short answer is

1 you'll find that first item, 2019B -- in the next
2 annual report, you'll find its status but without
3 that QMSLI I.D., or PIC, which says MSC, because in
4 essence, we look to RTM for all the remedial
5 actions that relate to the contract, whether it's
6 them directly or whether it is their subcontractors
7 that are responsible for that.

8 KATE MCGRANN: Okay. Do you know if
9 MSC stands for maintenance service contractor or
10 main service contractor? If you don't know, it's
11 fine, but if you do know, it would be helpful.

12 SAM BERRADA: I believe that's that.
13 I'm not a hundred percent sure, but I believe it's
14 that.

15 KATE MCGRANN: Which one?

16 SAM BERRADA: Maintenance service
17 contractor.

18 KATE MCGRANN: The target close date,
19 how would that be determined for any particular
20 entity in the chart?

21 SAM BERRADA: Right. So I think there
22 was -- there's a fair amount of work that's being
23 done in terms of refining the expectations for
24 those remedial actions because, in all fairness,
25 you know, the City has been pushing hard to get

1 those -- closure to those remedial actions as
2 quickly as possible. And they formalized their
3 expectations in the summer of 2021 by stating that
4 the written remedial action for everything, all the
5 findings, would be expected within 30 days.

6 However, their implementation would be
7 expected to be complete either in 30 days, 90 days,
8 or 180 days depending on the complexity of the
9 issue and the scope of the work that's associated
10 with closing that issue.

11 So example, in the latest monitoring
12 that was done relative to emergency response plan,
13 you know, RTM provided a very detailed plan as to
14 what they would be doing and by when they would be
15 doing it, but it's something that spans several
16 months because they've got to do some significant
17 development work and then implementation.

18 So -- so they're -- I guess, the short
19 answer is there's a fair amount of work that's
20 being done to clarify expectations, and that is, as
21 I just described right now, communicated from
22 OC Transpo to the contractors.

23 KATE MCGRANN: With respect to the last
24 column in this chart, Complete, and the options are
25 yes or no, who determines whether any particular --

1 the remedial action in respect of any particular
2 finding has been complete?

3 SAM BERRADA: So this is, as I said,
4 the remedial actions are subject to tracking to
5 regular meetings, now, typically, quarterly or --
6 or less, shorter timeframe. There's updates that
7 are provided by RTM on a monthly basis, but they
8 are reviewed and discussed between the RMCO and
9 OC Transpo, and OC Transpo makes the ultimate
10 determination as to whether they're satisfied with
11 the response or not.

12 But I certainly provide my input as to
13 whether the remedial action plan that's being
14 submitted would be expected to address the issue
15 that's found. So -- so it's a discussion between
16 OC Transpo and the RMCO as well as discussions to
17 track the progress and -- and communicate the
18 status to the contractors at those quarterly
19 meetings that I talked about that would show up in
20 these tables here.

21 KATE MCGRANN: Who at OC Transpo makes
22 the decision about whether remedial action is
23 complete or not?

24 SAM BERRADA: Typically, a decision, a
25 discussion, consultation between the Chief Safety

1 Officer, the head of operations, so Troy. There'd
2 be other people within the organizations in those
3 meetings and calls, and I would be involved in --
4 in some of those.

5 So they have -- OC Transpo follows up
6 independently of the RMCO, but the RMCO does have
7 some regular check points to make sure that the
8 finding is well understood and that the remedial
9 action being proposed, that there's a discussion on
10 it to discuss its adequacy.

11 KATE MCGRANN: Can you recall any time
12 in which that you have disagreed with OC Transpo's
13 assessment of whether a remedial action was
14 complete?

15 SAM BERRADA: No. No. But -- but
16 there -- there have been instances where remedial
17 actions submitted seemed to not fully address the
18 issue or seem to have changed in a way which would
19 not address the issue fully. And those are
20 discussed, and there's always a resolution, a
21 mutual understanding as to what needs to be done to
22 mitigate that finding.

23 KATE MCGRANN: In the event that
24 remedial action is required of OC Transpo, who
25 makes the determination as to whether that remedial

1 action is complete in that circumstance?

2 SAM BERRADA: Myself.

3 KATE MCGRANN: And is that
4 decision-making process laid out anywhere in any
5 document?

6 SAM BERRADA: There isn't a formal
7 process, but -- but it is a request. You'll notice
8 in the 2021 report that there are specific findings
9 for OC Transpo that, as I said, one of the key
10 principles is to expediently share that finding to
11 allow them to address those findings.

12 So one of the opportunities identified
13 in the most recent monitoring segments was -- was
14 an opportunity for OC Transpo to strengthen their
15 oversight plan, so I had meetings with them on
16 that, discussions. They formulated an approach
17 which I found to be satisfactory, and then it
18 closed those items.

19 KATE MCGRANN: I have run us right up
20 to 5 p.m., and I will stop my questions. If you
21 can bear with us for another minute or two --

22 SAM BERRADA: Sure.

23 KATE MCGRANN: -- I just want to follow
24 up with my counsel and then let your counsel ask
25 any follow-up questions they have.

1 So, Mr. Imbesi, do you have any
2 follow-up questions?

3 ANTHONY IMBESI: No, I don't.

4 KATE MCGRANN: Mr. Wardle, were there
5 any questions that you wanted to ask?

6 PETER WARDLE: I guess, are we coming
7 back at this point?

8 KATE MCGRANN: Yes, I think we're going
9 to have to.

10 PETER WARDLE: Okay. So what I think
11 I'll do, then, is save my questions until the end.
12 Let me just see if I had anything. I think the
13 only question I had -- maybe I should ask it now.

14 You were referring to the 2019 report,
15 Ms. McGrann, and you took Mr. Berrada to a chart at
16 page -- I think it was page 39. Can you put that
17 back up for a second?

18 KATE MCGRANN: Just bear with me for
19 one second. Okay. I am showing you COM1832.
20 That's the annual compliance report dated February
21 4th, 2020. Is that the document you were looking
22 for, Mr. Wardle?

23 PETER WARDLE: Let me just see if it's
24 the 20 --

25 ANTHONY IMBESI: That's the correct

1 one. It's the 2019.

2 PETER WARDLE: Yeah. Yeah. So it's
3 page 39. It was a risk-assessment chart. And I
4 just want to, I think, deal with this today so that
5 we don't have to deal with it down the road if we
6 come back.

7 So, Mr. Berrada, you recall my friend
8 asked you a number of questions about this chart?

9 SAM BERRADA: Yes.

10 PETER WARDLE: And with respect to the
11 box headed Frequent and Active Monitoring and the
12 comment at the bottom about detailed risk
13 assessment, based on your experience with other
14 commuter rail lines, is it your experience that
15 other commuter rail lines have a compliance
16 approach which includes the kind of detailed risk
17 assessment shown here?

18 SAM BERRADA: Yeah. I mean, the first
19 point I would say is that, you know, the approach
20 that was requested by the City is very substantive.
21 It's very detailed. You can see the amount of
22 structure, the amount of thought process, the
23 amount of research that was done to achieve that
24 structure and that -- that detailed monitoring
25 approach to -- to seek the objective evidence to

1 make those fact and evidence-based decisions.

2 So short answer is with the experience
3 that I've had, which is limited, really, to my
4 career at CN, they're really subject to CN's, you
5 know, monitoring teams or -- or typically,
6 operating practices, people performing efficiency
7 tests and some internal audits being done, but not
8 to this level of rigor, not to this level of
9 breadth, if you look at those six risk elements
10 from human factors to track to equipment to
11 infrastructure to emergency response plan to safety
12 management system.

13 So -- so I would say that, you know,
14 the -- the approach being used here is quite
15 substantive, and to my best knowledge, I have not
16 seen this approach being used to this level by
17 other commuter lines.

18 PETER WARDLE: All right. Thank you.
19 I think that's all I have for now. Thanks very
20 much, Ms. McGrann.

21 KATE MCGRANN: Okay. And thanks for
22 sticking with us for an extra five minutes past our
23 scheduled time. That brings our interview to an
24 end for today at least.

25 -- Whereupon the Examination concluded

1 at 5:05 p.m.

2 MR. WARDLE: And are you able to tell
3 us, Ms. McGrann, how much additional time you think
4 you'll need with this witness?

5 KATE MCGRANN: We can go off the record
6 for this.

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1 REPORTER'S CERTIFICATE

2
3 I, JANET BELMA, B.Ed., CSR(A),
4 Certified Shorthand Reporter, certify;

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

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

13 That the foregoing is a true and
14 correct transcript of my shorthand notes so taken.

15
16 Dated this 26th day of April, 2022.

17
18 *Janet Belma.*
19

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23
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