Ottawa Light Rail Commission

Mirsad Hairlahovic on Thursday, May 5, 2022



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

neesonsreporting.com | 416.413.7755

1	
2	
3	
4	
5	
6	OTTAWA LIGHT RAIL COMMISSION
7	OLRTC - MIRSAD HAIRLAHOVIC
8	MAY 5, 2022
9	
10	
11	
12	Held via Zoom Videoconferencing, with all
13	participants attending remotely, on the 5th day of
14	May, 2022, 9:00 a.m. to 12:29 p.m.
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

1	COMMISSION COUNSEL:
2	
3	Christine Mainville, Co-Lead Counsel Member
4	Anthony Imbesi, Litigation Counsel Member
5	
6	
7	PARTICIPANTS:
8	
9	Mirsad Hairlahovic, OLRT Constructors
10	Kartiga Thavaraj, Paliare Roland Rosenberg
11	Rothstein LLP
12	
13	
14	ALSO PRESENT:
15	
16	Joanne Lawrence, Stenographer/Transcriptionist
17	Elizabeth Deasy, Virtual Technician
18	
19	
20	
21	
22	
23	
24	
25	

2.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

| 1 | -- Upon commencing at 9:00 a.m.

CHRISTINE MAINVILLE: Okay. The purpose of today's interview is to obtain your evidence under oath or affirmation for use at the Commission's public hearings. This will be a collaborative interview such that my cocounsel, Mr. Imbesi, may intervene to ask certain questions. If time permits, your counsel may also ask follow-up questions at the end of the interview.

The interview is being transcribed, and the Commission intends to enter the transcript into evidence at the Commission's public hearings, either at the hearings or by procedural order before the hearings commence. The transcript will be posted to the Commission's public website, along with any corrections made to it, after it's entered into evidence. The transcript, along with any corrections, will be shared with the Commission's participants and their counsel on a confidential basis before being entered into evidence. You will be given the opportunity to review your transcript and correct any typos or other errors before the transcript is shared with the participants or entered into evidence. Any non-typographical corrections made will be appended to the

of Ottawa's LRT.

1 transcript. 2 And finally, pursuant to Section 33(6) 3 of the Public Inquiries Act, 2009: 4 "A witness at an inquiry shall 5 be deemed to have objected to answer any question asked of him upon the 7 ground that his answer may tend to incriminate the witness or may tend 9 to establish his liability to civil 10 proceedings at the instance of the 11 Crown or of any person, and no 12 answer given by a witness at an 13 inquiry shall be used or be 14 receivable in evidence against him 15 in any trial or other proceedings 16 against him thereafter taking place, 17 other than a prosecution for perjury 18 in giving such evidence." 19 And as required by Section 33(7) of the Act, you 20 are advised that you have the right to object to 21 answer any question under Section 5 of the Canada 22 Evidence Act. 23 Okay. So we'll start with an 24 explanation of your involvement and role in Stage 1

1 MIRSAD HAIRLAHOVIC: Okay. I joined 2 Dragados company in summer of 2015 as Vice 3 President Operations. Shortly after that, I was 4 involved with Ottawa LRT Stage 1 as an alternate on 5 the executive committee, and alternate to Manuel 6 Rivaya, who was the Executive Vice President. 7 served as an alternate executive representative for 8 the project - and other projects, but Ottawa LRT 9 was one of them - through to Mr. Rivaya resigning 10 from Dragados. I am trying to recall exact timing 11 of that. I do think it was the tail end of 2018, 12 year 2018, after which, in early 2019, I was 13 appointed as the primary executive representative 14 for Dragados for the Ottawa LRT Stage 1 and 2. 15 CHRISTINE MAINVILLE: Okay. 16 MIRSAD HAIRLAHOVIC: I continue to 17 serve in this role in my current role as the Chief 18 Operating Officer for Dragados Canada. 19 CHRISTINE MAINVILLE: Okay. Including 20 currently? 21 MIRSAD HAIRLAHOVIC: Yes. 22 CHRISTINE MAINVILLE: Are you still in 23 that role? So you're -- okay. 24 MIRSAD HAIRLAHOVIC: I'm still the 25 executive rep for the project, for the company.

CHRISTINE MAINVILLE: Okay. And maybe you can just explain what the executive committee is and how it works.

MIRSAD HAIRLAHOVIC: These large joint ventures are governed through the general partnership agreement. The role of the executive committee is to provide the overall governance for the project, with a very specific outline on the roles and responsibilities within the project. So it outlines the responsibilities for the project director, who reports directly to the -- so the project director reports directly to the executive committee, and then it's further governed through levels of authority, as far as decisionmaking process goes.

So in general terms, the executive committee would meet once a month. Executive committee would get an executive report on the project, which would include the status update - performance on the safety, quality, environment, everything - and would have a meeting, and any -- that meeting was minuted, and any decisions were obviously captured in the minutes. So no -- really no involvement in the day-to-day stuff. High level P&L really was the ultimate responsibility for the

1 Exco. 2. CHRISTINE MAINVILLE: For the? 3 MIRSAD HAIRLAHOVIC: P&L, the ultimate 4 profit and loss. That's really what -- what the --5 what my role is in the company. 6 CHRISTINE MAINVILLE: Got it. And as 7 an alternate earlier on in the project, would you 8 attend at every monthly meeting or only when 9 Mr. Rivaya was not available? 10 MIRSAD HAIRLAHOVIC: I would attend 11 regardless if he was available or not. 12 CHRISTINE MAINVILLE: Okav. 13 MIRSAD HAIRLAHOVIC: There could have 14 been an instance where I didn't attend but not 15 because I wasn't supposed to be there, just for 16 other reasons. 17 CHRISTINE MAINVILLE: And could you 18 give us a bit of a sense of your experience and 19 background prior to arriving at Dragados. 2.0 MIRSAD HAIRLAHOVIC: I was born very 21 young, and I went to university - I did a civil 22 engineering degree at the University of New 23 Brunswick - after which I started with Peter Kiewit 24 & Sons, a construction company, and I spent my --25 all my professional life before coming onboard with

1 Dragados in 2015 with Kiewit. I had helped -- I 2 was involved with various projects - large, 3 medium-sized projects - in various roles from when 4 I started as a field engineer, as a controls 5 engineer, then a project engineer, project manager, 6 project director, construction director, and so on. 7 I can elaborate further if you --8 CHRISTINE MAINVILLE: Well, did you 9 have any prior experience in rail projects? 10 MIRSAD HAIRLAHOVIC: I did not have 11 light rail experience. I guess the most relevant 12 to it would be the -- well, I guess I had very 13 short involvement before coming onboard, I quess, 14 in rail, which was the -- with the storage and 15 maintenance facility for Metrolinx, which was a 16 partnership between Kiewit and Bird. Just through 17 early design stages, I was the civil rep and Kiewit 18 representative on that project. 19 CHRISTINE MAINVILLE: Okav. 20 MIRSAD HAIRLAHOVIC: Before that was 21 the rapid bus transit system for York Region, Viva, 22 so it's not a light rail, but it's a similar 23 dedicated... 24 Okay. And did CHRISTINE MAINVILLE: 25 you work on many prior P3 projects?

1 MIRSAD HAIRLAHOVIC: No, this was the 2 first real involvement with a P3 project. 3 CHRISTINE MAINVILLE: Okay. Are you 4 able to give us a sense of --5 MIRSAD HAIRLAHOVIC: Sorry, but the 6 relevant part is the design-build component, which 7 is the construction contract. That's, in general 8 terms, what I did with Kiewit. CHRISTINE MAINVILLE: With? 10 MIRSAD HAIRLAHOVIC: Kiewit. All my 11 career was mainly in the design-build contracts or 12 quaranteed maximum price. We would have 13 responsibility for the design and construction. 14 CHRISTINE MAINVILLE: Okay. Got it. 15 Are you able to speak to the extent to which OLRTC 16 was overseeing the manufacturing of the rolling 17 stock on this project? 18 So from MIRSAD HAIRLAHOVIC: Yeah. 19 my -- like I mentioned earlier, from the monthly 20 reporting, we would get a dashboard report on the 21 performance of the rolling stock schedule, 22 et cetera, on a regular basis. The team 23 organization as well - overall organizational chart 24 is approved by the executive committee, and any 25 adjustments to that are approved by the executive

1 committee. The first two layers of the 2 organizations are hired by -- the reason I'm saying 3 this, where relevance comes in, is that we've had 4 direct reporting from people that were overseeing 5 the rolling stock construction. So from 20 --6 since -- from my involvement through, certainly 7 ahead of -- and high level insight on -- on that, 8 and we had our people overseeing and managing that. 9 So we had different -- I don't remember really 10 exactly, but there was different experts that were 11 onboard that had experience one way or another 12 with -- directly, indirectly, with the train 13 manufacturing, the train commissioning, et cetera, 14 so -- on our team. 15 CHRISTINE MAINVILLE: Do you recall who 16 in particular was overseeing the rolling stock? 17 MIRSAD HAIRLAHOVIC: Well, Jacques 18 Bergeron would be the one person that certainly 19 had -- was the front guy. We've had -- names 20 escape me now, from even the people that were --21 you know, procurement managers who had experience 22 with this. Matt Slade, who came onboard later, he 23 was -- certainly had experience with the rolling 24 stock, and then there was an organization under 25 So I'm referring to the people who would that.

1 come and report to us on the progress. 2. CHRISTINE MAINVILLE: Okay. Are you --3 I know you only started being involved in the 4 project in mid 2015, but are you able to speak to 5 what planning had been made for systems integration 6 on the project? 7 MIRSAD HAIRLAHOVIC: Sorry, can you 8 clarify what you mean by "planning"? 9 CHRISTINE MAINVILLE: Yes. Well, what 10 were the -- when the project set out, what were the 11 plans for -- if any, for how the systems 12 integration would -- like, who would be in charge of systems integration and what planning there was, 13 14 what level of planning there was for that? 15 I'll ask you both as it relates to the rolling 16 stock but also more generally, for all systems on 17 the project. 18 MIRSAD HAIRLAHOVIC: Not -- don't have 19 the firsthand knowledge, but the systems 20 integration plan really starts at the pursuit time, 21 which governs the award of the contracts. In this 22 case, from a critical systems integration point of 23 view, we brought in -- okay. So planning for the 24 systems integration -- I'm trying to answer the 25 So we had Alstom that was responsible question.

1 for supply, installation, testing, and 2 commissioning of the train control. We had an 3 engineering joint venture that was responsible for 4 design, integration, testing, commissioning of the 5 entire system. Some of those interface -- and then 6 there's other smaller systems as part of it, and 7 that entire interface was then managed by -- for a 8 period by our engineering joint venture or by the 9 construction joint venture, but ultimately the 10 ownership of -- we should be more clear that the 11 ownership of ultimate system adherence to the 12 specifications was on the construction joint 13 venture, and that's where we had the experts to 14 govern that. And then later we brought in -- even 15 when we -- you know, to close any gaps, we brought 16 in the safety assurance experts who provided the 17 safety case at the end of the project. I forget 18 the -- the name escapes me, but it's a technical 19 firm, consulting firm. 20 CHRISTINE MAINVILLE: Is it SEMP? 21 MIRSAD HAIRLAHOVIC: Yes. You have 22 fresher knowledge of this than I do. 23 CHRISTINE MAINVILLE: So you mentioned that the engineering joint venture was in charge of 24 25 integration and testing and commissioning of the

1 entire system. 2. MIRSAD HAIRLAHOVIC: Well, I should say 3 the remaining components of the system, not 4 counting the trains and the train control. 5 CHRISTINE MAINVILLE: Okav. So 6 excluding the trains. Okav. 7 MIRSAD HAIRLAHOVIC: Yes. But the rest 8 of the system had to -- it was their responsibility 9 to make sure the rest of the system adheres to the 10 specifications, works with the -- with the rolling 11 stock, including the train control, and then vice 12 versa, the rolling stock had responsibility to meet 13 the specifications. 14 CHRISTINE MAINVILLE: So OLRTC was 15 ultimately responsible for the integration of the 16 rolling stock and train control system? 17 MIRSAD HAIRLAHOVIC: I quess you 18 could -- in my simple way, ultimately we were the 19 ones that -- at the end of the day, if the trains 20 don't have the headway -- we have different 21 contracts with different experts, but ultimately is 22 that we hold the ultimate responsibility, and 23 that's how we approached it, to make sure that --24 so even when we thought that somebody else was 25 responsible for it, we would have had duplication

1 of effort - the safety case, for example. 2. CHRISTINE MAINVILLE: So who -- was 3 there someone that you thought was -- like, an 4 expert or someone that -- to which it was 5 outsourced that you thought was more directly 6 responsible for it, and OLRTC just had the 7 overarching responsibility? 8 MIRSAD HAIRLAHOVIC: We never 9 outsourced and said you -- here you go, you are 10 ultimately responsible to make sure the system works. We closed the gaps between the interface 11 12 between the systems and the overall system to make 13 sure that the system ultimately performs, right? 14 CHRISTINE MAINVILLE: M-hm. 15 MIRSAD HAIRLAHOVIC: As far as the --16 which is the big component to -- proving that 17 everything works is the safety case, the safety 18 assurance system, so that's ultimately what that 19 meant for us. 20 CHRISTINE MAINVILLE: So do I 21 understand, though, that the -- part of the --22 well, the integration that was left to Alstom and 23 Thales, in terms of rolling stock and the CBTC 24 system, was that mostly left to Alstom and Thales 25 to do, and it's just that OLRTC was ultimately

```
1
    responsible for that but the subcontractors were,
 2
    in practice, mostly responsible for doing that
 3
    work?
 4
                MIRSAD HAIRLAHOVIC: I think what I
5
    tried to articulate - and maybe I didn't come off
 6
    clearly - is that we had very clear contractual
7
    responsibilities passed down to Alstom and Thales
8
    for their scopes of work and what their
9
    responsibilities are, but we did not leave any
10
    component on that project solely to somebody to say
11
    let's see what the end product looks like. So for
12
    both Thales and for Alstom, we had direct
13
    coordination for their scope of work, the interface
14
    between the two, monitoring and gauging their
15
    performance, addressing the issues, in order to
16
    facilitate the overall system testing and
17
    commissioning.
18
                CHRISTINE MAINVILLE:
                                      Okay. And --
19
                MIRSAD HAIRLAHOVIC:
                                      But it --
2.0
                CHRISTINE MAINVILLE: Yeah, sorry.
21
                MIRSAD HAIRLAHOVIC:
                                      Sorry. I --
22
    that's where we kind of tried to take it.
23
    certainly not -- in no way, shape, or form did we
24
    say, Let me know in 3 years how the trains are
25
    running, Alstom.
```

1 CHRISTINE MAINVILLE: Okav. And the 2 people at OLRTC overseeing that, as you say, were, 3 for instance, Mr. Bergeron and then Matt Slade. 4 MIRSAD HAIRLAHOVIC: That's right. 5 And -- so we tried to have the experts that would 6 understand what -- like anything else that we do, 7 we always try to find the person who is an expert 8 in their field to be part of it. Certainly when it 9 comes to overall -- there's certain things when it 10 comes to rolling stock that you can gauge and 11 manage and monitor and evaluate performance, but 12 some things you certainly are not well equipped to 13 understand. You know, you can put things together, 14 but it doesn't mean that it's actually ready to 15 run. 16 I wouldn't call it a black box, but 17 there are certain things, like, it's hard to gauge the assembled train and how the quality of the 18 19 components within that are actually going to 20 perform, right? That part is -- you have your 21 quality system in place to make sure that, you 22 know, checks and balances for proper installation 23 are there, right, and Alstom -- you know, that's part of their submittal of documents, but the 24 25 ultimate -- it is ultimately not as defined and

1 clear as if you were pouring a cube of concrete, 2 which you can appreciate, probably. 3 CHRISTINE MAINVILLE: Okay. And was 4 SEMP brought in by the City? 5 MIRSAD HAIRLAHOVIC: SEMP was brought 6 in by the construction joint venture, by us. 7 CHRISTINE MAINVILLE: Okav. 8 I'm going -- I'm MIRSAD HAIRLAHOVIC: 9 saying SEMP because you used that name, and that is 10 the name, I do believe, that SEMP is -- they were a 11 British consultant that was brought in. 12 CHRISTINE MAINVILLE: That's right. 13 MIRSAD HAIRLAHOVIC: Yeah. 14 CHRISTINE MAINVILLE: Okay. 15 MIRSAD HAIRLAHOVIC: No, they were 16 brought by us to close the gap that we felt was 17 between -- we felt that EJV was supposed to do this 18 thing. We didn't think they were doing it or doing 19 it properly, so we brought them onboard as 20 assurance to make sure we get there. 21 CHRISTINE MAINVILLE: And what was that 22 gap that you thought EJV was supposed to do? 23 MIRSAD HAIRLAHOVIC: Well, to actually 24 provide the overall safety case to -- the whole 25 safety assurance, to close the gaps between the

1 barrier systems -- like, what you articulated, that we have a plan for system. So we had a plan, and 3 we had a default plan, and then we supplemented 4 that plan with SEMP too. 5 CHRISTINE MAINVILLE: And is that 6 because EJV, the joint venture, didn't have 7 oversight of the entire integration as -- including 8 the rolling stock and the train control? So there 9 was no overarching plan for all the systems? 10 that what would have led potentially to that gap? 11 MIRSAD HAIRLAHOVIC: So the actual 12 outcome of that is a part of the confidential 13 arbitration between us and the EJV, but --14 Well, I'll ask CHRISTINE MAINVILLE: 15 you to -- you don't have to tell me about what the 16 outcome of the arbitration was, but just what is 17 your perspective on it and observations and view of 18 it and --19 MIRSAD HAIRLAHOVIC: Oh, well, if 20 that's what you're asking. Well, so certainly the 21 outcome is privileged, and I can't answer the 22 questions about it if -- whatever it means as far 23 as if ultimately this is privileged information, 24 but it wasn't -- it was about a -- there was a 25 different position as far as who was ultimately

1 responsible, what we thought the EJV was versus 2 what they thought. We had a dispute with them on 3 We ultimately brought in SEMP because we 4 didn't want to -- we had our job to do, like I said, so that's why we always ultimately felt that 5 6 the overall system performance at the end, we have 7 the ultimate responsibility, so in this case we 8 brought in SEMP to do the work that we thought 9 somebody else was supposed to do. SEMP did some 10 other things for us, not just that, but ultimately 11 we had a dispute with EJV because they thought that 12 it was not their overall responsibility. 13 thought it was, and we were right. 14 CHRISTINE MAINVILLE: Is it -- would 15 you say that in a project like this, it's 16 preferable for all of the engineering to not be 17 split up, so to fall all under one entity? So for 18 instance, the EJV here, it would make sense if they 19 were responsible for all parts of the system, from 20 an engineering perspective? 21 MIRSAD HAIRLAHOVIC: At the end of the 22 day it's -- if -- how do I say this? If there was 23 one answer to that, then I certainly wouldn't have 24 a job. So each project kind of has its own -- what 25 ultimately gets you the best project. Like, is our

```
1
    engineering joint venture, which was SNC and WSP --
 2
    well, started with Triple M and ultimately WSP --
 3
    are they the best ones to commission and manage the
 4
    interface between the train and train control?
5
    Probably not. But the simple answer, if you ever
6
    could find the right engineering joint venture to
7
    take this on, you would always want to have one
8
    person that is responsible for that.
                CHRISTINE MAINVILLE:
                                       Got it.
10
                MIRSAD HAIRLAHOVIC:
                                      The problem is
11
    that that rarely happens because they would have to
12
    have a joint venture constituted of a number of
13
    parties, so...
14
                CHRISTINE MAINVILLE:
                                       Right. Okay.
15
                MIRSAD HAIRLAHOVIC: So in this --
16
    sorry, on this particular project, it's -- you
17
    know, with the stock, with the rolling stock
18
    delivery part of the contract, it's -- that almost
19
    never happens.
20
                CHRISTINE MAINVILLE:
                                       Okay. And was
21
    there -- I understand there may have been a change
22
    order for the engineering joint venture to write
23
    the test plans for the systems integration tests
24
    and the systems acceptance tests, the SATs and
25
    SITs?
```

```
1
                MIRSAD HAIRLAHOVIC: I certainly don't
 2
    recall the change orders that were written.
 3
                                       Did they write
                CHRISTINE MAINVILLE:
4
    those test plans, though? Do you know?
5
                MIRSAD HAIRLAHOVIC:
                                      I certainly don't,
6
    no.
7
                CHRISTINE MAINVILLE: Okay. Now, you
8
    weren't there in the earlier days, but would you --
9
    do you think OLRTC had a good understanding in
10
    hindsight of the level of integration that was
11
    required for the rolling stock and the signalling
12
    system, the level of complexity of the integration?
13
                MIRSAD HAIRLAHOVIC: During my time, I
14
    certainly believe that we did, and I think
15
    ultimately we integrated the system, so we
16
    certainly did it. What was the situation at the
17
    start of the project, at the mid time and all that
18
    other stuff like that, I -- I can't attest to that.
19
                CHRISTINE MAINVILLE: Okay. And what
20
    understanding do you have of challenges that were
21
    encountered on the systems integration front?
22
    On -- in respect of the rolling stock and the
23
    signalling system.
24
                                      I quess from my
                MIRSAD HAIRLAHOVIC:
25
    level, certainly that -- that -- certainly that --
```

details of that answer, there are people that are probably better suited to answer that that were on the project and part of the daily coordination and daily stuff on this, but there certainly were challenges. We certainly were getting regular reports. At some point, we were involved more critically with Alstom on a regular basis to get an update from them, but it was a high-level update on, you know, critical components or critical vehicles or getting to the number of trains we needed for testing and so on.

But to any statements to make about what challenges we had in general terms, you know, there's so many -- everybody needs so many hours to run the trains and the system in order to prove that it works, so to test, to DPICO the vehicles, and Thales, Alstom, everybody -- there were always challenges in having the trains continuously run, for whatever reasons, and getting the full system, but that is part of the testing and commissioning. So it's not that -- your expectation wasn't Day 1 you expect everything to be running smoothly, right? But you go along and you keep improving, and ultimately -- hence the -- the testing and commissioning took much longer than what we planned

```
1
    originally in the contract.
 2.
                CHRISTINE MAINVILLE:
                                       Okay. And by
 3
    that you mean the overall testing and commissioning
 4
    phase --
5
                MIRSAD HAIRLAHOVIC:
                                      That's right.
 6
                CHRISTINE MAINVILLE: Okav.
                                             So I iust
7
    want to know if you have any knowledge of SNC as
8
    one of the consortium partners having some
9
    difficulty finding someone to fill the role of
10
    systems integrator or someone to assist with
11
    systems integration.
12
                MIRSAD HAIRLAHOVIC:
                                      Sorry, I don't
13
    understand the question. SNC from the point of
14
    view of consortium partner?
15
                CHRISTINE MAINVILLE:
                                       Yes.
                                             Well, so --
16
    and either -- because I understand they're
17
    different, but either as a part of the engineering
18
    joint venture or SNC as part of the OLRTC joint
19
    venture, but either one not being able to find --
20
    or having trouble filling the role of systems
21
    integrator or a person to fill those shoes.
22
                MIRSAD HAIRLAHOVIC:
                                      Within the
23
    construction joint venture and all the other
24
    parties of SNC, whether it's engineers or
25
    construction, but -- in this case, we have a
```

24

25

1 contract, design contract for the engineering joint 2 venture. When the issues arise, there are ethical 3 walls within that organization to make sure that 4 there is no conflict in how the general partnership 5 governed how that's resolved. 6 But from -- to answer your question, 7 on -- from the construction joint venture's --8 really nothing outside of the -- and, you know, it 9 wouldn't be just SNC's responsibility to have the 10 integration people on the -- within the 11 construction joint venture. It's everybody's 12 responsibility. The parties come to the table with 13 different skill sets when we create these joint 14 ventures so that we can complement each other and 15 have a strong joint venture, but ultimately the 16 responsibility goes down to the construction joint 17 venture, and any -- any resources at that time 18 would have been -- they were no -- no different 19 than any human resources that we all have 20 challenges with in acquiring quality people in --21 in the short term, so there was nothing out of the 22 ordinary, as far as any -- like, any other role,

CHRISTINE MAINVILLE: Okay. Are you able to speak to any issues with interfacing with

critical role we were having to fill.

```
Alstom, OLRTC's interface with Alstom?
1
 2.
                MIRSAD HAIRLAHOVIC:
                                      It's a -- it's a
 3
    very broad question, so I'm just trying to
 4
    understand really what -- how to --
5
                CHRISTINE MAINVILLE:
                                       Yes.
 6
                MIRSAD HAIRLAHOVIC: Yes, there were
7
    issues when interfacing with Alstom.
8
                CHRISTINE MAINVILLE:
                                       M-hm.
                                               Well,
9
    we -- what would you say were the main challenges?
10
                MIRSAD HAIRLAHOVIC:
                                      The main challenge
11
    for us with Alstom was having them deliver the
12
    stock, rolling stock, on the contractual schedule.
13
                CHRISTINE MAINVILLE:
                                       M-hm
14
                MIRSAD HAIRLAHOVIC: In our view, they
15
    failed to do that.
16
                CHRISTINE MAINVILLE: And what was your
17
    understanding of the main reasons for the delay to
18
    the rolling stock?
19
                MIRSAD HAIRLAHOVIC: Ultimately, the
20
    actual assembly of the vehicles -- and I'm --
21
    obviously, you have to understand this, that I'm
22
    not there day to day. We get a high level report.
23
    I'm going from my recollection from 2 years, and
24
    I'm not that smart.
25
                So all those things considered,
```

ultimately, their train assembly leading up to the 1 2 majority of the project wasn't as critically late 3 as it was at the end. I mean, they were late, but 4 it wasn't as critically late. We were able to 5 manage that. As we moved through the rest of the 6 rolling stock, then the -- even the assembly was 7 late and so on. But like I said earlier is that 8 that component of -- once the train is assembled, 9 Alstom does their component of testing to the train 10 before the actual train control is installed. 11 the train control gets installed, then there's 12 further testing, et cetera, et cetera. 13 That part, the trains -- the trains 14 just did not -- you know, did not perform in 15 accordance with what the expectation were and the 16 requirements were, as far as the availability - you 17 know, retrofits that they had to do, repairs, you know, et cetera, right? So that's the component 18 19 that ultimately -- that ultimately drove the --20 critically the schedule and the delivery of the 21 trains. 22 CHRISTINE MAINVILLE: So you're -- you 23 mean prior to any integration testing, just the --24 Alstom's testing on the vehicles, on the trains 25 themselves, were problematic?

revenue service dates.

1 MIRSAD HAIRLAHOVIC: Sorry, no. No. 2 I -- what I was referring to is that -- sorry. 3 Maybe you're saying the same thing I am, so I'm 4 just going to repeat. Delivery -- like, the actual 5 assembly of the trains: So they get these parts, 6 they bring them into the Ottawa MSF, and that's 7 where they're assembled. So that part is easier to 8 quantify what is happening with the train because 9 you have the wheels on, you have the bogies on, you 10 have the crew on, you have to -- you start 11 assembling the trains. 12 CHRISTINE MAINVILLE: Right. 13 MIRSAD HAIRLAHOVIC: And that's where 14 the schedule performance is monitored. So leading 15 up to the 2017 or whatever - you know, I'm not sure 16 of the years exactly - their schedule wasn't 17 critically late. There was a re-baseline of the 18 schedule based on the early inputs for the design, 19 where they were allotted an additional couple of 20 months in their schedule for the final delivery, 21 but ultimately, that was -- they were -- you know, 22 delayed, not critically late, that it wasn't --23 that they were shown -- they were certainly given a 24 schedule that showed them finishing on the original

The critical issues showed

```
1
    and came to fruition is once we got into this
 2
    test -- you know, burning in the trains, running
 3
    the trains, et cetera, right? Once you had to
 4
    actually prove that train is running.
5
                CHRISTINE MAINVILLE: Got it. And then
6
    issues arising leading to retrofits and -- okay.
7
                MIRSAD HAIRLAHOVIC: And that -- so
8
    then you keep putting those trains back into
9
    retrofit to get those things changed, which now it
10
    starts delaying the other stock that's being
11
    assembled, so it's kind of a domino effect. That's
12
    what started happening. And that's where the
13
    really -- that's where the critical -- criticality
14
    of it became -- became a thing to -- you know,
15
    where we had a sit-down with Alstom to understand
16
    fully their schedule and how they're going to
17
    deliver and if they're going to deliver on time.
18
                CHRISTINE MAINVILLE:
                                       Got it. And did
19
    part of those issues -- once the trains started
20
    running, did part of those relate to the interface
21
    between Alstom -- Alstom's trains and the Thales
22
    signalling system? Were these bugs and that type
23
    of issue between the interface?
24
                                      Sorry, what do you
                MIRSAD HAIRLAHOVIC:
25
    mean by "issues"?
```

1 CHRISTINE MAINVILLE: Well, were they 2 integration issues, basically, in terms of once the 3 trains started running, the types of issues that 4 were arising were issues in terms of the 5 Alstom-Thales --6 MIRSAD HAIRLAHOVIC: Okay. 7 CHRISTINE MAINVILLE: -- interface? 8 MIRSAD HAIRLAHOVIC: Certainly there 9 were, but only -- in the context of when you go do 10 the trial testing, you always anticipate that it 11 won't be -- it won't be -- this whole thing won't 12 be done on the first version of the integration --13 or, sorry, of the train control software. 14 there's always iterations, to make sure that --15 that's why they have them. But you can appreciate 16 that every -- if you have a retrofit on a brake 17 pad, and you have a train control system, installed 18 it, and you tested the train with a certain brake 19 pad but now you put a new brake pad, you have to 20 retest a train control. 21 So to that extent, those are the 22 technical issues that come up. Was there ever an 23 issue that the -- this train control was wrong for 24 this train, or the train was wrong for this train 25 It's just that, you know, with the control? No.

```
1
    continuous -- either incompleteness of the train or
 2
    retrofitting or you had to do some rework as far as
 3
    testing -- because every time you change a critical
 4
    component on a train, you have to redo the testing
5
    to -- you know, so the train still needs to stop a
6
    certain amount of time, et cetera, right?
7
                CHRISTINE MAINVILLE: Okay. And did
8
    you have an understanding of delays to the
9
    validation testing for the first two LRVs?
10
                MIRSAD HAIRLAHOVIC: I certainly don't
11
    recall any details around that --
12
                CHRISTINE MAINVILLE:
                                       Okav.
13
                MIRSAD HAIRLAHOVIC: -- beyond just
14
    what I articulated in general terms.
15
                CHRISTINE MAINVILLE: And in terms of
16
    running the trains, I think you said around 2017,
17
    and these issues surfacing leading to additional
18
    work and retrofit, were -- did that running of the
19
    trains start later than had -- had been planned?
20
                                      I don't -- I don't
                MIRSAD HAIRLAHOVIC:
21
    recall.
             It wasn't -- if it was later on, the day,
22
    the train -- the testing didn't -- didn't start
23
    critically late, to say that -- you know, that the
24
    test -- test track was supposed to be available on
25
    this date, and it wasn't available for another year
```

1 or so, that wasn't the case. 2 CHRISTINE MAINVILLE: Do you recall 3 that the test track was late, delivered late, 4 though? 5 MIRSAD HAIRLAHOVIC: I don't recall, 6 but that's -- that was a critical component. It's 7 all connected with the availability of the trains 8 for testing, et cetera, so... 9 CHRISTINE MAINVILLE: Do you know what 10 the original plan was for the test track? Was it 11 always supposed to be the portion of the track that 12 was made available? 13 MIRSAD HAIRLAHOVIC: On the site? Yes, 14 I do believe it was the same. I mean --15 CHRISTINE MAINVILLE: Okay. The 16 Blair --17 MIRSAD HAIRLAHOVIC: Yes, correct. 18 CHRISTINE MAINVILLE: Okay. And do you 19 recall that the -- initially, it wasn't long enough 20 to run the trains at full speed? 21 MIRSAD HAIRLAHOVIC: I quess I'm qoing 22 to answer that by saying that the train -- the 23 track, test track availability, the length of the 24 track was not a reason for the -- if -- you know, 25 any causation of additional testing that was

1 required to get these trains to revenue service 2 ready, and I don't recall those details as far as 3 how many kilometres we're supposed to or metres and 4 how many we actually had. It was about -- at that 5 time, we were just in a space of this is what is 6 required to get this testing done. Everybody 7 agreed, all three parties, and we started testing. 8 CHRISTINE MAINVILLE: Okay. Do you 9 recall a move from -- testing of the first LRVs 10 from Hornell to Ottawa? 11 MIRSAD HAIRLAHOVIC: I'll tell you what 12 I -- what I do recall. It's a high-level answer 13 because it was before my time, but ultimately 14 that's the -- that's the -- the conclusion that --15 based on everything that -- that was -- as far as 16 that's concerned. The plan was for Alstom to have 17 two prototype trains built elsewhere, tested, and 18 brought, and then based on those two trains to 19 create the rest of the fleet. 20 Because of the delay on the design 21 book, which is the City inputs to the design book -22 outline of the cabin, stanchions, and some other 23 critical components - in Alstom's claim to us at 24 that time, they were delayed by that, but they 25 tried to mitigate that by not completing those two

1 trains where they were supposed to be completed but 2 bringing them to the MSF to complete it because of 3 the initial delay. What that did is that you no 4 longer had these two prototype trains that were 5 tested and then you build the rest of the fleet. 6 Now you end up with 34 prototypes. 7 CHRISTINE MAINVILLE: Right. 8 MIRSAD HAIRLAHOVIC: In the context. 9 But that whole thing was concluded with Alstom. 10 Part of our public knowledge is that that design 11 book delay is a claim that we have against the 12 But with Alstom -- Alstom has a component --City. 13 financial component of that, but the schedule 14 component was resolved with Alstom through -- I 15 believe it was the Version 5 schedule, where we 16 re-baselined their milestones but they still met 17 the RSA date, but we incorporated their mitigation because of that delay to the design book. 18 19 CHRISTINE MAINVILLE: Right. And how 20 were they able to still maintain the RSA date 21 but --22 MIRSAD HAIRLAHOVIC: Oh, the mitigated 23 I certainly don't recall the details of schedule. 24 that, but that is -- that exists out there. 25 CHRISTINE MAINVILLE: Okay.

```
1
                MIRSAD HAIRLAHOVIC: This was -- this
 2
    was -- this mitigated schedule, I'm -- you know, I
 3
    think you quoted me on 2017. I'm not sure of the
 4
    years because there's -- you know, years fly when
5
    you're having fun, so it's -- it's like, there's
6
    2015, 2016 -- I do believe that this re-baseline
7
    was done in early 2016, but it could have been
8
    2015.
                CHRISTINE MAINVILLE:
                                       Okay.
10
                MIRSAD HAIRLAHOVIC:
                                      And I'm talking
11
    about re-baseline for Alstom.
12
                CHRISTINE MAINVILLE: Talking about
13
    what?
14
                MIRSAD HAIRLAHOVIC: Re-baseline
15
    between us and the Alstom group.
16
                CHRISTINE MAINVILLE:
                                       Right.
                                               Did you
17
    understand that there was some discrepancy between
18
    the schedules of Alstom and Thales, that they
19
    didn't aliqn?
2.0
                MIRSAD HAIRLAHOVIC:
                                             Day 1?
                                      When?
21
                CHRISTINE MAINVILLE:
                                       Well, so --
22
                MIRSAD HAIRLAHOVIC:
                                      I guess maybe I
23
    should answer --
24
                CHRISTINE MAINVILLE: Well, I think
25
    there were two different issues, yes --
```

```
1
                MIRSAD HAIRLAHOVIC: Yes.
 2.
                CHRISTINE MAINVILLE: -- that at the
 3
    outset, the contracts didn't align for the delivery
    of certain items?
 4
 5
                MIRSAD HAIRLAHOVIC: I -- I certainly
6
    wouldn't -- I wouldn't know that.
7
                CHRISTINE MAINVILLE: Okay.
8
                MIRSAD HAIRLAHOVIC:
                                      Where I was
9
    directly involved is the line in those two
10
    schedules when we -- where we looked at Alstom's
11
    whole schedule, when we saw that the testing and
12
    commissioning was taking much longer, that Thales
13
    had a bunch of rework and that Thales was
14
    struggling getting it coordinated. So in that
15
    context, it was a -- obviously the project team was
16
    the ones that have all the nitty -- all the
17
    intricate details of that, but as far as having
18
    that general critical kickoff session, that was to
19
    align the schedules and get the realistic schedule
20
    out there from Alstom and then align Thales's
    schedule to that. That was a critical action by
21
22
    the CJV that happened... Shoot. My years
23
    sometimes escape me, but -- I don't know if it's
24
    January 2018 or if it's January of -- yeah, it was
25
    January of 2018, I think.
```

```
1
                In any case, so I know that there
 2
    was -- because once you're delayed, there certainly
 3
    was no alignment for the schedules. You had to
 4
    align the two schedules once the train delivery was
5
           So that's when we -- there is a misalignment
6
    at that stage. Whether there was a misalignment on
7
    Day 1, that certainly wasn't -- wasn't reported or
8
    wasn't evidenced clearly at that time, right?
9
    Tt's --
10
                CHRISTINE MAINVILLE: So you're
11
    saying -- yeah, sorry.
12
                MIRSAD HAIRLAHOVIC:
                                      No, I just --
13
    sometimes, you know, as you get into the details
14
    and fully understand what each party is doing -
15
    that happens a lot of times - then you need to
16
    adjust that, what you thought how things are going
17
    to unfold versus how they unfold. In retrospect,
18
    sometimes it's easy to interpret that it wasn't set
19
    out properly, so -- but...
20
                CHRISTINE MAINVILLE: So did you say
21
    some work was done, then, you think early 2018 to
22
    reintegrate those schedules? Is that what you were
23
    saying?
24
                MIRSAD HAIRLAHOVIC: Yeah.
                                             So it was
25
    about -- it was more to get everybody to start, you
```

1 know -- to start -- forget about -- everybody is 2 thinking about the big picture. We need to look at 3 the daily things, how this is going to work, and 4 start from there in order to put a -- you know, a 5 clear plan on how we're going to get to the revenue 6 service. 7 CHRISTINE MAINVILLE: Okay. And who 8 was overseeing that? 9 MIRSAD HAIRLAHOVIC: Really, the point 10 man on that was Rupert Holloway. He was the acting 11 project director at that time. 12 CHRISTINE MAINVILLE: Okav. Do you 13 recall some point in time where less than fulsome 14 schedules were being provided up to RTG or to the 15 independent certifier? 16 MIRSAD HAIRLAHOVIC: Provided by whom? 17 CHRISTINE MAINVILLE: And there were --18 from OLRTC, that OLRTC's overall schedule, 19 integrated schedule, didn't fully mitigate the 20 delays or that there were some issues with the 21 fulsomeness of the schedules. 22 MIRSAD HAIRLAHOVIC: Well, certainly at 23 some point. The moment we were -- the moment we were informed by -- by the -- where relevant, if 24 25 Alstom or somebody else, they weren't going to

```
1
    finish in time, providing us with a late schedule,
 2
    that was -- we have our obligations to mitigate.
 3
    So they -- so do they, through our contract, but
 4
    the moment that was the case, then I'm sure at some
5
    point we submitted a delayed schedule because we
 6
    thought we were going to be late. Or sorry, we
7
    were -- confirmed that we were going to be late.
8
                CHRISTINE MAINVILLE:
                                       And there may
9
    have been some lag time in devising the -- or in
10
    revising the schedule and providing for that
11
    mitigation?
12
                MIRSAD HAIRLAHOVIC:
                                      Lag time?
                                                 Sorry,
13
    I don't --
14
                CHRISTINE MAINVILLE: Well, so let
15
    me -- let me give you the specifics. Let me ask
16
              Would you have been aware of concerns
    you this:
17
    expressed by the independent certifier about the
18
    schedules being received and how -- from RTG and
19
    how they were not fully mitigated?
20
                MIRSAD HAIRLAHOVIC:
                                      Sorry, when we
21
    submitted the schedule that was finishing late, the
22
    concerns from the independent certifier saying your
23
    schedule is not fully mitigated; it's finishing
24
    late?
25
                                       Well, I think
                CHRISTINE MAINVILLE:
```

1 what it was was that the independent certifier 2 wasn't able to track how OLRTC would get to what it 3 said was the RSA date. 4 MIRSAD HAIRLAHOVIC: I certainly 5 don't -- I'm trying to think what is the proper way to -- it's not that there's no recollection. 7 mean, at the end of the day, we put our best -- the 8 project team spends a lot of time in developing the 9 proper schedules that are more realistic in 10 accordance with our obligations to the contract, 11 and that's what we submit. So I certainly don't --12 and we do not dismiss anybody's concerns and any 13 critical comments that are raised, but -- I don't 14 fully understand what the concerns were, but at any 15 time -- there are times where the clients or 16 independent certifiers do not accept late schedules 17 because they want fully mitigated schedules, but we 18 can't -- we cannot put -- sometimes we can't just 19 force the issue and make it look like something on 20 the paper. It's -- the reality is what it is. So 21 I don't know if that answers the question, but I 22 certainly don't ... 23 So would you say CHRISTINE MAINVILLE: 24 that OLRTC's schedules were realistic over time? 25 MIRSAD HAIRLAHOVIC: I would say that

schedule fit that time frame.

1 our -- OLRTC's schedules were certainly in 2 accordance with our contract requirements. 3 CHRISTINE MAINVILLE: Okay. What does 4 that mean in terms of reflecting the reality of the 5 scheduling on the ground? 6 MIRSAD HAIRLAHOVIC: So what do you 7 mean by "reality"? Sorry. 8 CHRISTINE MAINVILLE: Well --9 MIRSAD HAIRLAHOVIC: The reason I'm 10 saying that is that the reality of it is that, you 11 know, here is what my original plan was, and if I 12 continue down this plan, here's what it's going to 13 So that's the one reality. The other reality 14 is that here's where my plan was, here's what's 15 happened, but I'm doing all these things in order 16 to make the schedule still fit within the contract 17 requirements because you're making me -- I still 18 have obligations to meet the contract dates, so 19 that's another reality. So in that context, we 20 always supply the schedules in accordance with 21 that. 22 CHRISTINE MAINVILLE: I think I'm 23 understanding. You're being held to a certain date 24 contractually, and so you're effectively making the

1 MIRSAD HAIRLAHOVIC: No, we have an 2 obligation to meet the schedule milestones unless 3 we -- unless we're granted an extension of time. 4 CHRISTINE MAINVILLE: Right. 5 MIRSAD HAIRLAHOVIC: Until somebody 6 grants us an extension of time, we have an 7 obligation to meet that. At times, we don't get a 8 grant to have an extension of time, but we can't 9 meet them, and we don't meet them. We have an 10 obligation to -- even if it's not our fault, if 11 it's not our contractual responsibility, to do all 12 reasonable -- apply all reasonable mitigation 13 measures to maintain the schedule. And when the 14 issues are internal, then we -- we implement not 15 only mitigation but acceleration measures to do so. 16 When we're not granted an extension of 17 time and the other party is responsible, we 18 implement not only reasonable mitigation measures 19 but acceleration measures, and we have -- we then 20 have these claims against the clients. So in that 21 context is that -- that's -- that's -- those are 22 the steps the schedules are taken through. So when 23 we do provide the schedule with the date, it's 24 because we think that, through these measures, we 25 can still meet the date, not just -- I just want to

1 make sure it's clear that it's not just, okay, 2 there is no way we can meet it, but let's show this 3 date because we need to show this date. 4 CHRISTINE MAINVILLE: Okay. So you 5 would -- you would produce a schedule that you say 6 was accurate in terms of -- it didn't 7 misrepresent --8 MIRSAD HAIRLAHOVIC: No. 9 CHRISTINE MAINVILLE: -- what was going 10 to be taking place, but it just accelerated or --11 it accounted for acceleration to meet whatever date 12 OLRTC was being held to. 13 MIRSAD HAIRLAHOVIC: Yeah. 14 generally, that was -- in general terms. I'm not 15 saying that -- what the project team's reporting 16 requirements were for monthly schedules. Certainly 17 I'm not the one to be the expert what those are. 18 There's other people that certainly would know, but 19 these are followed. Any changes in schedule are --20 we generally elaborate why those are happening, 21 whether it's acceleration, delay, mitigation, 22 whatever it is. Those things are explained in 23 these submissions. 24 CHRISTINE MAINVILLE: So for instance, 25 there were schedules with caveats.

1 MIRSAD HAIRLAHOVIC: Yes. 2. CHRISTINE MAINVILLE: And can you 3 explain those and how those fit in. 4 MIRSAD HAIRLAHOVIC: I have really 5 no -- I will not attempt to explain any of the 6 caveats that are in there. I have no recollection 7 of that at this stage, so -- certainly. But the 8 people who put the caveats in, they can probably 9 explain that better than I can. 10 CHRISTINE MAINVILLE: But do you 11 understand that they relate to delay claims against 12 the City or delay events that -- so -- such that 13 the -- if the RSA date was still May 2018, the 14 schedule lined up with that, but then there was a 15 caveat, subject to a delay event claim or request 16 that OLRTC was making in respect of the City that 17 would have moved the RSA date back? 18 MIRSAD HAIRLAHOVIC: If -- sorry. Ιf 19 we're saying that the schedules were submitted, 20 here's the RSA date, we're going to meet the RSA 21 date, but only -- we are still meeting the RSA 22 date; however, this impact you created for me I 23 have managed to mitigate, and I accelerated, and 24 now I will ask for compensation for this. So it's 25 a reservation of right for the delays because of

```
1
    the City-caused interference, right?
 2.
                CHRISTINE MAINVILLE:
                                       M-hm.
 3
                MIRSAD HAIRLAHOVIC:
                                      I can't paraphrase
 4
    what those exact wordings were, but we had issues
5
    like that, and we certainly had those articulated
 6
    in the schedule, and that's our obligation on
7
    the -- you know, in order to protect our rights, if
8
    we're going to accelerate -- do anything beyond
9
    reasonable mitigation efforts that causes damage
10
    and costs, we need to articulate those, right?
11
                CHRISTINE MAINVILLE: So I guess I'm
12
    just trying to understand. What if, despite all
13
    mitigation and acceleration measures, OLRTC doesn't
14
    think it can meet the May 2018 RSA date, for
15
    instance? What would happen then? And assume the
16
    City has not granted any delay relief. How would
17
    that get reflected on the schedule?
18
                MIRSAD HAIRLAHOVIC: We would submit a
19
    delayed schedule, along with --
2.0
                CHRISTINE MAINVILLE: You would submit
21
    a delayed schedule.
22
                MIRSAD HAIRLAHOVIC:
                                      Yes.
23
                CHRISTINE MAINVILLE: Okay. So if the
24
    schedule said the May 2018 RSA date will be met,
25
    OLRTC realistically believed it could make that
```

1 work. 2 MIRSAD HAIRLAHOVIC: Subject to the 3 qualifications you articulated that were submitted 4 with that schedule. 5 CHRISTINE MAINVILLE: The caveats. 6 MIRSAD HAIRLAHOVIC: That's right. 7 But -- and the CHRISTINE MAINVILLE: 8 caveats would have the effect of moving that RSA 9 date; correct? 10 MIRSAD HAIRLAHOVIC: I cannot get into 11 this hypothetical discussion around factual things 12 that I am not aware of. Sorry. 13 CHRISTINE MAINVILLE: Okay. Why don't 14 we start with this: Why don't we start with the 15 sinkhole and so we're not talking in hypotheticals. 16 What was the impact of the sinkhole on the project? 17 And we'll talk about the schedule specifically, 18 but... 19 MIRSAD HAIRLAHOVIC: Impact on the day 20 the sinkhole happened, or impact at the -- right 21 now, looking back? 22 CHRISTINE MAINVILLE: Looking back, 23 now. 24 MIRSAD HAIRLAHOVIC: The sinkhole had a 25 delay on the project. It delayed civil

1 infrastructure construction because it happened in 2 the middle of the project, and it delayed 3 connectivity of the project, et cetera, et cetera. 4 So it ultimately delayed the project. 5 CHRISTINE MAINVILLE: And was it on the 6 critical path? Did it impact, I should say, the 7 critical path? 8 MIRSAD HAIRLAHOVIC: Did the sinkhole 9 impact the critical path today, or did the sinkhole 10 impact critical path on the day it happened? 11 CHRISTINE MAINVILLE: Tell me about 12 both. 13 MIRSAD HAIRLAHOVIC: Well, when the 14 sinkhole happened, the trains were on schedule, so 15 if you delay other works that are -- certainly the 16 tunnel works were on the critical path. You would 17 have had a delay to critical path; therefore, when 18 the sinkhole happened, the City did not grant us an 19 extension of time, and we, at that time, thought 20 that we can mitigate what's happened. Because you 21 obviously don't have a full perception until you 22 have a full perception what the damages were, what 23 the impact of that whole sinkhole restoration, 24 remediation, and additional work that had to be

done to -- to stabilize the area.

1 Whether there was ultimately a critical 2 path delay because of the -- because of the 3 sinkhole versus trains, I certainly am not smart 4 enough to answer that right now, but that has all 5 been analyzed and overanalyzed in our various 6 claims, right, so ultimately, you know, what 7 component of the critical path delay can be 8 attributed to which event. CHRISTINE MAINVILLE: Okay. 10 MIRSAD HAIRLAHOVIC: So -- sorry. So 11 that -- that helped in not having the hypothetical 12 discussion. 13 CHRISTINE MAINVILLE: Riaht. 14 take it it delayed some of the testing, the 15 integration testing in particular? 16 MIRSAD HAIRLAHOVIC: Well, construction 17 is followed by -- I'm not saying this because you don't understand. I'm just going to say it because 18 19 it's --20 CHRISTINE MAINVILLE: M-hm. 21 MIRSAD HAIRLAHOVIC: We construct 22 things -- sorry, we design them, we install them, 23 we test them, we commission them, we do the revenue 24 service running. So all testing for the trains and 25 train control was done and was able to be done

```
1
    regardless of the continuance through the path.
                                                       So
 2
    the only things that you couldn't test is
 3
    end-to-end running until you have that component.
 4
    So those two things, that's why -- you know, I'm
5
    talking about, you know, with the critical path
6
    delay analysis and what ultimately was the hot
7
    potato in the end or hotter potato, it's a bit
8
    complex because of that component, right?
9
                But ultimately, this specific system
10
    overall testing of -- you know, on the signalling,
11
    et cetera, right, and the station -- station
12
    commissioning and testing, et cetera, was -- was
13
    delayed because of the delay of the civil works,
14
    right, but it did not have -- it did not have as
15
    critical an impact, if any -- I'm not -- again,
16
    there is analysis on that, as far as -- because the
17
    train test track was available, because there was
18
    track available for the running of the trains,
19
    minus the -- the full system running end to end.
20
                CHRISTINE MAINVILLE:
                                       How important do
21
    you understand the full system end-to-end running
22
    to be on a project like this?
23
                                      I quess, you know,
                MIRSAD HAIRLAHOVIC:
24
    everything is important, right, but in order to be
25
    able to be critically meeting that full
```

```
1
    connectivity test, to make sure that the train goes
 2
    from one end to the other end with the entire
 3
    system running in a certain amount of time, that
 4
    comes after you have done all the other testing and
5
    works, right? So it's important, but it's when --
6
    the criticality of it kind of comes at the end.
7
                CHRISTINE MAINVILLE: You mentioned
8
    that the City rejected the relief event and delay
9
    event relating to the sinkhole that OLRTC brought
10
    forward?
11
                                      The City rejected
                MIRSAD HAIRLAHOVIC:
12
    any and all entitlement we ever had.
13
                                       Sorry, can you --
                CHRISTINE MAINVILLE:
14
                                      It's as simple as
                MIRSAD HAIRLAHOVIC:
15
    that.
           They --
16
                CHRISTINE MAINVILLE: So any other
17
    requests made --
18
                MIRSAD HAIRLAHOVIC:
                                      They had
19
    responded -- I mean, there's still a lawsuit out
20
    there now that is -- now is countersued, because we
21
    had to react with a -- well, no, we didn't. We had
22
    a -- we had -- we were filing a lawsuit, but they
23
    wanted to get ahead of us and file a lawsuit for
24
    whatever reason -- well, we know. But ultimately
25
    is -- you know, they had responsibility for -- to
```

1 provide us with the architectural wood, ash wood. 2 They gave us the wood that couldn't be installed, 3 and ultimately it took a lot more work, but they 4 never recognized -- they recognized responsibility, 5 tried to settle the components of it, but 6 ultimately they never formally did. Same thing 7 with the fare gates, et cetera, et cetera. 8 Everything -- everything that was -- you know, I 9 should -- you know, obviously I'm -- there are 10 minor smaller changes that happened that didn't 11 have any schedule components impacted, and they 12 were agreed at the project level, but anything with 13 any significance was not. 14 CHRISTINE MAINVILLE: Okay. 15 MIRSAD HAIRLAHOVIC: Including the 16 sinkhole issue. Certainly, the City did not take 17 responsibility for the sinkhole. But that -- that 18 was -- you know, that was -- when something like 19 that happened, the City, us and everybody, put 20 everybody on notice because we didn't really know 21 why it happened at that time, and as we were 22 investigating when everything happened, it was --23 even to this date, it's inconclusive what caused 24 the sinkhole. 25 CHRISTINE MAINVILLE: Yes. And are you

1 familiar with the -- a request to the City to alleviate or renegotiate the liquidated damages 3 that flowed from the sinkholes or the delay 4 relating to the sinkholes? I should ask you, like, 5 was there a request to the City, aside from the 6 delay event and relief event claim, but to discuss 7 the liquidated damages that would flow from the 8 delay? T . . . MTRSAD HATRLAHOVIC: Part of the 10 sinkhole claim for damages included -- included the 11 delay component in it, which included prolongation 12 and included some of the overall delay impacts 13 because of that. And that was part of the -- well, 14 it was -- there were -- at the time - I wasn't in 15 the room - there were without-prejudice 16 conversations that were happening with the 17 representatives from the company and the City 18 because we had these legacy issues that we were 19 trying to resolve - I mentioned the ash wood, fare 20 gates, et cetera - and the sinkhole. 21 So I certainly don't recall what were 22 the exchanges of these, you know, negotiations, 23 what were the requests, but certainly at some point 24 there could have been -- there could have been an

exchange of asking for relief of those -- I don't

1 recall. I really don't.

CHRISTINE MAINVILLE: Do you recall what were the liquidated damages for OLRTC over time as a result of the delay?

MIRSAD HAIRLAHOVIC: I don't recall the exact amounts or anything like that, but there's two components to it. Our liquidated damages that relates to the City are not large. There was no -- there was no -- with the City, there was -- there's a million-dollar penalty every time you -- every time you say that you're going to achieve revenue service and you don't. They have to ramp up again for that, and we had three -- three instances of that, I do think. Don't quote me on number of those, but there was -- some of those were applied by the City.

Where our liquidated -- where our damage because of the delay comes from is from the financing charges from the concessionaire. They were passed down to the construction contractor. So when we don't finish the contract on time, the debt cannot be repaid in time, and therefore you end up paying for the financing charges for that. Those amounts certainly can be confirmed, but I'm not going to attempt to recall what those are.

1 CHRISTINE MAINVILLE: But they were a 2 daily amount; correct? 3 MIRSAD HAIRLAHOVIC: Yes, they are --4 they're calculated on a daily -- banks like their money. And the -- I guess the penalty that the 5 6 City wrongfully applied to us and continued to do 7 so for the late finish is in the context of the 8 mobility matters, where they offset it from 30, 9 \$32 million for extended occupancy of lanes in the 10 Because there's a certain -- within the 11 contract, there's a certain amount, there is a 12 value, of you taking a lane for construction. 13 amount is contemplated for within the original 14 project timelines. There's no reference to if the 15 project is delayed that those still apply, but the 16 City has grandstanded on that, and they've actually 17 applied and they still have that, that's part of our lawsuit is for them to pay us that money. 18 19 So the City had 3 or 4 million. 20 didn't really have a lot of LDs for the penalties 21 for not having the service in place, but they 22 have -- they have, like I said, wrongfully held the mobility matters, and I do believe that they're 23 24 looking -- their lawsuit, which is not quantified 25 at all, it has some stuff around extended buses

```
1
    used and so on, so...
 2.
                CHRISTINE MAINVILLE:
                                       So the daily
 3
    financing charges that applied every day that the
    project was delayed, that, you're saying, is owed
 4
5
    to the lenders.
                MIRSAD HAIRLAHOVIC:
                                      That was paid by
7
    the -- by the Ottawa LRTC to the lenders.
8
                CHRISTINE MAINVILLE:
                                       Right.
                                               But am I
9
    right that the City could -- had a say in that or
10
    could do something about that if it wanted to?
11
                MIRSAD HAIRLAHOVIC:
                                      Certainly it's
12
    about paying off the debt.
13
                CHRISTINE MAINVILLE:
                                       Sorry?
14
                MIRSAD HAIRLAHOVIC:
                                      It's about paying
15
    off the debt, so the only way the City would do it
16
    is if they paid off the debt. So in the case that
17
    the City is responsible for delay or is proven to
18
    be responsible for delay, they would be responsible
19
    for those charges. What the City had 100 percent
20
    control of is not holding back the $32 million.
21
                CHRISTINE MAINVILLE:
                                       Which has to do
22
    with the mobility matters.
23
                MIRSAD HAIRLAHOVIC:
                                      Yes.
24
                                      Okay. And when
                CHRISTINE MAINVILLE:
25
    was that?
               What time frame?
```

1 MIRSAD HAIRLAHOVIC: They started 2 deducting those, I do think -- it could be 3 I'm not sure. It wasn't taken off the verified. 4 final payment. It could have been, but I think it 5 was deducted as we went beyond revenue service for 6 any payments that were sent by the City then. 7 they made a huge deal out of that internally - you 8 know, the City is a bit of a political animal -9 about how they're going to get every penny, and 10 they're going to have this \$32 million and they're 11 not going to pay that back. 12 CHRISTINE MAINVILLE: So, sorry, that 13 was after the May 2018 RSA date? 14 MIRSAD HAIRLAHOVIC: Yeah, yeah, yeah, 15 I -- I don't know if there's, like, an certainly. 16 overlap with -- before that, but it's -- this whole 17 32 million is just after the RSA date. 18 CHRISTINE MAINVILLE: Okay. 19 MIRSAD HAIRLAHOVIC: And that was part 20 of our -- that is part of our -- the full details 21 of that are part of our -- all the, I quess, 22 general details of that are part of our lawsuit, 23 our countersuit to the City that we filed recently. 24 CHRISTINE MAINVILLE: Okay. Are you 25 able to speak to the City underwriting RTG's debt?

1	MIRSAD HAIRLAHOVIC: No.
2	CHRISTINE MAINVILLE: You were not
3	involved or
4	MIRSAD HAIRLAHOVIC: No, I was not
5	involved with that.
6	CHRISTINE MAINVILLE: Okay. So you're
7	not able to say whether that had an impact on the
8	project or the relationship?
9	MIRSAD HAIRLAHOVIC: No.
10	ANTHONY IMBESI: Were you aware of it?
11	MIRSAD HAIRLAHOVIC: I am aware of it,
12	yes, but I'm certainly not able to give my opinion
13	on that or anything like that, so
14	CHRISTINE MAINVILLE: Okay. So you
15	don't know if that would play into this
16	liquidated daily liquidated damages that OLRTC
17	was
18	MIRSAD HAIRLAHOVIC: No
19	CHRISTINE MAINVILLE: suffering.
20	MIRSAD HAIRLAHOVIC: I would not.
21	CHRISTINE MAINVILLE: Are you able to
22	speak to the financial impact, then, of the delays
23	on OLRTC overall?
24	MIRSAD HAIRLAHOVIC: Well, in general
25	terms, that in general terms, delays, additional

1 efforts, mitigations, accelerations, dealing with 2 all those issues had a significant impact, 3 financial impact, on the construction joint 4 The companies injected hundreds of 5 millions of dollars to finish the project. 6 CHRISTINE MAINVILLE: And did it have 7 any impact on OLRTC's resources -- or resourcing, I 8 should say? 9 That's where MTRSAD HATRLAHOVIC: No. 10 we spent a bunch of extra money. 11 CHRISTINE MAINVILLE: You spent what? 12 A bunch of extra MIRSAD HAIRLAHOVIC: 13 money --14 CHRISTINE MAINVILLE: A bunch of extra 15 money. 16 MIRSAD HAIRLAHOVIC: -- to make sure we 17 get it done. 18 CHRISTINE MAINVILLE: And would you 19 have expected -- in the context of this 20 partnership, would you have expected anything more 21 from the City as a result of this, the impact that 22 this was having on OLRTC? Is there anything you 23 would have expected the City to do or not do, given 24 the situation that the project found itself in? 25 MIRSAD HAIRLAHOVIC: The City was

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

governed by popular opinion, not by what is practical, and the popular opinion was take us to the ringer, at least internally. So the fact that they deducted \$32 million after knowing, frankly, how much money the companies injected into it to get the project finished is a sign of them not wanting to contribute at all, not even to the things that they were responsible for.

Even if they wanted to reserve their rights on the mobility matters, there was a very easy way for them to -- because there was -- there was old money, there was the contract money paid out, and then as part of the -- because they knew that they were going to have to pay something because they offered settlement on the ash wood and the fare gates, so there was money that they had to contribute, so the money was never going to be -that they were going to have to chase us for the money down the road if they wanted to contribute and -- as far as, you know, having more harmonious relationship or having contributing to ease the burden and the pressure on the companies, no, the City did not want to do that.

CHRISTINE MAINVILLE: And would you have expected them to? Like, in another project,

1 let's say, what would you expect from the City 2 partner or the project owner? 3 MIRSAD HAIRLAHOVIC: Well, it's a --4 it's a public-private partnership, so we certainly 5 expect a much higher level of partnership and 6 ability than we got with the City. 7 CHRISTINE MAINVILLE: And you spoke 8 about some statements the City made about 9 effectively not wanting to compromise or pay? Can 10 you elaborate on that? What do you have knowledge 11 of in terms of such statements? 12 MIRSAD HAIRLAHOVIC: Hmm. It was part 13 of the privileged negotiations we had at this 14 level -- executive level with the City as part of 15 resolving the issues, right? 16 CHRISTINE MAINVILLE: Privileged or 17 without prejudice? 18 MIRSAD HAIRLAHOVIC: Sorry, without 19 prejudice. 2.0 CHRISTINE MAINVILLE: Okay. 21 MIRSAD HAIRLAHOVIC: So I can say? 22 CHRISTINE MAINVILLE: I'm not your 23 legal counsel, but I think... 24 Like, I think we've KARTIGA THAVARAJ: 25 spoken in general terms. I think we don't want

```
1
    to -- if we can speak in general terms, Mirsad,
 2
    it's fine. I don't want you to get into anything
 3
    that's actually --
 4
                MIRSAD HAIRLAHOVIC:
                                      Yeah.
5
                KARTIGA THAVARAJ: -- the details.
 6
                MIRSAD HAIRLAHOVIC: So I'm not going
7
    to be quoting anybody, but certainly the City has
8
    made it clear to us that the $32 million is
9
    something that they had on their books as far as
10
    the revenue and that they're not going to reverse
11
    that out, no matter how much -- because we tried to
12
    get them to -- Hey, there's no reason for you to be
13
    holding this; we can post security against it; we
14
    can do all these things, right? They just would
15
          So we literally wanted to post security
    not.
16
    against this for them to be able to draw on it, but
17
    that was never going to fly, so... It's not any --
18
    it's not that we were looking for them to inject
19
    some new money. This was the money that was due to
20
    us, right? So it's not that we don't -- a
21
    public-private partnership does not speculate
22
    that -- you know, if I have responsibility on the
23
    contract and this is my risk and risk is
24
    generalized, that's why we contributed the money we
25
          We had obligations as the contract was
    had.
```

```
1
    signed. And even if it's somebody's problem, we
 2
    had an obligation to mitigate and so on, and we did
 3
    that, in order to get the job done. We didn't put
 4
    the tools down until we resolved commercial issues.
    We brought money in to finish the job. That's not
5
 6
         Just -- in a public-private partnership is
7
    that there's a more collaborative effort to
8
    actually align and have a common goal and common
9
    success and a common definition of success, which
10
    was not the case.
11
                CHRISTINE MAINVILLE: Are you able to
12
    ballpark how much extra money the partners had to
13
    inject into the project?
14
                MIRSAD HAIRLAHOVIC:
                                      That's near and
15
    dear to me, so -- but we -- you know, we brought
16
    in -- I'm talking about the general discussion
17
    versus what it ended up costing us, we brought in
18
    4, $500 million, so...
19
                CHRISTINE MAINVILLE: 45, you said?
20
                MIRSAD HAIRLAHOVIC: 4, $500 million.
21
                CHRISTINE MAINVILLE: 4 to $500 million.
22
                MIRSAD HAIRLAHOVIC:
                                      So that's -- I'm
23
    sure you can get the financial statements and --
24
                CHRISTINE MAINVILLE:
                                       So it
25
    effectively --
```

```
1
                MIRSAD HAIRLAHOVIC: I don't think that
 2
    that's privileged information, is it?
 3
                KARTIGA THAVARAJ: We -- that's fine.
 4
    We have a separate confidentiality claim, but we
5
    can talk about -- with respect to the financial
 6
    statements, but we can talk about it in this
7
    interview.
8
                MIRSAD HAIRLAHOVIC:
                                      So whether that
9
    can be disclosed, I guess that's part of the other
10
    one, but I mean, that's -- those are the facts.
11
                CHRISTINE MAINVILLE: So in terms of --
12
    that's ballpark how much over budget the
13
    construction was. Is that --
14
                MIRSAD HAIRLAHOVIC: No, that's how
15
    much over the actual contract amount. So over
16
    budget, then you take out the profit and overhead
17
    and all those parts, so the number is bigger,
    right? So this is generally, you know, money we
18
19
    spent versus the money we recovered.
20
                CHRISTINE MAINVILLE: Okay. So I know
21
    the litigation is not over, but in terms of how
22
    profitable a project this was or not ultimately,
23
    how would you characterize that?
24
                MIRSAD HAIRLAHOVIC: This project is --
25
    from the financial point of view, was not a
```

1 success. 2. CHRISTINE MAINVILLE: And do you see 3 this as having had any impact on the project? 4 know you've said that the partners compensated by 5 injecting money. Do you see any other kind of impact, including long term, given the 30-year 6 7 maintenance contract? 8 MIRSAD HAIRLAHOVIC: I'm only 9 speaking -- this -- the losses for the project, you 10 have to be -- understanding is that I'm only 11 referring from the construction joint venture. We 12 have different P&Ls, we have different -- we --13 what position maintenance -- what their losses, 14 profitability looks like, that has nothing --15 that's not included in this, and I do not have an 16 insight on that. I'm strictly talking about --17 about this. Does it have -- does that have an impact on ultimately how the project was delivered? 18 19 We're big companies; we go through this -- you 20 know, we certainly have obligations, and our risk 21 in the contract for not completing the job or not 22 completing the job on time is always bigger than --23 than putting the money in, so that's why the 24 contracts were written like they're written. So 25 certainly did not have any impacts outside of

1 the -- outside of the -- behind the scenes, what it 2 means to financially -- to have -- you know, to 3 have the financial or -- this type of financial 4 performance on the project is not a -- is not a 5 badge to carry. 6 CHRISTINE MAINVILLE: So you don't 7 think it had an impact -- if I can paraphrase, an 8 impact on the construction, but did it have an 9 impact -- well, let me first get your confirmation 10 on this: Are you saying there wasn't -- at least 11 nothing out of the ordinary in terms of 12 cost-cutting measures, value engineering and the 13 like -- is that what you're saying? -- as a result 14 of the financial strain? 15 MIRSAD HAIRLAHOVIC: No, it's quite the 16 opposite. At the final push for the revenue 17 service, all the companies, anything and all 18 resources that were required were allocated to the 19 project. So certainly not -- there was no 20 cost-cutting. We always look for cost optimization 21 as we go through the project. That's a business --22 that's our business, but certainly no -- there was 23 no cost-cutting -- sorry, there was no cost-cutting 24 not to meet the requirements of the -- of the 25 That's why we spent the additional money. project.

25

1 CHRISTINE MAINVILLE: There was a cash 2 injection to bring it to completion. 3 MIRSAD HAIRLAHOVIC: Yes, there were 4 continuous cash injections for the -- for a couple 5 of years leading to revenue service. 6 CHRISTINE MAINVILLE: Would you say, 7 though, that it -- there was an increased 8 significant pressure to get to revenue service or 9 substantial completion? 10 MIRSAD HAIRLAHOVIC: For us, for the 11 construction joint venture? So everybody was 12 motivated to get the construction -- to get to 13 revenue service for different reasons. 14 continuing to -- to -- continuing down the path, 15 the more you're out there, the more money you're 16 spending, but there's also a fine line where you --17 and there's very clear requirements you have to 18 meet in order to -- to say I have met my 19 requirements for substantial completion and then 20 for the final -- for the revenue service. Other 21 parties were motivated by something different. RTG 22 wanted to get the system in place so they can run 23 the system, and the City -- well, City made -- the

City was under political pressure to put the system

in place, and that's what they're governed by, so

```
1
    they were very motivated at that time.
 2.
                CHRISTINE MAINVILLE: Did you witness
 3
    the -- like, how did you witness the City's
 4
    motivation? Are you able to point to anything to
5
    say --
 6
                MIRSAD HAIRLAHOVIC: Yeah, this would
7
    be for me, you know -- well, I mean, the clear
8
    evidence is the term sheet at the end, because the
9
    City was talking about that they will not allow
10
    anything but the full contract requirements being
11
    executed and all 15 trains out there, that -- but
12
    the term sheet is -- is -- revenue service term
13
    sheet is with 13 trains, is with the reduced
14
    obligation for RTG in order for it -- what their
15
    performance looks like as far as evaluating -- and
16
    I quess 13 trains, not 15 trains, with the
17
    commitment to get the -- the rest of the trains in
18
              There were deductions to Ottawa LRTC,
    service.
19
    financial deductions, because obviously we didn't
20
    have the 15 trains out - we had 13 trains.
21
    that's all part of the term sheet, but the term
22
    sheet itself is -- is an evidence of -- of somebody
23
    wanting to have a system in place.
24
                CHRISTINE MAINVILLE:
                                       Do you --
25
                MIRSAD HAIRLAHOVIC:
                                      But informally,
```

```
1
    behind the scenes, there certainly were.
                                               There
 2
    were.
 3
                CHRISTINE MAINVILLE: Was the term
 4
    sheet -- are you aware of whether the term sheet
5
    was initiated by the City?
 6
                MIRSAD HAIRLAHOVIC: I think the term
7
    sheet was the result of a continuous -- continuous
8
    dialogue and negotiations that were happening
9
    leading up to the revenue service between the --
10
    between the -- well, really, at all levels, but the
11
    term sheet is ultimately -- agreement on a term
12
    sheet is ultimately the result of negotiations and
13
    discussions -- no, I shouldn't say negotiations.
14
    Discussions and governance that happened at the
15
    highest levels in the City and within the
16
    organizations.
17
                CHRISTINE MAINVILLE: Do you know when
18
    the decision was made to reduce the trains from 15
19
    to 13 for peak service?
2.0
                MIRSAD HAIRLAHOVIC: I really don't.
21
    don't recall when that was -- I mean, you know,
22
    term sheet has a date on it. That's when it was
23
    finally agreed to, right? Like, the conversations
24
    that led up to it were the conversations around
25
    gradual rollout, about other things, other things
```

```
1
    leading up to it, to arrive to that.
 2.
                CHRISTINE MAINVILLE:
                                       Do you recall
 3
    what the rationale was or the reason why only 13
 4
    trains would be made available as opposed to 15?
 5
                MIRSAD HAIRLAHOVIC:
                                      My recollection of
6
    it -- and a person like Matt Slade or Rupert would
7
    certainly give you a more accurate answer on this,
8
    but from my recollection, from the executive
9
    reporting point of view, is that when we were
10
    testing and doing the -- there's a revenue service
11
    running period: So you run the trains, and then
12
    you see the availability you have, how many trains
13
    are running and how often they're running, how long
14
    they're running for, et cetera.
                                      It seemed that
15
    that resulted in -- I think that that's what
16
    resulted in the 13 trains being something that can
17
    be sustained, based on the fleet that was there.
18
    Yeah.
19
                CHRISTINE MAINVILLE:
                                     Okav.
                                             Would you
20
    have been aware of the City's go/no-go list?
21
                MIRSAD HAIRLAHOVIC:
                                      I've heard of it.
22
    I don't have any recollection of what that is now.
23
                CHRISTINE MAINVILLE: Okay. And just
24
    qoing back --
25
                MIRSAD HAIRLAHOVIC:
                                      You have to
```

1 appreciate that, you know, it was really about --2 at that stage, it was about day to day: You know, 3 what are we doing today? Did we do what we said we 4 were going to do today? Are we going to do 5 tomorrow what we plan to do tomorrow? I mean, 6 that's the level of criticality at some point that 7 it became, at all levels. 8 CHRISTINE MAINVILLE: And did you -- I 9 take it you became more -- increasingly involved as 10 the -- the -- the ultimate RSA date was 11 approaching? 12 MIRSAD HAIRLAHOVIC: I quess you could 13 say that there was more involvement, but any 14 time -- listen, if it's a critical issue, if you 15 have the revenue service but it's running months 16 late, if you're not involved and putting pressure 17 for all parties to perform, that means that we're 18 not doing our job. So certainly it's -- you know, 19 that's a fair statement. The level of detail that 20 I was involved probably doesn't change. It's just 21 a matter of getting the right people to the table 22 to continue to talk and be involved with it from 23 all parties. 24 CHRISTINE MAINVILLE: And were you 25 often interacting with the City directly?

1 MIRSAD HAIRLAHOVIC: No, not for the 2 revenue service. 3 CHRISTINE MAINVILLE: And just going 4 back to the financial strain or pressure, and we 5 talked about it not really having an impact in 6 terms of cost-saving measures and whatnot, but what 7 about the relationship between the City and the 8 project company or OLRTC? 9 If your question MIRSAD HAIRLAHOVIC: 10 is the fact that we brought in \$400 million, we 11 blamed the City for that. The City had the 12 responsibilities, and that's part of our lawsuit. 13 We had our own responsibility as part of it that we 14 injected money for, so -- especially certainly 15 leading up to the revenue service, the project team 16 was not -- was disconnected from that. There was 17 not a burden put on them as far as managing that. 18 That's why -- I don't think that that's -- the fact 19 that we could not resolve our contractual disputes 20 with the City had this impact on the relationship, 21 but that had nothing to do with, you know, the 22 revenue service being 16 months late. 23 CHRISTINE MAINVILLE: Okay. So are you 24 saying it didn't have -- it wouldn't have had an 25 impact on the people on the ground and the project

1 directors and teams, but at a higher level, you 2 would say, given the --3 MIRSAD HAIRLAHOVIC: The fact that --4 yeah, the fact that we could not resolve any 5 commercial issues that are now in the court with 6 the City for the 5, 6 years, whatever the project 7 was, is not -- is not ideal. I mean, you 8 paraphrased it as it impacted the relationship. 9 quess I would -- maybe threw that in as far as did 10 anything impact the relationship, but I was more 11 trying to convey not that it impacted the 12 relationship - I was trying to -- more to -- to say 13 how does this connect it from actually getting to 14 revenue service, right? 15 So the fact that we're injecting the 16 money, that had nothing to do with the project team 17 not working with the City. They continued to work 18 with the City because they were a critical 19 component of it and dragging them along with this 20 The fact that we couldn't resolve these process. 21 commercial issues has its own flavour of it, but, 22 you know, this is not a tremendous -- not -- did 23 not cause a tremendous deterioration of the 24 relationship. 25 CHRISTINE MAINVILLE: Okay.

1 MIRSAD HAIRLAHOVIC: So... 2 CHRISTINE MAINVILLE: We might take a 3 We could go off record. break. 4 -- RECESS AT 10:35 --5 -- UPON RESUMING AT 10:50 --6 CHRISTINE MAINVILLE: Was there a --7 would you say there was some reluctance to keep the 8 City fully apprised of the delays on the project? 9 MIRSAD HAIRLAHOVIC: Sorry? 10 CHRISTINE MAINVILLE: Was there 11 reluctance in keeping the City fully apprised of 12 the delays on the project? You may phrase it 13 differently than "reluctance," but in terms of how 14 transparent OLRTC or RTG would want to be with the 15 City about the delays on the project, how would you 16 characterize that? 17 MIRSAD HAIRLAHOVIC: Well, take the 18 sinkhole example: When the sinkhole occurred, in 19 the following weeks, months, whatever it is, we put 20 our -- we understood what that meant for the 21 project as far as at that time. We implemented 22 different mitigation, acceleration measures to maintain the schedule, and the City was interested 23 24 in keeping the -- for us to come up with ways to 25 keep the same schedule, same milestones at that

1 The -- once we implemented all those and the time. 2 time unfolded and months passed or whatever it is 3 that passed and we no longer could see that we 4 could reasonably meet that end date, we informed 5 the City that we could not meet that end date. 6 CHRISTINE MAINVILLE: When was that, do 7 you recall, roughly? 8 MIRSAD HAIRLAHOVIC: I don't know 9 exactly the time when it was, but certainly when it 10 became evident that we can no longer maintain the 11 schedule. 12 CHRISTINE MAINVILLE: Okav. So you 13 would say when it did become evident that it was 14 not possible, that was conveyed to the City in a 15 timely way? 16 MIRSAD HAIRLAHOVIC: Including the 17 challenges to maintain the schedule leading up to 18 that. 19 CHRISTINE MAINVILLE: Right. So there 20 was some realization that it would be challenging 21 Is that fair to say? to do it beforehand? 22 MIRSAD HAIRLAHOVIC: Yeah, certainly I 23 don't think that anybody could -- unless you're --I think anybody could not clearly see that having 24 25 that massive hole in the middle of the project

```
1
    would have challenges to the project -- add
 2
    challenges.
 3
                CHRISTINE MAINVILLE:
                                       Right.
 4
                MIRSAD HAIRLAHOVIC:
                                      So -- so I think
5
    that that's certainly the -- the context, that
 6
    everybody was aware of the challenges. We were
7
    aware of the challenges, we have challenges of the
8
    projects -- different projects, different
9
    challenges that we work through, and at times we're
10
    successful, and at times we're not. It depends on
11
    the size of the challenge and ability to rectify
12
    it.
13
                CHRISTINE MAINVILLE:
                                       So -- but it's
14
    not the case that you would say that the RSA date
15
    was artificially maintained for some time when
16
    OLRTC knew it was not achievable?
17
                MIRSAD HAIRLAHOVIC: Changing the RSA
18
    date is a significant event. It affects everybody,
19
    lenders and everybody there, so you certainly have
20
    to be sure that that is the case before you request
21
    one.
22
                CHRISTINE MAINVILLE:
                                       Okay.
23
                MIRSAD HAIRLAHOVIC: So at the first
24
    whiff of it, you -- you certainly do have a lot of
25
    obligations by -- by the client and the lenders
```

1 to -- to do your best before you -- you have to be 2 very certain that you are not going to meet it 3 before you communicate it. 4 CHRISTINE MAINVILLE: Got it. So what 5 would have preceded that were -- you would 6 characterize them as very aggressive schedules to 7 try to see if it could be met. 8 MIRSAD HAIRLAHOVIC: The schedule 9 post-sinkhole -- the plan post-sinkhole versus the 10 plan pre-sinkhole was more challenging. I would 11 not -- I certainly would not attempt to 12 characterize -- it's a pretty subjective term, 13 "aggressive," what we -- what you think aggressive 14 is, what I think aggressive is, but certainly there 15 was more challenges: less float, more give, all 16 kinds of things to the schedule post-sinkhole 17 versus pre-sinkhole. 18 CHRISTINE MAINVILLE: Okav. 19 there -- the schedule required manufacturing and 20 testing to happen concurrently; correct? 21 MIRSAD HAIRLAHOVIC: Again, I think I 22 articulated earlier that the immediate impact of 23 the sinkhole compared with the train manufacturing 24 and testing was, you can see that that was not --25 assembly of the train was not delayed because the

1 sinkhole happened, right? Those two things are 2 totally independent. The testing, initial testing, 3 of the trains through the burn-in track was not 4 impacted by the sinkhole because that happened --5 sinkhole happened elsewhere. The final testing 6 continuity throughout the whole system was impacted 7 the by the sinkhole. 8 Right. CHRISTINE MAINVILLE: Did you 9 understand, though, that Alstom and Thales had 10 notified OLRTC that it would not be able to meet 11 the May 2018 RSA date by the summer, at least, of 12 2017? 13 MIRSAD HAIRLAHOVIC: Would I have been 14 I'm sorry if that was not -- I don't aware? 15 remember the timelines, when they sent the 16 notifications in, what they were claiming for and 17 all those things, right? 18 CHRISTINE MAINVILLE: Okay. 19 They had a MIRSAD HAIRLAHOVIC: 20 contract to manage, and certainly they did that, 21 right? 22 CHRISTINE MAINVILLE: Would you have 23 been aware of, for instance, Alstom's recovery or 24 mitigation plan that it would present? 25 MIRSAD HAIRLAHOVIC: Again, like in

1 the -- like I said, in our monthly Exco report, we 2 would get a report, an update on the schedule, 3 which would include the discussions around anything 4 that is late, anything that is being mitigated. 5 Any of those things would have been discussed in 6 this form when it came up. I certainly cannot 7 recall exact conversations that happened at that 8 time, if you can appreciate that. Yes, but would CHRISTINE MAINVILLE: 10 the executive committee generally have been 11 involved at that level in terms of recovery plans 12 or determining whether to grant or deny a schedule 13 change to Alstom? 14 MIRSAD HAIRLAHOVIC: A critical 15 extension to a subcontract that affects the final 16 completion or the revenue service would fall under 17 the governance of the executive committee. 18 CHRISTINE MAINVILLE: Okay. 19 MIRSAD HAIRLAHOVIC: So in 2017, it 20 would have been Manuel Rivaya for -- as the 21 representative for us, and I would have been an 22 alternate. And if -- so I mentioned earlier the 23 re-baselining of Alstom's schedule. So Alstom came 24 back early with the Version 5 schedule where they 25 asked for an extension of time because they were

- |1| delayed. They put in the mitigation measures.
- 2 That was granted. It still fit within the revenue
- 3 service date even though they got a few weeks on
- 4 their schedule.
- Any subsequent schedules would have
- 6 | gone through the same process. There would have
- been an entitlement discussion, the obligation to
- 8 mitigate, and then, if and when appropriate, if
- 9 they were not responsible for the delays, they
- would have been granted a time, but Alstom was
- 11 never granted an extension of time beyond revenue
- 12 service by us because they were the ones
- responsible for the delay. So if 2017, whatever it
- 14 is, that they would not be granted an extension of
- 15 time.
- CHRISTINE MAINVILLE: So I'm trying to
- understand how it -- because I understand that the
- 18 date contractually, or from a commercial
- 19 perspective, if it's Alstom's -- let's say it's
- 20 | Alstom's responsibility, the delay, you would not
- 21 want to, contractually or commercially, give them
- 22 an extension, but in terms of the reality of the
- 23 | schedule -- like, I'm trying to understand: What
- is the schedule, in fact, informed by? Is it not
- what -- how long it will actually take them in

1 fact, despite it being their fault, or? 2 MIRSAD HAIRLAHOVIC: I don't 3 understand -- I really don't understand the 4 question still. Sorry, and I'm trying to understand what is the -- what is it that -- are 5 6 you asking me if Alstom has told us, We're not 7 going to finish in time, there's no way I'm 8 finishing in time, and here's all the full details 9 why I'm not going to finish on time, and we said, 10 Yes, you will, and -- so Alstom never did that. 11 there was never a situation like that. We were 12 managing the schedule with Alstom. Our project 13 team was on, what did you do today? Did you do 14 what you said you're going to do today, and then 15 what are we doing tomorrow? To that extent. 16 So that's why I'm just trying to say 17 that - and I think I said it before - at some point it became about practical, let's get the job done 18 19 type of deal, right? And we got involved, and that 20 was the level of -- that was the level of -- of 21 engaging in performances and -- you know: Hey, we 22 were going to run the trains so many hours, so many 23 trains today. Did we do this? Why didn't we do 24 this? Was this train available? That's what the 25 project team got into, right? And everybody

1 around, because, I mean, the testing and 2 commissioning, everybody was part of it, including 3 the City. 4 CHRISTINE MAINVILLE: Sorry, repeat the 5 last part? 6 MIRSAD HAIRLAHOVIC: Everybody was 7 involved with the testing and commissioning, 8 including the City, right? Because ultimately they 9 supply the drivers, they had part of it as -- as --10 so -- right? 11 CHRISTINE MAINVILLE: Okav. I quess I 12 just have -- I'm struggling with understanding what 13 the schedule is supposed to reflect as between the 14 commercially agreed to dates and, you know, who may 15 be responsible for what as opposed to the actual 16 construction schedule that would reflect, like, 17 when things can actually get done realistically, 18 and I don't know where those merge or how they 19 interact with each other. 20 MIRSAD HAIRLAHOVIC: Well, in general 21 terms -- in general terms, the -- we have 22 obligations to meet dates, and re-baselining of the 23 schedules has significant implications on the 24 contractually involved parties. That's why 25 administration of the actual schedule is something

1 that's different than a practical schedule, and 2 that happens all the time. So in this case, I'm 3 sure that you have it, you have access to 4 information on the detailed schedules leading up to 5 revenue service showing when the revenue service is going to be accomplished. And every month there 6 7 was no request for extension of time to the City by 8 us to rebaseline the milestone or extension of time 9 by Alstom and us not granting them. 10 I mean, like I said, at some point 11 there's a schedule; we're not going to finish in 12 time; here's what the schedule looks today like; 13 what does it look tomorrow; what does it look 14 today; what does it look tomorrow. So that's where 15 I'm saying that -- so yeah, there's -- sometimes 16 there is that -- we cannot continuously -- you 17 know, the City is never going to continuously just 18 give us -- grant us extensions of time because 19 there's implications to that, but we were -- we 20 were always -- there was always a working schedule. 21 Whether it was fully aligned with the schedule 22 that's being administered, but it was connected 23 with the monthly schedule reporting one way or 24 another, right? So... 25

CHRISTINE MAINVILLE:

So there

Okay.

1 are two schedules, or there -- but they're 2 integrated in some --3 MIRSAD HAIRLAHOVIC: Those are your 4 words, not mine. 5 CHRISTINE MAINVILLE: Did RTG have 6 concerns about the schedule in terms of it being 7 achievable? 8 MIRSAD HAIRLAHOVIC: Certainly RTG was 9 a critical component in the -- in the -- in getting 10 to revenue service and their obligations leading up 11 to the revenue service on the schedule and post 12 revenue service. So they were part of the process 13 all along, yes. 14 CHRISTINE MAINVILLE: But they -- I 15 understand that they -- what they would rely on is 16 OLRTC's schedule in terms of when the construction 17 will be done and --18 MIRSAD HAIRLAHOVIC: Absolutely. 19 CHRISTINE MAINVILLE: And so would they 20 just take that and present it to the City, or --21 you know, or did -- or was there back and forth and 22 some exchange with OLRTC about the schedule? 23 MIRSAD HAIRLAHOVIC: Our relationship 24 with RTG's managed through our construction 25 contract that speculates the obligations that we

1 have to them. So schedule submissions, we had an 2 obligation to submit construction schedules. Anv 3 and all submissions that are -- that RTG forwards 4 to the City on our behalf they have, and at various 5 times they have a right to -- to -- to understand, 6 to agree, to disagree, et cetera. What their 7 actions are after that, also (indiscernible) by the 8 construction contract, right? So if RTG -- if 9 RTG -- RTG relied on us for schedule reporting, if 10 RTG thought that something was wrong with the 11 schedule, they would have highlighted it to us if 12 there was such a thing, and --13 CHRISTINE MAINVILLE: So that did not 14 happen? 15 Oh, I certainly MIRSAD HAIRLAHOVIC: 16 don't have -- it was not part of my mandate to 17 understand the monthly schedule submission dates 18 between us and RTG. 19 CHRISTINE MAINVILLE: Okay. So you're 20 not -- you can't be certain --21 MIRSAD HAIRLAHOVIC: No, I certainly 22 would not be able to answer the dialogue that goes 23 on and them understanding the schedule that's being 24 submitted. 25 CHRISTINE MAINVILLE: Okay. How did

```
1
    the City respond to the various delays to the RSA
 2
    date or target date as further delays progressed?
 3
                MIRSAD HAIRLAHOVIC:
                                      Secondhand
 4
    information was nobody's -- everybody was eager to
5
    get the system open. There was a lot of public
6
    pressure on the City to get the system open because
7
    people can see the trains running and not being in
8
    service, so any delays that happened to that, to
9
    revenue service target dates -- and those were the
10
    target dates.
                   That's what I'm talking about, you
11
    know, the administration of the schedule.
12
    revenue service target dates then become -- as they
13
    moved around, I don't think that any party at the
14
    table was happy with, including the City.
15
                CHRISTINE MAINVILLE: Were these new
16
    target dates being announced publicly?
17
                MIRSAD HAIRLAHOVIC: I don't recall.
18
                CHRISTINE MAINVILLE: Do you know
19
    that -- do you know if RTG would have publicly
20
    announced any, or would that be the City? Or --
21
                MIRSAD HAIRLAHOVIC:
                                      I -- I -- you'd
22
    have to ask RTG, but from OLRTC, we were not
23
    announcing any work -- any dates, anything that was
24
    happening on the project. We were not.
25
                CHRISTINE MAINVILLE:
                                       Okay.
```

1 MIRSAD HAIRLAHOVIC: We were not making 2 any kind of public statements or announcements or 3 releases. 4 Okay. Aside from CHRISTINE MAINVILLE: 5 the risks that materialized during the project, how 6 would you characterize the original budget? Did 7 you see it as being a tight budget for the project? 8 MIRSAD HAIRLAHOVIC: Well, I mean, the 9 project, for a number of reasons, ended up costing 10 more than the original budget was: Through 11 evolution of design, through the impacts that 12 happened throughout the project. On a mega job 13 like this, when you have these significant events 14 happen that happened and external delays, it's hard 15 to -- I certainly am not -- for that, I am not 16 smart enough or have not done a but-for analysis, 17 and I don't know who can. To say that the original 18 budget was right or wrong, we are three 19 professional companies that have lots of years of 20 experience, that do this stuff for a living. Not 21 the first job we did. When we priced the job, the 22 team put together a price that they felt it was 23 appropriate to get the work done. The assessment 24 of risk was done and a risk assigned to it, and we 25 went down, and the project did not unfold as

23

24

25

1 planned. 2. CHRISTINE MAINVILLE: Do you have any 3 view as to the suitability of the MSF for the train 4 manufacturing, in hindsight? Whether it was a 5 suitable production facility? 6 MIRSAD HAIRLAHOVIC: A true and tested 7 assembly facility versus a newly constructed 8 facility that was intended for maintenance of 9 trains, not assembly of trains, is certainly --10 this is not the ideal scenario. However, we had a 11 worldwide, you know, organization like Alstom that 12 evaluated what the requirements were and -- and 13 said that they can do it, and they signed the 14 contract to do so. But there was no choice. Τf 15 they were given a choice, I'm sure that they would 16 have done it differently. 17 CHRISTINE MAINVILLE: And why do you 18 say there was no choice? 19 MIRSAD HAIRLAHOVIC: The contract 20 clearly required them to assemble the trains for 21 the Canadian content, and there was no other way 22 they could do it. So the City pregualified Alstom

knowing that -- what facilities they had in Canada,

path that was -- very narrow path created for that,

what buildings they had. That was ultimately the

2.

1 for us. Not them - us.

CHRISTINE MAINVILLE: Do you have any view as to what -- given Alstom's experience in the field and its expertise, do you have any view as to what might have contributed to the issues that the vehicles ultimately had, some of the breakdowns and the derailments?

MIRSAD HAIRLAHOVIC: Well, I mean, the derailments that are happening now, I think that --well, the root cause analysis is still not finalized, so at this stage it's very raw opinions, and the root cause will be finalized, and that will give you the true expert opinion what caused it, because there's many things that can contribute to derailment: It's a faulty part, not adhering to maintenance protocols or not having the right maintenance protocols, human error, all kinds of things. So that's why the root cause is taking a bit of time to establish really why -- why the -- the failure.

The maintainer has raised a construction defect notification - Alstom - that there's a construction defect as the reason for the derailment and we had the suppliers who are on the other side of that, but the actual -- so again, you

1 know, there's a difference between the reality 2 versus administering the contracts, as you said 3 earlier, right? 4 So in this case, it's about recovering 5 the damages for the derailment that are passed down 6 by the City and the damages that RTM has, so hence 7 the notifications, and everybody's notified 8 everybody. The reality of -- of what caused the 9 derailment and the corrective actions, that will be 10 obviously the evidence out there to let us know 11 what caused it. But now, at this point, it's just 12 speculation. 13 CHRISTINE MAINVILLE: What's the 14 construction defect that has been pointed to as 15 having potentially contributed to one of the 16 derailments? 17 MIRSAD HAIRLAHOVIC: That's a good 18 question. It's certainly -- it's a construction 19 defect associated with the bearing, the bearing on 20 the -- a bogie that --21 CHRISTINE MAINVILLE: Yeah. 22 So -- but it's --MIRSAD HAIRLAHOVIC: 23 you know, when there's a construction defect 24 notification, it's a bit broader to make sure that 25 they don't miss anything, as far as what that is.

1 So the construction defect is -- that's why I'm saying it's a speculation that it's bearings 3 because that's where everybody's looking. 4 monitoring bearings, we -- there's more 5 interaction with the bearings, et cetera, 6 et cetera, but the notification for the defect is 7 the train derailed because of the faulty train. 8 CHRISTINE MAINVILLE: Okay. And 9 stepping back from the actual direct causes of the 10 derailments or other breakdowns, just from a more 11 high-level perspective, you know, what are things 12 that you think may have contributed to perhaps some 13 of the issues that -- or challenges that were 14 encountered? Like, why there were so many issues 15 For instance, the maintenance facility or on this? 16 the labour challenges that may have been 17 encountered by Alstom or the vehicle requirements. 18 Do you have a sense of what made this perhaps more 19 challenging for the vehicle manufacturer or others 20 on the project that may have played a role more 21 generally? 22 MIRSAD HAIRLAHOVIC: Yeah. 23 very, very complex project when it comes to the 24 I certainly am not a train expert to say 25 this is what's wrong with this particular train,

but if I'm looking at it from a 10,000-foot view is that on Day 1, when Alstom was prequalified by the City to be part of our team, Alstom has never -- did not have a -- this was a prototype vehicle for them, for this system and this environment.

I think it was further exacerbated by the initial delays to that so that they had to, you know, have the prototypes completed in the MSF and the testing done here. So, you know, it's a new train for the -- for the -- for the system, for the environment, but at the same time, this is a train manufacturer that's been operating throughout the world, so not everything is brand new to them.

To what level having to do this assembly -- and it's -- you know, we're talking manufacturing, but it's actually assembly of components that happens in the MSF. To what extent that contributed, to what extent the -- Alstom developing a prototype for this market and for this environment and to what extent the requirements, specific requirements, of this project agreement contributed to the final issue, I -- you know, I certainly say that all the components are there, but to what extent it was driving it...

CHRISTINE MAINVILLE: Am I right that

1 vehicle supply now is not necessarily taken on by 2 the private partner? In future projects or in 3 current projects. 4 MIRSAD HAIRLAHOVIC: Yeah, I don't --5 from the Canadian projects that we're involved but 6 that are part of the portfolio of Dragados Canada 7 that I'm overseeing is that this is the only 8 contract that we have for the supply of trains, so 9 we do not have any other that we are responsible 10 for supply. We have integration and testing some 11 trains, but ultimately it is -- is the -- the 12 supply of the trains is with -- with the ultimate 13 owner of the system. So examples that we had, 14 Eglinton-Finch Project or REM, the trains are 15 supplied by the client. Then we have the --16 varying interaction scope based on the different 17 projects for those, but we don't have the train 18 supply. 19 CHRISTINE MAINVILLE: Do you know why 20 that is, why that seems to be more common, at least 21 now? 22 MIRSAD HAIRLAHOVIC: Well, we certainly 23 don't -- we certainly don't -- I think it's from an 24 overall mitigation and a proper allocation of the 25 risk on the -- on the -- on the contracts.

1	CHRISTINE MAINVILLE: So you would
2	MIRSAD HAIRLAHOVIC: We
3	CHRISTINE MAINVILLE: Yeah.
4	MIRSAD HAIRLAHOVIC: But yeah, we
5	prefer not to be the train supplier.
6	CHRISTINE MAINVILLE: Because it's a
7	risky business?
8	MIRSAD HAIRLAHOVIC: Yeah, it's not
9	a you know, we are not we're not a train
10	manufacturer, so we have a reliance on the train
11	supplier for that end of it, so we don't I do
12	not consider myself to be a train building,
13	assembly expert. Integrating the overall system,
14	sure. Building the infrastructure for it, sure.
15	But the so therefore it's not at a proper
16	allocation of risk.
17	CHRISTINE MAINVILLE: Okay.
18	MIRSAD HAIRLAHOVIC: Same thing for the
19	City, what's happened with Stage 2, where they've
20	separated the vehicle supply and the infrastructure
21	and testing/commissioning component.
22	CHRISTINE MAINVILLE: And why is the
23	owner better placed to manage the risk? Or is it
24	more that just the private company doesn't want to
25	take it on?

1 MIRSAD HAIRLAHOVIC: Well, they have 2 a -- they'll have -- I think that it's both. Ι 3 think it's both, but where is the owner more 4 appropriate to manage that risk? The owners 5 ultimately have much more extensive relationships 6 with the train suppliers, so if you take the 7 example Metrolinx, they will have a train supplier 8 not only for this project but for other projects. 9 They will have those trains around for 30 years; 10 they will get different trains, updated trains, 11 et cetera. So there's an existing relationship 12 that helps you in establishing that. 13 For us, it becomes one-off. So it's 14 much more of a -- much more of a -- we have a lot 15 less influence over the train supplier than a 16 client does. So it's not that they are technically 17 better suited, but they can certainly get them to 18 perform better if they own that because there's 19 that motivation down the road. 20 CHRISTINE MAINVILLE: Okay. And does 21 it make a difference who's operating the trains? 22 MIRSAD HAIRLAHOVIC: So in this case, 23 the City is operating the trains? And --24 Well, in our CHRISTINE MAINVILLE: 25 case, yes, in Ottawa's case.

1 MIRSAD HAIRLAHOVIC: Yeah. And in 2 general terms, they are -- does it matter -- sorry, 3 to which extent does it matter? 4 CHRISTINE MAINVILLE: Well, I just 5 wonder if, for instance, as here, the City is 6 operating the train, does that make it even more 7 suitable for the City, the owner, to be -- to be 8 responsible for the vehicle supply, or is that not really a consideration? 9 10 MIRSAD HAIRLAHOVIC: Well, I think 11 that -- you know, that component of it certainly, 12 again, you know, adds another layer of it, that 13 you're actually physically operating the trains, so 14 you certainly -- I would say that that can even 15 further make it more reasonable for them to 16 actually own the train supply because you're more 17 connected with the final product and what the final 18 product operates like, so you have certainly more 19 control beyond just what you wrote in the contract. 20 CHRISTINE MAINVILLE: In terms of the 21 involvement of the operator, OC Transpo, on this 22 project, would you -- would there have been any 23 value, from your perspective, in involving them 24 earlier on in the design or build? 25 MIRSAD HAIRLAHOVIC: They were

```
1
    required.
               They were required to be -- I wasn't --
 2
    obviously I wasn't there at the onset of the
 3
    contract or onset of the project, but ultimately
 4
    they had critical inputs from Day 1, OC Transpo.
5
                CHRISTINE MAINVILLE:
                                       Okav.
 6
                MIRSAD HAIRLAHOVIC:
                                      They're the ones
7
    that actually contributed to the -- to the final
8
    configuration of the train, to make sure that it
9
    met their requirements, and including the cabin
10
    layout, including the stanchions, including --
11
    et cetera. So certainly they were required to be
12
    so involved.
                  In our view, they did not do their
13
    part in time, on time, for that.
14
                CHRISTINE MAINVILLE:
                                      So was that a
15
    result of them getting involved too late, or you
16
    just think they took too long?
17
                MIRSAD HAIRLAHOVIC: I think they just
18
    took too long.
19
                CHRISTINE MAINVILLE:
                                      Okav.
20
                MIRSAD HAIRLAHOVIC:
                                      They just -- they
21
    were not -- this was a significant project.
22
    takes -- you know, it takes a lot of structure, a
23
    lot of coordination, a lot of quick decisionmaking
24
    to keep things moving.
25
                                       This relates to
                CHRISTINE MAINVILLE:
```

1 the design book issue you'd mentioned earlier? 2. MIRSAD HAIRLAHOVIC: Yeah. 3 CHRISTINE MAINVILLE: Okay. Do you 4 know why the yard ultimately was not automated? 5 MIRSAD HAIRLAHOVIC: It's not automated 6 right now? 7 CHRISTINE MAINVILLE: Yes. 8 Why do we -- so MIRSAD HAIRLAHOVIC: 9 the UTO is part of -- it had something to do with 10 the Stage 2 vehicles because they need to be 11 incorporated in that. The second component is that 12 in order to finalize the UTO in the yard, we 13 need -- the constructor needs -- specifically 14 Thales needs an access to -- to trains in order to 15 do that. 16 CHRISTINE MAINVILLE: M-hm. 17 MIRSAD HAIRLAHOVIC: And because that 18 critical priority is to keep the revenue service 19 going now, so the train availability is more for 20 maintenance of the trains and actual service 21 versus -- versus that, and because there are 22 hustlers in the yard, so it's not a critical issue 23 for -- for the maintainer, operator, it's just been 24 delayed. We at OLRTC certainly wanted to get that 25 done so we're done with it, but ultimately it is --

1 we're not the priority for that. That's all. 2 There is no other technical reason for that. 3 CHRISTINE MAINVILLE: Has it impacted 4 the ability to make vehicles available or the speed 5 of retrofits or manufacturing? 6 If it did, it MIRSAD HAIRLAHOVIC: 7 would have been a -- there would have been critical 8 pressure from and commitment from the maintainer to 9 actually get it done because it's not -- they are 10 not -- only we as the constructor are seeing this 11 as a burden, and now the City is on the same page 12 as us, so we're certainly working together to get 13 there now. 14 CHRISTINE MAINVILLE: Sorry, only the 15 constructor what? Sees it as --16 MIRSAD HAIRLAHOVIC: Right now -- that 17 was always -- for us, we don't operate the system. 18 We don't have a -- once we achieve the revenue 19 service, we -- it's no longer ours. We don't have 20 the care and custody of the system, and we don't --21 we don't have the responsibility for the -- to 22 maintain the revenue service. So to us, number one 23 priority for us is -- when it comes to that is to 24 get the UTO done, but for the system operator and 25 the maintainer, for them, that's low on the

- priority because their number one is maintain the service, maintain the vehicles, and then -- because that does not, in their -- obviously in their view -- and I'm paraphrasing. They didn't tell me this -- that that has no -- that doesn't have an impact as far as availability or reliability of the trains.
 - Of the retrofits that were deferred, with the term sheet and other work to be done and completed, did -- would that have increased the pressure on -- on the maintenance teams post -- following revenue service?
 - MIRSAD HAIRLAHOVIC: Well, if
 there's -- I'm sure that Alstom has always an
 understanding that like anything else that comes
 out -- you know, this is not a car that's coming
 off an assembly line that's been produced for a
 hundred years. There's going to be things that
 need to be retrofitted and so on. The extent of
 the retrofits that we have here, I'm certainly not
 the expert to say if this is more than normal or
 less than normal. But the management of getting
 those retrofits done, certainly any time you have
 to do something that is not maintenance or

```
1
    operation of the train is taking away from the --
 2
    from that component of it. But not every train is
 3
    either maintained or operated 100 percent of the
 4
    time, so there's always times where the trains are
5
    available for other things. That's supposed to be
 6
    a little bit bigger than what is happening now, and
7
    that's why the retrofits are -- again, similar to
    UTO, non-critical retrofits are low on the priority
8
9
    versus getting the critical things addressed.
10
                CHRISTINE MAINVILLE: And you're aware
11
    of the minor deficiencies list?
12
                MIRSAD HAIRLAHOVIC:
                                      I'm aware that it
13
    exists, yes.
14
                CHRISTINE MAINVILLE: Do you understand
15
    it to be -- well, where -- to be quite extensive?
16
    I mean, the -- let me put it this way:
                                             The final
17
    certificate has not -- final completion certificate
18
    has not yet been issued; correct?
19
                MIRSAD HAIRLAHOVIC:
                                      That's correct.
20
                CHRISTINE MAINVILLE:
                                       Is that mostly
21
    because of the minor deficiencies list or the --
22
                MIRSAD HAIRLAHOVIC:
                                      Yes, they're --
23
    yeah, there are components like the -- the
24
    requirements for that, like the UTO, there's
25
    retrofits with the vehicles, those are the big
```

1 The minor deficiencies would not, things. certainly, drive that. There's other building code 3 Those are things that are driving the -stuff. 4 delaying the final completion. The deficiencies 5 list that's been checked off and knocked off, 6 including the warranty item list, that is an 7 ongoing effort, right? But it's getting these 8 critical components completed that is -- was the --9 and because the final completion really has no --10 it's much different than substantial completion of 11 revenue service. That takes less criticality and 12 priority by everybody, so as far as let's do 13 everything we can to get there versus once we 14 achieve the revenue service, everything was 15 maintaining the revenue service. 16 So these are CHRISTINE MAINVILLE: 17 items that mostly relate to the term sheet, then, 18 what's outstanding --19 MIRSAD HAIRLAHOVIC: There are some 20 items from the term sheet, and there are some items 21 that are just part of the normal deficiency list, 22 like you suggested. 23 CHRISTINE MAINVILLE: Okay. 24 So, you know, the MIRSAD HAIRLAHOVIC: 25 UTO was -- was not part of it. It is part of it

```
1
    because it was Stage 2, and Stage 2 is disconnected
 2
    from the substantial completion of Stage 2
 3
    vehicles -- at -- Stage 2 -- sorry, Stage 2 MSF.
 4
                CHRISTINE MAINVILLE:
                                       Okay.
                                              That has
5
    delayed some of the work to be done on the Stage 1
6
    vehicles?
               Or --
7
                MIRSAD HAIRLAHOVIC:
8
                CHRISTINE MAINVILLE:
                                       Not just
9
    vehicles, but infrastructure?
10
                MIRSAD HAIRLAHOVIC:
                                      No. It -- what --
11
    UTO, it needed to incorporate Stage 2. Stage 2 had
12
    two -- Stage 2 change order had two components to
13
    it: update to the MSF to accommodate the additional
14
    vehicles and the additional vehicles. Because the
15
    scope of work was added that impacted the automatic
16
    train control, the automatic train control was no
17
    longer a requirement only for Stage 1 but is a
18
    requirement for Stage 2, so therefore you cannot
19
    have the substantial completion requirement to have
20
    the UTO done because of the Stage 2 component, but
21
    it is part of the substantial completion, the final
22
    completion for the Stage 2 yard UTO.
23
                CHRISTINE MAINVILLE: And do you recall
24
    any issues with Alstom maintenance not wanting to
25
    accept the trains based on some of the work not
```

1 being completed on them? 2. MIRSAD HAIRLAHOVIC: Sorry, Alstom not 3 accepting the Stage 2 trains? 4 CHRISTINE MAINVILLE: Or not wanting to 5 take ownership of some of the issues could be -- or 6 some dispute, perhaps, between whether they were 7 maintenance issues as opposed to work not being 8 completed on the manufacturing side. 9 I'm trying to --MIRSAD HAIRLAHOVIC: 10 trying to understand the question because the 11 Stage 2 vehicles are supplied by Alstom. 12 CHRISTINE MAINVILLE: Not Stage 2. I'm 13 talking about Stage 1. 14 MIRSAD HAIRLAHOVIC: Okay. Sorry. 15 Stage 1 vehicles. 16 CHRISTINE MAINVILLE: Stage 1. Given 17 the deferred retrofits --18 MIRSAD HAIRLAHOVIC: Yes. 19 CHRISTINE MAINVILLE: -- at RSA, was 20 there -- maybe let me ask the question this way: 21 Was there any tension or dispute as between the 22 maintainer and the constructor, given the deferral 23 of some of this work? 24 MIRSAD HAIRLAHOVIC: Oh. I'm not sure, 25 but I don't think that Alstom ever said that the

1 reason that the -- the reason for -- the reason for 2 any delay is the retrofits because it is their --3 it's their problem, right? The retrofits are part 4 of their requirements, right? 5 CHRISTINE MAINVILLE: Alstom globally 6 in terms --7 MIRSAD HAIRLAHOVIC: Yeah. 8 CHRISTINE MAINVILLE: Because they're 9 also the manufacturer, yeah. 10 MIRSAD HAIRLAHOVIC: Yes. 11 CHRISTINE MAINVILLE: Are you aware of 12 any tension between Alstom supply and Alstom 13 maintenance? 14 MIRSAD HAIRLAHOVIC: The -- on paper, 15 they tried to separate things. That's the same 16 organization, so --17 CHRISTINE MAINVILLE: Okav. So --18 MIRSAD HAIRLAHOVIC: -- even though 19 there's two contracts, there's only one Alstom 20 entity that exists. 21 CHRISTINE MAINVILLE: So you're not 22 aware of what, if any, tension or disputes there 23 are internally. 24 MIRSAD HAIRLAHOVIC: I -- you know, I 25 think that in the recent time, Alstom maintenance

1 has pointed to some defects, whether those defects 2 are trains or infrastructure, but I think that 3 that's -- that's strictly from Alstom's strategic 4 contract governance. I don't think that they 5 have -- my view is that I don't think that they 6 have a -- it's the same -- it's in the exact -- the 7 contract is the same -- unlike us, where our 8 concessionaire is ACS and the constructor is 9 Dragados, two different incorporated companies, 10 Alstom is one, just two different contracts. 11 CHRISTINE MAINVILLE: Okav. You're not 12 aware of, then, anyone from Alstom maintenance 13 being brought in to meet with City representatives, 14 including the mayor, about this issue? 15 MIRSAD HAIRLAHOVIC: From Alstom? 16 CHRISTINE MAINVILLE: Yeah. 17 MIRSAD HAIRLAHOVIC: Alstom had a seat 18 at the table the entire revenue -- getting to 19 revenue service. Their executives, like our 20 executives, sat at the table, as far as in these 21 coordinations with the City and reporting on the 22 progress, the process, et cetera. But for both 23 Alstom maintenance and Alstom supply, in getting to 24 revenue service - you can appreciate there were --25 maintenance didn't exist - were the same people.

1 Once we started with the maintenance and the 2 retrofits existed and the revenue service was in 3 place or there was revenue service, the trains 4 running, those were still the same people. 5 CHRISTINE MAINVILLE: Okay. So you 6 have no knowledge of what I'm referencing. 7 MIRSAD HAIRLAHOVIC: I certainly don't 8 know -- I can see Alstom saying that the things are 9 affecting how they're able to maintain because of 10 the train availability or requirements for the 11 retrofits, et cetera, but I'm not sure that they 12 would point the finger to themselves. Doesn't 13 sound like Alstom. 14 CHRISTINE MAINVILLE: No, not to 15 themselves, but -- sorry, I have background noise. 16 Okay. MIRSAD HAIRLAHOVIC: 17 CHRISTINE MAINVILLE: Okay. Let me ask 18 When you say Alstom executives were at the 19 table with the City for RSA, what particular 20 meetings are you referencing? 21 MIRSAD HAIRLAHOVIC: Well, I mean every 22 and all -- most -- at all levels, the coordination 23 at that time was RTM, RTG, OLRTC, the City, Alstom, 24 and where appropriate Thales. So those -- there 25 were daily meetings at the project level, at the --

```
1
    sorry, at the technical level, at the execution
    level, at the director level, and then at the
 2
 3
    executive level, as far as coordination.
 4
    reporting on -- on -- on this.
5
                CHRISTINE MAINVILLE:
                                       Were these
6
    meetings in person or held remotely?
7
                MIRSAD HAIRLAHOVIC:
                                      I think it was a
8
    combination of both. At times, when there was a
9
    critical -- critical message in by the City, the
    City certainly had no problem assembling everybody
10
11
    in Ottawa to -- as you suggested, when there was a
12
    reaction to something not unfolding in accordance
13
    with the plan - general updates, preparations -
14
    that representatives from the companies would fly
15
    in, including Alstom. But there was a lot of
16
    remote coordination, so I can't really recall
17
    exactly the frequency or who was on which call
18
    and... But it was certainly all hands on deck.
19
                CHRISTINE MAINVILLE: And so do you
20
    recall seeing the -- Alstom's reliability reports?
21
                MIRSAD HAIRLAHOVIC:
                                      No, not myself.
22
    I'm sure there's people that -- within the
23
    organization that have seen it. I've heard of it.
24
    I've heard of it, but not -- I don't know what's in
25
    it.
```

```
1
                CHRISTINE MAINVILLE: And how were the
    trains performing in 2019 leading up to RSA?
 2
                                                   What
 3
    were the types of issues that were being
 4
    encountered? Or the extent of the issues, I should
5
    ask.
 6
                MIRSAD HAIRLAHOVIC:
                                      I quess from my --
7
    at my level, it was a dashboard of hours planned
8
    versus hours had and disruption to those hours and
9
    what are we doing to rectify that, to that extent.
10
    What the actual issues were in general terms, I
11
    certainly think that there are better people to
12
    give you more accurate information on that, like
13
    Matt Slade and Rupert and then Jacques and -- those
14
    quys.
15
                CHRISTINE MAINVILLE: And I take it
16
    there were challenges in meeting -- running as many
17
    kilometres as they would have liked?
18
                MIRSAD HAIRLAHOVIC:
                                      I -- in general
19
    terms, that would be my -- my summary of it.
2.0
                CHRISTINE MAINVILLE:
                                       And are you
21
    referencing trial running, or you're referencing
22
    even a broader period of maybe full integration
23
    testing and pretrial running?
24
                MIRSAD HAIRLAHOVIC:
                                      I mean, I can only
25
    articulate particular areas that our plan for
```

1 testing and commissioning and vehicle integration 2 took longer than what we planned, took a different 3 effort than we planned, and it was driven by -- by 4 a multitude of issues. One of them certainly was 5 having continuous availability of a train that didn't need retrofitting, that didn't need repair, 6 7 that didn't shut down, stuff like that, so ... 8 CHRISTINE MAINVILLE: So --9 MIRSAD HAIRLAHOVIC: And as far as --10 like I say, again, and the details of that, what 11 the actual plan is for hours in a day per train 12 per -- you know, per test, et cetera, that 13 granularity -- or a form of that granularity 14 exists. There are people that are fully aware of 15 what that is, versus the actuals, and you can 16 appreciate that something like that would have been 17 documented and exchanged on a daily, hourly basis. 18 CHRISTINE MAINVILLE: What was the 19 extent of your involvement then in trial running? 20 MIRSAD HAIRLAHOVIC: Again, monthly --21 we had our monthly executive report. As it became 22 more critical reading after the -- to the -- to 23 revenue service, we had for a period of time 24 instituted a weekly call with project 25 representatives and executive representatives

1 between us and Alstom to get an update on the train 2 availability type of deal, so when are the trains 3 coming, so we're -- literally they would report on 4 a -- what was the plan for this train this week, 5 where is it now, is it progressing like we were 6 supposed to type of deal, right? So to that 7 extent, there were -- this is where it goes back 8 to, at some point, it was about what are we doing 9 today, what are we doing tomorrow, at kind of all 10 levels as far as -- because the plan -- we needed 11 to be very flexible and adjust it as things 12 evolved. 13 CHRISTINE MAINVILLE: So was there any 14 discussion at the executive level about the 15 performance of the trains or the reliability of the 16 system? 17 MIRSAD HAIRLAHOVIC: Yes. 18 And what would CHRISTINE MAINVILLE: 19 you -- what was Alstom's position on that or what 20 were they conveying? 21 MIRSAD HAIRLAHOVIC: I'm sure that, you 22 know, in our arbitration with them, they probably 23 wrote down exactly what their position is on that, 24 but ultimately, at that time, it was -- again, it 25 was about, hey, did this train run 4 hours like we

1 needed it to? No, it ran 3 hours. Why didn't it? 2 Because we had to go change this thing. I mean, 3 that's the level of -- of -- of discussions that 4 were happening with them because there was no point 5 of having a high-level discussion because then it becomes a who's on first. So ultimately it was 6 7 about getting the thing done. Like I said, the 8 plan for commissioning and testing that we all 9 signed up for did not unfold as planned. It took 10 us longer and more hours to actually get us to 11 where we needed to get to, and ultimately we got to 12 there were 13 trains, not 15 trains. 13 CHRISTINE MAINVILLE: Would you say 14 that some aspects of it were compressed, though, 15 such as the full integration testing? 16 MIRSAD HAIRLAHOVIC: Sorry, I do not 17 understand the question. 18 CHRISTINE MAINVILLE: Do you know what 19 I'm referencing when I say "integration testing"? 20 In the -- and -- integration of the rolling stock 21 with the Thales signalling system and the track, 22 the guideway, and running the trains to test that 23 integration, the whole system. Do you know whether 24 that was compressed as it related to the original 25 plans?

```
1
                MIRSAD HAIRLAHOVIC: Well, it took
 2
    us -- you know, if -- we had the RSA 16 months or
 3
    18 months later than we planned. So the -- it took
 4
    us where it took us at the end.
 5
                CHRISTINE MAINVILLE:
                                       But if you would
6
    need the entire line to run that, are you aware of
7
    how much --
8
                MIRSAD HAIRLAHOVIC:
                                      No.
9
                CHRISTINE MAINVILLE:
                                     -- full
10
    integration there was on the entire --
11
                MIRSAD HAIRLAHOVIC: You only need --
12
    you only need the entire line to run the -- to test
13
    the entire system. Not to integrate -- not to get
14
    the train tested - to get the train control tested,
15
    and to get the train to interact with the other --
16
    train with the train control to interact with the
17
    other system. You can do heavy lifting of that
18
    work without having the entire track available.
19
                CHRISTINE MAINVILLE:
                                       Okav.
20
                MIRSAD HAIRLAHOVIC:
                                      That's generally
21
    the way that other projects are done as well.
22
                CHRISTINE MAINVILLE:
                                       So do you know of
23
    any testing and commissioning that needs to be done
24
    on the entire line?
25
                                      Well, I'm sure
                MIRSAD HAIRLAHOVIC:
```

1 there is, but I certainly would not be the man to 2 answer the details of that. 3 CHRISTINE MAINVILLE: Okay. 4 MIRSAD HAIRLAHOVIC: Like, certainly 5 like I -- what I said before is that the 6 continuity, end to end times, interacting with the 7 actual systems that were finished last, of course. 8 For that, you need everything constructed. But I 9 don't know what those -- what that -- what every 10 test is as far as the final testing. 11 CHRISTINE MAINVILLE: Were there any 12 concerns raised or had about the amount of time 13 that there was to do the full running on the line 14 and how much of that kind of testing there was? 15 I don't -- I don't MIRSAD HAIRLAHOVIC: 16 recall if there was -- in -- my recollection is in 17 the actual formal dispute with Alstom we had, they 18 brought everything as a reason for the lateness but 19 them, right? So -- they certainly pointed the 20 finger at everything, so -- but I don't recall 21 what -- what the actual -- the truth is, you know, 22 something different than that, and I certainly 23 don't know what -- what the full scope of plan was 24 for the entire system testing versus what unfolded 25 and what -- how critical that was to the overall

1	train quality and train reliability.
2	CHRISTINE MAINVILLE: And do you recall
3	any conversations with Thales about that?
4	MIRSAD HAIRLAHOVIC: Myself?
5	CHRISTINE MAINVILLE: Well
6	MIRSAD HAIRLAHOVIC: I did not have any
7	conversations with Thales myself about that.
8	CHRISTINE MAINVILLE: Were you aware of
9	the concerns being conveyed by Thales about the
10	amount of running and full integration testing
11	being done?
12	MIRSAD HAIRLAHOVIC: I certainly was
13	not aware, but that doesn't mean that they would
14	not have raised those concerns to the appropriate
15	people that were dealing with that.
16	CHRISTINE MAINVILLE: Would you have
17	been aware or the executive committee, OLRTC
18	executive committee, been aware of, like, the
19	results of trial running and how the trains were
20	performing
21	MIRSAD HAIRLAHOVIC: Yes.
22	CHRISTINE MAINVILLE: So what was the
23	takeaway for you? How was that going?
24	MIRSAD HAIRLAHOVIC: Not as planned.
25	We were not meeting the run times. We were not

1 meeting the reliability. We did not perceive --2 expect the retrofit amounts that were happening. 3 That was our view of what we had relied on Alstom 4 to provide to us as a product, which they -- we 5 felt it did not. 6 CHRISTINE MAINVILLE: And so what 7 discussions did that lead to? What was done with 8 that information? 9 MIRSAD HAIRLAHOVIC: Well, in normal 10 terms, we would -- you know, again, like I said, 11 then we escalated to having the weekly calls with 12 the executive level with them to get the commitment 13 throughout. Alstom changed leadership on the job 14 as well a couple -- a number of times in order to 15 address some of the concerns that we were having, 16 so, you know, we were certainly putting pressure on 17 Alstom to perform and deliver in accordance with their contract and the timelines we had. 18 19 are -- this is not pouring a cube of concrete so 20 that if you really don't like what -- the 21 performance level, you get another person to 22 perform it. We're kind of stuck with these trains. 23 So we did everything in our power to push that 24 rope. 25 CHRISTINE MAINVILLE: And so what was

1 the view as to the system's readiness for revenue 2 service, given the performance during trial 3 running? 4 MIRSAD HAIRLAHOVIC: What was the view? 5 Alstom told us they're ready. The infrastructure 6 was ready -- is ready. We had -- the collective 7 group had everything to start the trial running. 8 The conclusion was to open the system with 13 9 trains to ensure that we have reliability. So 10 ultimately nobody at the table was presented with 11 the facts or position that the system is not ready 12 for revenue service, but let's do it. 13 CHRISTINE MAINVILLE: So the -- that 14 was the position of the Alstom executives, fair to 15 say? 16 MIRSAD HAIRLAHOVIC: Absolutely. 17 CHRISTINE MAINVILLE: And when you say they were in the -- in the meetings leading to RSA, 18 19 they were not part of the -- Alstom was not part of 20 trial running; correct? Other than producing the 21 trains for trial running. 22 MIRSAD HAIRLAHOVIC: They are a 23 critical part of the trial running. They need to 24 keep the trains moving. 25 Right. CHRISTINE MAINVILLE:

```
1
                MIRSAD HAIRLAHOVIC:
                                      They give us the
 2
    trains, and then they need to maintain the trains
 3
              Once the system is in place, the --
    more so.
 4
    Alstom maintenance actually has responsibility to
5
    maintain the actual system as well. So all the
 6
    track right away and trains is maintained by
7
    Alstom, not just the trains. The trial --
8
                CHRISTINE MAINVILLE:
                                       Would you --
9
                MIRSAD HAIRLAHOVIC: -- running that --
10
    sorry?
11
                CHRISTINE MAINVILLE: No, go ahead.
12
    Keep going.
13
                MIRSAD HAIRLAHOVIC:
                                      What I'm saying is
14
    they're in trial run, and so they were responsible
15
    to supply the trains, they were responsible to keep
16
    the trains -- the City provided the operators, and
17
    then the collective team was -- you know, like any
18
    other, you know, trial running, there was analysis
19
    of what's -- what's -- what we need to do versus
20
    what we're doing.
21
                CHRISTINE MAINVILLE:
                                       They were not
22
    part of the trial running review team?
23
                MIRSAD HAIRLAHOVIC: I'm not sure what
24
    that -- what you're referring to.
25
                CHRISTINE MAINVILLE:
                                       Okay.
                                              They -- do
```

```
1
    you know whether they would have been aware of the
 2
    trial running criteria, the requirements?
 3
                MIRSAD HAIRLAHOVIC: Oh, that is passed
 4
    down to Alstom through the contract, yes.
5
    would have been fully aware of what -- what the
6
    requirements of revenue service are.
7
                CHRISTINE MAINVILLE: Were you -- were
8
    you aware of the trial running criteria? I'm not
9
    going to guiz you on what they are. Would you have
10
    been aware of them?
11
                MIRSAD HAIRLAHOVIC: Oh, certainly.
12
    Because that's the -- so we were aware what we
13
    needed to -- that was our -- that was our dashboard
14
    as far as what does it take to get to revenue
15
    service and was -- sorry, to substantial, what does
16
    it take to get to revenue service and monitoring
17
    compliance to that would have been a part of the
18
    critical reporting to us, but I certainly don't
19
    remember now what those -- what those are.
20
    that was --
21
                CHRISTINE MAINVILLE:
                                       Do you -- sorry.
22
                MIRSAD HAIRLAHOVIC:
                                      No, I'm saying
23
    that was certainly a critical piece of information.
24
                                       Do you recall a
                CHRISTINE MAINVILLE:
25
    change to the criteria, then, during trial running?
```

1 MIRSAD HAIRLAHOVIC: Well, the term 2 sheet changed the criteria, so... How it evolved, 3 I don't recall right now, how do we get from the 4 specific contract requirements to going to 13 5 trains and measuring the performance against that. 6 The trial running -- again, any changes to that, 7 my -- part of my brain is firing for familiarity of 8 something, but certainly if I was looking to get 9 the most accurate information, I would ask Matt 10 Slade about that. 11 CHRISTINE MAINVILLE: And was Matt 12 Slade reporting up to the executive committee any 13 concerns about the system's readiness for RSA or 14 the reliability, from the perspective of the 15 reliability of the system? 16 MIRSAD HAIRLAHOVIC: At times, yes. 17 Nothing is -- nothing is -- nothing we do in 18 construction and in life in general is without 19 So even with the term sheet of 13, everybody 20 understood that we are not 100 percent quaranteed 21 the system is going to run. 22 CHRISTINE MAINVILLE: Yeah. 23 MIRSAD HAIRLAHOVIC: But we have an 24 obligation to be 99.9 percent, and that's where we 25 thought we were.

```
1
                CHRISTINE MAINVILLE: Well, would you
 2
    say it was clear that the system was encountering
 3
    more issues than you would have liked or expected,
 4
    anticipated, at that point in time?
5
                MIRSAD HAIRLAHOVIC:
                                      I was certainly --
6
    I was certainly -- it would be hard for me to say
7
    no because we end up with a term sheet that was --
8
    that is a pure evidence that the system was turned
9
    over with reduced requirements than what the
10
    contract's revenue service requirements were.
11
                CHRISTINE MAINVILLE: Right.
                                               Is it
12
    fair to say --
13
                MIRSAD HAIRLAHOVIC: And --
14
                CHRISTINE MAINVILLE: Oh, sorry, go
15
    ahead.
16
                MIRSAD HAIRLAHOVIC: I was going to say
17
    and it wasn't because, okay, we'll just be more
18
    conservative and going down to these trains because
19
    we are 100 percent -- it's about establishing
20
    the -- you know. Like I said, it's just -- it's
21
    purely driven by the -- by the trial running
22
    that's -- the conclusion was to open the system
23
    with 13 trains and measure against that.
24
                CHRISTINE MAINVILLE: Do you recall a
25
    reduction to the average kilometres -- the
```

1 performance in terms of the kilometres run that had 2 to be met during trial running, so a drop from 3 98 percent to 96 percent? Is it that ring a bell? 4 MIRSAD HAIRLAHOVIC: Well, I certainly 5 do recall conversations and recommendations by the team, what was the -- what's the normal accepted 6 7 practice versus what's in this contract, et cetera, 8 and -- that led up to those conversations. CHRISTINE MAINVILLE: Okay. 10 MIRSAD HAIRLAHOVIC: But certainly the 11 details behind it and what the actual facts show --12 so certainly there were those conversations. 13 was always about, yes, we have obligations in the 14 contract, and -- but also there was always a 15 conversation what makes sense, what is the industry 16 standard, what is the practice, and it was --17 sometimes it was difficult to close the gap between 18 the two. 19 CHRISTINE MAINVILLE: Right. Did you 20 understand there to be a change in the -- in how 21 the project agreement was going to be interpreted 22 in regards to trial running? 23 MIRSAD HAIRLAHOVIC: I don't recall 24 Again, I think that -- maybe there are 25 others that can testify to that much better than I

1 I don't recall. can. 2. CHRISTINE MAINVILLE: Do you remember 3 any change to the -- the notion of 12 consecutive 4 days of trial running? 5 MIRSAD HAIRLAHOVIC: I have a recollection of those events, but certainly I 6 7 don't -- don't remember the full details of it, as 8 far as going from the number of days that are 9 required for the full trial running versus what we 10 ended up with. But it was all connected with --11 like I said, it was all connected with the start of 12 the testing, commissioning, running the trains to 13 get the system proven, so... 14 CHRISTINE MAINVILLE: What do you mean 15 by that? 16 MIRSAD HAIRLAHOVIC: I'm just saying 17 that, ultimately, there's a reason that we went 18 down to 12 -- there's a reason we went to 13 19 trains. 2.0 CHRISTINE MAINVILLE: Yeah. 21 MIRSAD HAIRLAHOVIC: You know, that's 22 all I meant by it. It's nothing --23 CHRISTINE MAINVILLE: Okay. So it's 24 fair to say that everybody -- it was clear to 25 everybody that it wouldn't be a flawless entry into

1 service. Like, there would be some issues and 2 kinks going into service. Is that fair to say? 3 MIRSAD HAIRLAHOVIC: I don't think even 4 that on Day 1 signing the contract that everybody 5 thought that on Day 1 this is going to be a 6 perfect, flawless system. What we could not 7 comprehend at that time, even in the days before 8 revenue service - at least not myself - is what the 9 extent of those would be based on -- based on 10 the -- based on the opinion and position from our 11 train supplier, based on -- you know, based on the 12 testing that led up to it and everything, so ... 13 CHRISTINE MAINVILLE: Was it understood 14 that there would be increased reliance or pressure 15 on maintenance, that maintenance had to be better 16 prepared than maybe a -- it would need to be in 17 normal circumstances? 18 MIRSAD HAIRLAHOVIC: I certainly -- you 19 know, maybe others do, but I certainly can't say 20 that my opinion is that additional maintenance was 21 required. There was added retrofit work to be 22 done, but as far as what the maintenance -- what 23 the correct amount of maintenance was supposed to 24 be versus what was happening, I don't know if that 25 was a different effort, a bigger effort, smaller

```
1
    effort, right? I certainly am not a maintenance
 2
    expert.
 3
                CHRISTINE MAINVILLE: Okay.
                                              So was
 4
    there any context to, you know, Alstom's position
5
    being, We're ready? Like, what did you understand
 6
    that to mean really? You know, that there would be
7
    no issues, or that there would be issues, but we'll
8
    be able to manage them on the maintenance side?
9
    Like what -- or was that not clear to you?
10
                MIRSAD HAIRLAHOVIC:
                                      Trying to --
11
    sorry, are you asking me if Alstom was telling us
12
    they were not ready? Alstom was saying that they
13
    were ready.
14
                CHRISTINE MAINVILLE: No, but what did
15
    that mean, and did they elaborate on what that
16
    meant?
17
                MIRSAD HAIRLAHOVIC: Alstom were ready.
18
    They signed up for the Stage 2 contract. All the
19
    things that required them to -- to get the Stage 1
20
    fleet in the space of retrofits, maintenance of
21
    Stage 1 fleet, construction of Stage 2 fleet and
22
    all those things, they -- they certainly did not
23
    tell us that either one of those things is
24
    detrimental to the success of revenue service
25
    running and reliance on that. They certainly stood
```

1 behind their fleet as a fleet that is going to 2 perform and is performing. 3 CHRISTINE MAINVILLE: Was there any --4 ever any discussion of a soft start or a 5 progressive start to operations? 6 MIRSAD HAIRLAHOVIC: I wasn't part of 7 any direct discussions around that with the City, 8 but there certainly were a number of discussions 9 around that topic. 10 CHRISTINE MAINVILLE: To your 11 understanding? 12 MIRSAD HAIRLAHOVIC: My understanding 13 was that recommendation was that it makes sense. 14 Industry standard practice is to have a soft 15 rollout. My understanding is that the City was 16 certainly never going to accept that. The City 17 publicly stated that they were going to have 15 18 trains on Day 1, and that was the only thing they 19 were going to hold the contractor responsible for, 20 and they led by that, so they -- they did not want 21 to revise the terms of the system operation and 22 maintenance to -- for a soft rollout. 23 CHRISTINE MAINVILLE: Would there have 24 been any expectation of full payment by the City if 25 there had been a softer start?

1 MIRSAD HAIRLAHOVIC: From my 2 understanding is that the City's position was that 3 they were going to gauge performance based on the 4 criteria in the contract, which is 15 trains and so 5 much reliability. So if you have a soft rollout, 6 very quickly you have no payments if you're running 7 with a much reduced fleet, hence the term sheet 8 that speculated 13 trains and measuring against 13 9 trains for the payment purposes. So if you had a 10 soft rollout before that, you would have been 11 running the system with the passengers, and really 12 the RTM and RTG would not be collecting any 13 payments from the City -- well, I don't know what 14 amount, but I'm pretty sure it would be nothing 15 because very quickly, based on the requirements of 16 train availability and running, you would -- any 17 soft rollout would not make sense, so you were 18 better off just -- you know. 19 CHRISTINE MAINVILLE: Trying. 20 MIRSAD HAIRLAHOVIC: Trying. 21 CHRISTINE MAINVILLE: Would it be --22 would -- well, so would it be the City 23 completely -- like, would there be a renegotiation 24 of -- perhaps of the deductions, or you're saying 25 OLRTC would expect full payment -- or not OLRTC but

1 RTG would expect full payment despite not running 2 at full capacity? 3 MIRSAD HAIRLAHOVIC: I don't --4 certainly I'm not on their executive board. 5 not sure what their expectations were. I think it 6 may be a question to ask them, but it would be -- I 7 don't think that it would be -- that they would ask 8 for a full payment like they're running 15 trains, 9 but probably -- maybe -- maybe prorated to the 10 number of trains that they were running. 11 CHRISTINE MAINVILLE: And do you 12 know -- do you have any sense of when these 13 discussions might have taken place about a soft 14 start proposal, like to -- and was it at different 15 points in time? 16 I think the topic MIRSAD HAIRLAHOVIC: 17 was approached at different points in time, brought 18 up by different parties. Certainly would have 19 been -- not sure the exact times. Like I said, I 20 wasn't part of the discussions except for getting 21 the general feedback in our monthly updates, where 22 things are, but it would have been obviously 23 between -- sometime between the start of testing, 24 trial running, and the actual revenue service 25 achieved.

1	CHRISTINE MAINVILLE: Okay. Do you
2	know if OLRTC well, OLRTC had the obligation to
3	maintain the system before RSA; correct?
4	MIRSAD HAIRLAHOVIC: Yes.
5	CHRISTINE MAINVILLE: And do you know
6	to what extent that was being done, given all of
7	the other constraints on scheduling and testing and
8	all of the activities happening?
9	MIRSAD HAIRLAHOVIC: We met all of our
10	obligations in constructing and maintaining the
11	system that we had.
12	CHRISTINE MAINVILLE: So you would say
13	the system was handed over in good maintenance
14	condition, in properly maintained conditions?
15	MIRSAD HAIRLAHOVIC: It certainly would
16	have been part of the reporting by the project team
17	to us. I was not the maintainer myself, but those
18	requirements, those obligations, were part of
19	the the project scope, so
20	CHRISTINE MAINVILLE: And how was the
21	start of service coordinated as between OLRTC and
22	RTM?
23	MIRSAD HAIRLAHOVIC: Sorry. Can you
24	elaborate on that question?
25	CHRISTINE MAINVILLE: Well, in terms of

1 the -- I would expect that there has to be a lot of 2 transfer of information from OLRTC to RTM to allow 3 them to properly maintain the system, to understand 4 the -- everything about the -- the -- well, not 5 everything, but various information about the 6 designs and whatnot. 7 MIRSAD HAIRLAHOVIC: Okav. 8 CHRISTINE MAINVILLE: Was that -- was 9 there an ability to get that done sufficiently? 10 MIRSAD HAIRLAHOVIC: Yeah. So RTM and 11 RTG had an insight and input on the -- this -- on 12 the system as it was being designed, constructed, 13 and commissioned. So they certainly were part of 14 it. They were further then governed by an 15 interface agreement between OLRTC and RTM for --16 for certain, you know, requirements, and that 17 interface agreement included our construction contract, but RTG actually has some different 18 19 requirements than the project agreement with the 20 City where RTM needs that. 21 So certainly system design and system 22 construction, system achieving the substantial 23 completion, they were a critical part of agreeing 24 that the system was designed and constructed in 25

accordance with the project agreement.

There's a

1 period where they were critically involved with -with the testing and commissioning in order to get 3 themselves up to speed, and then there was a period 4 of time where we were there. You know, even in the 5 plan, you know, still -- you always anticipate 6 after substantial completion there will be some 7 deficiencies and having a presence and coordination 8 as far as getting the system running, the system 9 operating, and addressing any deficiencies, 10 warranty items, defects that come up, et cetera. 11 So we were between that and the final completion. 12 CHRISTINE MAINVILLE: Would there ever 13 be any -- given the interface agreement between 14 OLRTC and RTM --15 MIRSAD HAIRLAHOVIC: Yes. 16 CHRISTINE MAINVILLE: -- and the fact 17 that they're effectively the same companies, 18 largely, would there ever be -- would RTM ever take 19 on more than it normally would because -- because 20 of the partnership with OLRTC and the interface 21 agreement so that it would take -- it takes some 22 load off OLRTC and takes it onto the maintenance 23 side? 24 MIRSAD HAIRLAHOVIC: You don't know 25 these guys. These guys are actually opposite.

16

17

18

19

20

21

22

23

24

25

1 have a very -- it's -- and surprisingly, you know, its parents are the same companies, but it's --3 because we have a -- we have a different skill set 4 and different things we contribute to this, so 5 there's certainly a very thorough and strict 6 adherence requirement from RTM and RTG to us, 7 including -- and then us to what we need to provide 8 to them as the final product. So if at any point 9 RTM or RTG would -- RTM would take on a certain 10 component of what OLRTC is responsible for, it 11 would be like anything else: There would be a 12 commercial resolution, and there would be a 13 transfer of funds for that, the same thing as they 14 would have with the City. 15

anything from us. An example of something that RTM took on as part of the term sheet -- I'm not sure you're aware that we had spotters to monitor the train doors because of the cameras, so Ottawa LRTC actually was -- we were paying for those people even though RTM was managing the actual people that were there, but we were paying for that. So that was a term sheet item that was transferred to be done post substantial completion -- post revenue service, I should say, sorry, but ultimately is --

1 there is a very clear commercial agreement between 2 us and RTM that's not how that's going to be 3 handled and who has the responsibility. So we took 4 the responsibility towards the -- to resolve the 5 They were managing the spotters because issue. 6 they were operating the system, but we were paying 7 for the actual spotters. 8 CHRISTINE MAINVILLE: Do you have a 9 view as to whether RTM was ready for RSA, whether 10 at the time or in hindsight? 11 MIRSAD HAIRLAHOVIC: Do I have a view 12 if they were ready? They certainly said that they 13 were ready, and I certainly was not there to 14 evaluate what that -- their obligations were, 15 whether they were met, so I certainly can't give 16 you an opinion on that. 17 CHRISTINE MAINVILLE: Okay. What about 18 the operator? Would you have any insight into 19 their level of preparedness? 20 MIRSAD HAIRLAHOVIC: Well, both of them 21 had an extra 16 months to get ready because the 22 revenue service is late, so I don't think that 23 either one is -- is -- you know, so I would hope 24 that they were, but I'm sure that -- you know, I 25 know that they were struggling with -- with -- with

```
1
    the drivers and getting the drivers training and
 2
    all those things, right? There were struggles
 3
    getting them in the trains and all kinds of things
 4
    through -- through the testing and commissioning
5
    period, right? But it's a very convoluted process,
 6
    so it's hard to say who's ready and who's not ready
7
    when you're ultimately still trying to prove the
8
    trains.
9
                CHRISTINE MAINVILLE:
                                       Okay. Is it fair
10
    to say that OLRTC rapidly demobilized following
11
    RSA?
12
                MIRSAD HAIRLAHOVIC:
                                      It's been a while,
13
    and I still have a lot of people out there now, so
14
    I don't know -- who told you that we scattered?
15
                CHRISTINE MAINVILLE:
                                       I don't tell.
16
                MIRSAD HAIRLAHOVIC:
                                      Not -- it's not
17
    true.
18
                CHRISTINE MAINVILLE:
                                       Okay.
                                              So you
19
    think OLRTC still has sufficient resources and a
20
    presence to fulfill their obligations following
21
    RSA?
22
                MIRSAD HAIRLAHOVIC: I think that OLRTC
23
    had more resources through revenue service and post
24
    revenue service than what the initial plan was.
25
                                       In terms of --
                CHRISTINE MAINVILLE:
```

1 there was quite -- am I right that there was quite a change to the management team at OLRTC in the 3 summer of 2018, after the original RSA date was 4 missed? 5 MIRSAD HAIRLAHOVIC: What -- which 6 change do you mean? 7 CHRISTINE MAINVILLE: Well, for 8 instance, is it right that Joe Manconi was brought 9 in; Matt Slade, I think? There were changes at the 10 project director level, and then Jacques Bergeron 11 left at the end of the summer? 12 MIRSAD HAIRLAHOVIC: After the revenue 13 service. 14 CHRISTINE MAINVILLE: After the 15 original revenue service date was missed. I quess 16 my question is was there a change in direction at 17 that point in time, or was this just kind of 18 happenstance? 19 MIRSAD HAIRLAHOVIC: Matt Slade was --20 he was involved with the project before -- after 21 the first -- original RSA date was missed; correct? 22 CHRISTINE MAINVILLE: Sorry, I 23 missed -- he was what? 24 I'm asking you a MIRSAD HAIRLAHOVIC: 25 So you said that Matt Slade was brought question.

```
1
    in when the original RSA date was missed. I -- he
    was involved with the project --
 3
                CHRISTINE MAINVILLE: Oh, he was
 4
    involved before, but he became... Sorry, I think
5
    you're right. It was before -- he was systems
 6
    director as of April 2018, and then he only became
7
    project director in July 2019.
8
                MIRSAD HAIRLAHOVIC:
                                      That's right.
9
                CHRISTINE MAINVILLE:
                                       Okay.
10
                MIRSAD HAIRLAHOVIC:
                                      So he is -- so he
11
    was involved. He was -- he was the systems
12
    director because ultimately he had -- he was
13
    brought in as the person with the -- with the right
14
    train experience. Rupert Holloway, who was Exco
15
    representative for SNC leading up to his
16
    appointment as the project director, was appointed
17
    project director, and he ran the project for a
18
    period of time. He ran it -- I can't recall now.
19
                Rupert Holloway resigned from SNC and
20
    moved back to Australia. That's when Matt Slade
21
    was appointed as the project director, and the
22
    reason it was Matt Slade and not some other person
23
    appointed - we've got other candidates - is because
24
    Matt Slade -- at that time, it was about trains -
25
    train testing, train commissioning - and he was the
```

1 right person for that. Same reason we made a 2 change to have Rupert there, we make adjustments to 3 leadership to adjust to where we are currently in 4 the project. So at that time, Matt Slade was the 5 right person. Matt Slade was already leading this 6 whole train system testing/commissioning under 7 Rupert's leadership, so when Rupert left, that was 8 really the key and critical component, so that's 9 why the change. 10 CHRISTINE MAINVILLE: Okay. So there 11 wasn't a -- was there a change in tone or direction 12 in terms of, you know, we've missed the first RSA 13 date, and --14 MIRSAD HAIRLAHOVIC: No, no, that --15 certainly those two things are not connected. 16 There was no... 17 CHRISTINE MAINVILLE: Were the changes 18 to the payment milestones related to the financial 19 strain that OLRTC would have been under? 20 MIRSAD HAIRLAHOVIC: The changes to 21 payment milestones were just based on the -- based 22 on the -- how the work was progressing. I mean, at 23 the end of the day, we progressed -- we progressed 24 the work and the payment accordingly to how the 25 plan was being revised, so that had enough

24

25

1 flexibility to allow for that, but certainly not --2 not driven because of the overruns. Driven by many 3 other factors, don't get me wrong. This is not 4 overruns because -- it's not because it's costing 5 us more to do the same thing. Things have changed 6 for us. 7 CHRISTINE MAINVILLE: Do you recall any 8 issues with the testing of Thales's systems and 9 OLRTC believing that it didn't have the right 10 staff, testing staff, on site? 11 MIRSAD HAIRLAHOVIC: I... I mean, I 12 don't recall exactly the -- you know, who was not 13 the right and who was the right person, but 14 certainly we -- we expected everybody to continue 15 to perform, and if we saw that something was not --16 something or somebody was not, we certainly were 17 looking for a resolution to that, and that included 18 the -- everybody in all. So Thales had -- yeah, 19 Thales had -- we wanted everybody to give this 20 critical attention because things were changing and 21 evolving, so we certainly brought in Thales's 22 leadership to commit to that and work with us and 23 get the right resources there if they were not.

Because they're -- yeah, they needed to reinforce

the team to address the -- how we were actually

1 doing the work. 2. CHRISTINE MAINVILLE: So we didn't talk 3 much about the interface with Thales, but --4 interface between OLRTC and Thales. Were there any 5 significant challenges there? 6 MIRSAD HAIRLAHOVIC: Sorry, what do you 7 mean by "challenges"? 8 CHRISTINE MAINVILLE: Well, I would 9 say -- let's focus it. Anything that may have 10 impacted the -- their work and the -- their system 11 at the end of the day, the reliability of their 12 system? 13 MIRSAD HAIRLAHOVIC: Oh. Overall, I 14 would categorize as Thales performing -- meeting 15 their performance requirements on this project. 16 Thales was -- we didn't expect the first version of 17 the software to be the final version of the 18 software. That's part of the -- what they do, with 19 the train software. No. In this -- in that world, 20 not everything happens on the first try but as part 21 of the process. 22 Thales certainly -- they've had 23 enough -- they showed enough flexibility to adjust to the schedules and adjust to the testing. 24 25 were also -- tried to ask for additional

1 compensation for that, and they were granted that, 2 so when we as OLRTC evaluated that somebody was 3 entitled to it, you know, they were granted an 4 extension of times and changes accordingly to accelerate, to mitigate, to -- and so on, so... 5 6 certainly Thales was a critical part of getting to 7 revenue service, and we treated them as such. 8 CHRISTINE MAINVILLE: Do you have any 9 sense of whether any of the issues that were later 10 encountered with the system have to do with the 11 signalling system or the integration of it with the 12 other systems? 13 MIRSAD HAIRLAHOVIC: I mean, there 14 was -- to my recollection, there were the software 15 versions that needed to be updated as we were 16 coming to the revenue service. They were part of 17 it too, right? But Matt Slade, again, can more 18 critically answer this correctly, but I don't 19 believe -- my recollection is that they were not --20 I know that they were not the critical driver in 21 when the revenue service is going to be achieved. 22 CHRISTINE MAINVILLE: Okay. 23 MIRSAD HAIRLAHOVIC: But they were a 24 critical component within it. 25 Do you have any CHRISTINE MAINVILLE:

1 view as to the reliability of the system going forward in terms of whether -- what your 2 3 expectations are in terms of the system at this 4 point in time? 5 MIRSAD HAIRLAHOVIC: Well, I -- right 6 now, my understanding is the system is -- they're 7 meeting the requirements, whatever the requirements are now for that. I anticipate that things will 8 9 only improve as they go along. I can't see it 10 taking a step back. Certainly, I think that that's 11 the expectation from the -- this is just a 12 conversation that we're having with RTM, RTG and so 13 on, and so certainly that's the expectation and 14 that's what they're striving for, that the system 15 will -- will and continues to improve going 16 forward, and I think that they have that commitment 17 from Alstom as well, so... 18 CHRISTINE MAINVILLE: Is there anything 19 looking back that you would change in terms of how 20 the project was managed? 21 MIRSAD HAIRLAHOVIC: By? 22 CHRISTINE MAINVILLE: Anybody, but 23 let's start with OLRTC. 24 MIRSAD HAIRLAHOVIC: It's hard to say 25 that I would change how we managed it because when

1 you are in the thick of it -- that's why I always 2 have a problem with the but-for analysis of 3 schedules, when you're in the thick of it versus 4 what happens at the end. We certainly will take 5 this and go forward as a business to make sure 6 that, you know, we don't repeat the same things 7 that we could have done better and that we did 8 better, right? So, you know, bring in a sampling 9 board or something like that, that would be 10 something that you would probably do earlier and 11 make sure that that's concluded. Because, 12 ultimately, they delivered what they had to do - it 13 just cost us a lot more money than what it should 14 have. So that's a more of a financial thing 15 versus... 16 CHRISTINE MAINVILLE: What do you mean 17 by a sampling board? 18 Well, the --MIRSAD HAIRLAHOVIC: 19 recognizing clearly very early where the gaps are 20 and getting the critical conversation out of the 21 way with EJV to close that gap as far as safety 22 assurance components, right? So ultimately we did 23 it, but we did it with another party that was 24 brought in when they were brought in, and, you 25 know, when you do that, you certainly pay a very

1 high premium to get the same work done that you could have done. So that's just a -- you know, but 3 like I said before, you know, if -- this joint 4 venture certainly had requirements for this 5 project, and we did not shy to meet our 6 obligations, and that meant that we extensively 7 resourced the job, and we spent a bunch of money 8 that -- to mitigate everybody's issues because we 9 were the only ones ultimately reacting to 10 everything. That's what we did. 11 I think from the City point of view, 12 they certainly... Well, I think that they needed 13 to have a stronger organization and more 14 decisionmaking at their -- OC Transpo and that 15 level. They -- this was the first and probably the 16 only PPP project they've done, so I don't know if 17 they're going to do another one, but... Yeah. 18 decision on these projects is worse than a wrong 19 decision, and I say that's the critical component 20 that was missing from the City. 21 CHRISTINE MAINVILLE: So that they were 22 delayed in their decisionmaking? 23 MIRSAD HAIRLAHOVIC: Yes. 24 CHRISTINE MAINVILLE: And do you 25 attribute that to a lack of experience on this type

```
1
    of project?
 2.
                MIRSAD HAIRLAHOVIC:
                                      Absolutely.
 3
                CHRISTINE MAINVILLE: And when you talk
 4
    about that, is that mostly relating to the design
    book, or do you have other things in mind?
5
 6
                MIRSAD HAIRLAHOVIC: No, I mean, we
7
    really -- you know, any critical issues that
8
    were -- any critical issues that were not important
9
    to the City they just did not resolve.
                                             So we have
10
    a number of critical commercial issues, but the
11
    decisionmaking on fare gates, the decisionmaking on
12
    the ash wood, the decisionmaking on the design
13
    book, the decisionmaking for those things,
14
    everything was delayed because you had to satisfy
15
    everybody versus -- so it was popular opinion
16
    versus what's the right thing to do and force the
17
    issues. All those things delayed and impacted the
18
    construction, and for no -- and ultimately,
19
    without -- it was always a cautious approach.
20
    not to take responsibility for the issue or to --
21
    sorry, to admit responsibility for it, and that,
22
    you know, further then delayed the resolution of
23
    critical components.
24
                                              I have no
                CHRISTINE MAINVILLE:
                                       Okay.
25
    other questions, unless there's anything else you
```

```
1
    want to add, but my colleague Mr. Imbesi may have a
 2
    few follow-up questions.
 3
                ANTHONY IMBESI: No, I don't.
                                                 Thanks,
4
    Christine.
5
                CHRISTINE MAINVILLE: Anything you want
6
    to follow up on, Kartiga?
7
                KARTIGA THAVARAJ:
                                    Nothing from me, no.
8
                CHRISTINE MAINVILLE:
                                        Great.
                                                Did you
9
    have other thoughts, lessons learned that you
10
    wanted to share, or things I may not have asked
11
    about that you think we should know?
12
                MIRSAD HAIRLAHOVIC: I think we covered
13
    it in 3 and a half hours, so...
14
                CHRISTINE MAINVILLE: Well, then I'm
15
    letting you go early. We can go off record.
16
    -- Concluded at 12:29 p.m.
17
18
19
2.0
21
22
23
24
25
```

1	REPORTER'S CERTIFICATE			
2				
3	I, JOANNE A. LAWRENCE, Registered			
4	Professional 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 oath			
8	by me;			
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 5th day of May, 2022.			
17	Jours Lymes			
18				
19				
20	NEESONS, A VERITEXT COMPANY			
21	PER: JOANNE LAWRENCE, RPR, CSR			
22	COURT REPORTER			
23				
24				
25				

Ottawa Light Rail Com Mirsad Hairlahovic on S
WORD INDEX
<pre><\$ > \$32 53:9 54:20 55:10 58:4 60:8 \$400 70:10 \$500 61:18, 20, 21</pre>
<1>1 4:24 5:4, 14 22:21 34:20 36:7 90:2 95:4 101:5, 17 102:13, 15, 16 122:4, 5 123:19, 21 124:18 10,000-foot 90:1 10:35 72:4 10:50 72:5 100 54:19 99:3 118:20 119:19 12 121:3, 18 12:29 1:14 143:16 13 66:13, 16, 20 67:19 68:3, 16 110:12 115:8 118:4, 19 119:23 121:18 125:8 15 66:11, 16, 20 67:18 68:4 110:12 124:17 125:4 126:8 16 70:22 111:2 131:21 18 111:3

< 2 > **2** 5:14 25:23 92:19 96:10 101:1, 2, 3, 11, 12, 18, 20, 22 102:3, 11, 12 123:18, 21 **20** 10:5 **2009** 4:3 **2015** 5:2 8:1 11:4 34:6, 8 **2016** 34:*6*, 7 **2017** 27:*15* 30:16 34:3 76:12 77:19 78:13

2018 5:11, 12 35:24, 25 36:21 43:13 44:14, 24 55:13 76:11 133:3 134:6 **2019** 5:12 107:2 134:7 **2022** 1:8, 14 144:16

< 3 > **3** 15:24 53:19 110:1 143:13 **30** 53:8 93:9 **30-year** 63:6 **32** 55:17 **33(6** 4:2 **33(7** 4:19 **34** 33:6

< 4 > **4** 53:19 61:18, 20, 21 109:25 **45** 61:19

< 5 > **5** 1:8 4:21 33:15 71:6 77:24 **5th** 1:*13* 144:*16*

< 6 > **6** 71:6

< 9 > **9:00** 1:14 3:1 **96** 120:3 **98** 120:3 **99.9** 118:24

< A > **a.m** 1:14 3:1 ability 59:6 74:11 97:4 128:9 **Absolutely** 82:18 115:16 142:2 accelerate 44:8 138:5 accelerated 42:10 43:23 acceleration 41:15, 19 42:11, 21 44:13 72:22

accelerations 57:1 accept 39:16 101:25 124:16 acceptance 20:24 accepted 120:6 accepting 102:3 access 81:3 96:14 accommodate 101:*13* accomplished 81:6 accounted 42:11 accurate 42:6 68:7 107:12 118:9 achievable 74:16 82:7 achieve 52:11 97:18 100:14 achieved 126:25 138:2*1* achieving 128:22 acquiring 24:20 **ACS** 104:8 **Act** 4:3, 19, 22 acting 37:10 action 35:21 actions 83:7 88:9 activities 127:8 **actual** 18:11 25:20 26:10 27:4 62:15 80:15, 25 87:25 89:9 96:20 107:10 108:11 112:7, 17, 21 116:5 120:11 126:24 130:21 131:7 **actuals** 108:15 add 74:1 143:1 added 101:15 122:21 additional 27:19 30:17 31:25 46:24 56:25 64:25 101:*13*, 14 122:20

137:25

address 114:*15* 136:25 addressed 99:9 addressing 15:*15* 129:*9* adds 94:12 adherence 12:11 130:6 adheres 13:9 adhering 87:15 adjust 36:16 109:11 135:3 137:23, 24 adjustments 9:25 135:2 administered 81:22 administering 88:2 administration 80:25 84:11 admit 142:21 advised 4:20 affirmation 3:4 **after** 3:16 5:3, 12 7:23 49:4 55:13, 17 58:4 83:7 108:22 129:6 133:3, 12, 14, 20 aggressive 75:6, 13, 14 **agree** 83:6 agreed 32:7 50:12 67:23 80:14 agreeing 128:23 agreement 6:6 67:11 90:21 120:*21* 128:*15*, 17, 19, 25 129:*13*, *21* 131:*1* **ahead** 10:7 49:23 116:11 119:*15* align 34:19 35:3, 19, 20 36:4 61:8 **aligned** 81:21 alignment 36:3 alleviate 51:2 allocated 64:18 allocation 91:24 92:16

allotted 27:19

allow 66:9 128:2 136:*1* **Alstom** 11:25 14:22, 24 15:7, 12. 25 16:23 22:7, 17 25:1, 7, 11 26:9 28:15, 21 32:16 33:9, 12, 14 34:11, 15, 18 35:20 37:25 76:9 77:13, 23 78:10 79:6, 10, 12 81:9 86:11, 22 87:22 89:17 90:2, 3, 18 98:*15* 101:*24* 102:2, 11, 25 103:5, 12, 19, 25 104:10, 12, 15, *17*, *23* 105:*8*, *13*, 18. 23 106:15 109:1 112:17 114:3, 13, 17 115:*5*, *14*, *19* 116:*4*, *7* 117:*4* 123:11, 12, 17 139:17 **Alstom's** 26:24 28:21 32:23 35:10 76:23 77:23 78:19, 20 87:3 104:3 106:20 109:19 123:*4* Alstom-Thales 29:5 alternate 5:4, 5, 7 7:7 77:22 amount 30:6 49:3 53:2, 11, 13 62:15 112:12 113:10 122:23 125:14 amounts 52:6, 24 114:2 analysis 48:6, 16 85:16 87:10 116:18 140:2 analyzed 47:5 animal 55:8 announced 84:16, 20 announcements 85:2

announcing 84:23 **answers** 39:21 Anthony 2:4 56:10 143:3 anticipate 29:10 129:5 139:8 anticipated 119:4 anybody 60:7 73:23, 24 139:22 **anybody's** 39:12 appended 3:25 **applied** 52:15 53:6, 17 54:3 apply 41:12 53:15 appointed 5:13 134:16, 21, 23 appointment 134:16 appreciate 17:2 29:15 69:1 77:8 104:24 108:*16* apprised 72:8, 11 approach 142:19 approached 13:23 126:17 approaching 69:11 appropriate 78:8 85:23 93:4 105:24 113:14 approved 9:24, 25 **April** 134:6 arbitration 18:*13*, *16* 109:*22* architectural 50:1 area 46:25 areas 107:25 arising 28:6 29:4 **arrive** 68:1 arriving 7:19 articulate 15:5 44:10 107:25 articulated 18:1 30:14 44:5

45:3 75:22 artificially 74:15 **ash** 50:1 51:19 58:15 142:12 **aside** 51:5 85:4 asked 4:6 77:25 143:10 **asking** 18:20 51:25 79:6 123:11 133:24 **aspects** 110:14 assemble 86:20 assembled 16:18 26:8 27:7 28:11 assembling 27:11 106:10 assembly 25:20 26:1, 6 27:5 75:25 86:7, 9 90:15, 16 92:13 98:18 assessment 85:23 assigned 85:24 **assist** 23:10 associated 88:19 **assume** 44:15 assurance 12:16 14:18 17:2*0*, 2*5* 140:22 attempt 43:5 52:25 75:11 attend 7:8, 10, 14 attending 1:13 attention 136:20 attest 21:18 attribute 141:25 attributed 47:8 Australia 134:20 authority 6:14 automated 96:4. 5 automatic 101:15, 16 availability 26:16 31:7, 23 68:12 96:19 98:6 105:10 108:5 109:2 125:16

available 7:9,

11 30:24, 25

31:12 48:17, 18 68:4 79:24 97:4 99:5 111:18 average 119:25 award 11:21 aware 38:16 45:12 56:10, 11 67:4 68:20 74:6, 7 76:14, 23 99:10, 12 103:11, 22 104:12 108:14 111:6 113:8, 13, *17*, *18* 117: *1*, *5*, 8, 10, 12 130:18 < B > back 28:8 43:17 45:21, 22 54:20 55:11 68:24 70:4 77:24 82:21 89:9 109:7 134:*20* 139:*10*, 19 background 7:19 105:15 **badge** 64:5 balances 16:22 ballpark 61:12 62:12 **banks** 53:4 **barrier** 18:*1* **based** 27:18 32:15, 18 68:17 91:16 101:25 122:9, 10, 11 125:3, 15 135:21 basically 29:2 **basis** 3:20 9:22 22:7 108:17 **bearing** 88:19 bearings 89:2, 4, 5 behalf 83:4 **believe** 17:10 21:14 31:14 33:15 34:6 53:23 138:19 believed 44:25

believing 136:9

bell 120:3

Bergeron 10:*18* 16:3 133:10 **best** 19:25 20:3 39:7 75:1 better 22:2 43:9 92:23 93:17, 18 107:11 120:25 122:15 125:18 140:7, 8 big 14:16 37:2 63:19 99:25 **bigger** 62:17 63:22 99:6 122:25 **Bird** 8:16 **bit** 7:18 48:7 55:8 87:19 88:24 99:6 **black** 16:16 **Blair** 31:16 **blamed** 70:11 **board** 126:4 140:9. 17 **bogie** 88:20 **bogies** 27:9 **book** 32:21 33:11. 18 96:1 142:5, 13 books 60:9 **born** 7:20 **box** 16:*16* **brain** 118:7 **brake** 29:16. 18. 19 **brand** 90:13 **break** 72:3 breakdowns 87:6 89:10 **bring** 27:6 65:2 140:8 bringing 33:2 **British** 17:11 **broad** 25:3 broader 88:24 107:22 brought 11:23 12:*14*, *15* 17:*4*, 5, 11, 16, 19 19:3, 8 32:18 49:9 61:5, *15*, 17 70:10 104:13 112:18 126:17 133:8,

25 134:13 136:21 140:24 **Brunswick** 7:23 **budget** 62:12. 16 85:6, 7, 10, 18 **bugs** 28:22 **build** 33:5 94:24 building 92:12, 14 100:2 buildings 86:24 **built** 32:17 **bunch** 35:13 57:10, 12, 14 141:7 **burden** 58:22 70:17 97:11 **burn-in** 76:3 burning 28:2 **bus** 8:21 **buses** 53:25 **business** 64:21, 22 92:7 140:5 **but-for** 85:16 140:2 < C > cabin 32:22 95:9 calculated 53:4 call 16:16 106:17 108:24 calls 114:11 cameras 130:19 Canada 4:21 5:18 86:23 91:6 Canadian 86:21 91:5 candidates 134:23 capacity 126:2 captured 6:23 car 98:17

categorize
137:14
causation 31:25
caused 50:23
87:13 88:8, 11
cautious 142: <i>19</i>
caveat 43:15
caveats 42:25
caveats 42:25 43:6, 8 45:5, 8
CBTC 14:23
certain 3:7
16:9, 17 29:18
30:6 35: <i>4</i>
40:23 49:3
53:10, 11 75:2 83:20 128:16
83:20 128: <i>16</i>
130: <i>9</i>
certainly 10:6,
<i>18</i> , <i>23</i> 15:23
16: <i>8</i> , <i>1</i> 2 18:20
19:23 21: <i>1</i> , <i>5</i> ,
<i>14</i> , <i>16</i> , <i>25 22</i> : <i>4</i> ,
5 27:23 29:8
30:10 33:23 35:5 36:2, 7 37:22 39:4, 11,
35:5 36:2, 7
37:22 39: <i>4</i> , 11,
22 40:1 42:16,
<i>18</i> 43:7 44: <i>5</i>
46: <i>15</i> 47:3
50:16 51:21, 23
52:24 54:11
55:15 56:12
59:4 60:7
63:20, 25 64:19,
22 67:1 68:7
69:18 70:14
73:9, 22 74:5,
19, 24 75:11, 14
76:20 77:6
82:8 83:15, 21
85:15 86:9
88:18 89:24
90:23 91:22, 23
93:17 94:11, 14, 18 95:11 96:24
18 95:11 96:24
97:12 98:21, 24
100:2 105:7
106: <i>10</i> , <i>18</i>
107: <i>11</i> 108: <i>4</i>
112: <i>1</i> , <i>4</i> , <i>1</i> 9, <i>22</i>
113:12 114:16
117: <i>11</i> , <i>18</i> , <i>23</i>
118:8 119:5, 6 120:4, 10, 12
120.4, 10, 12 121.6 122.10
121:6 122:18,

19 123:1, 22, 25 124:*8*, *16* 126:*4*, 18 127:15 128:13.21 130:*5*, *15* 131:12, 13, 15 135:*15* 136:*1*, 14, 16, 21 137:22 138:6 139:10, 13 140:*4*, *25* 141:*4*, 12 certificate 99:17 144:1 certifier 37:15 38:17, 22 39:1 certifiers 39:16 **certify** 144:*4* cetera 9:22 10:13 26:12, 18 28:3 30:6 31:8 46:3 48:11, 12 50:7 51:20 68:14 83:6 89:5, 6 93:11 95:11 104:22 105:11 108:12 120:7 129:10 challenge 25:10 74:11 challenges 21:20 22:5, 13, 18 24:20 25:9 73:17 74:1, 2, 6, 7, 9 75:15 89:13, 16 107:*16* 137:*5*, *7* challenging 73:20 75:10 89:19 change 20:21 21:2 30:3 69:20 77:13 101:12 110:2 117:25 120:20 121:3 133:2, 6, 16 135:2, 9, 11 139:19. 25 changed 28:9 114:*13* 118:2 136:5 **changes** 42:19 50:10 118:6 133:9 135:17,

20 138:*4*

Changing 74:17 136:*20* characterize 62:23 72:16 75:6, 12 85:6 **charge** 11:12 12:2*4* **charges** 52:19, 23 54:3, 19 **chart** 9:23 **chase** 58:18 **checked** 100:5 **checks** 16:22 **Chief** 5:17 **choice** 86:14, 15, 18 Christine 2:3 3:2 5:*15*, *19*, *22* 6:1 7:2, 6, 12, 17 8:8, 19, 24 9:3, 9, 14 10:15 11:2, 9 12:20, 23 13:5, 14 14:2, *14*, 20 15:18, 20 16:1 17:3, 7, 12, 14, *21* 18:5, *14* 19:14 20:9, 14, 20 21:3, 7, 19 23:2, 6, 15 24:24 25:5, 8, 13, 16 26:22 27:12 28:5, 18 29:1, 7 30:7, 12, 15 31:2, 9, 15, 18 32:8 33:7, 19, 25 34:9, 12, 16, 21, 24 35:2, 7 36:10, 20 37:7, 12, 17 38:8, 14, 25 39:23 40:3, 8, *22* 41:*4* 42:*4*, *9*, 24 43:2, 10 44:2, 11, 20, 23 45:5, 7, 13, 22 46:5, 11 47:9, 13, 20 48:20 49:7, 13, 16 50:14, 25 52:2 53:1 54:2, 8, 13, 21, 24 55:12, 18, *24* 56:2, *6*, *14*, 19, 21 57:6, 11, 14, 18 58:24

59:7, 16, 20, 22 61:11, 19, 21, 24 62:11, 20 63:2 64:6 65:1, 6 66:2, 24 67:3, 17 68:2, 19, 23 69:8, 24 70:3, 23 71:25 72:2, 6, 10 73:6, 12, 19 74:3, 13, 22 75:4, 18 76:8, 18, 22 77:9, 18 78:16 80:4, 11 81:25 82:5, *14*, 19 83:13, 19, 25 84:15, 18, 25 85:4 86:2, 17 87:2 88:13, 21 89:8 90:25 91:19 92:1, 3, 6, 17, 22 93:20, 24 94:*4*, *20* 95:*5*, 14, 19, 25 96:3, 7, 16 97:3, 14 98:*8* 99:*10*, *14*, 20 100:16, 23 101:*4*, *8*, *23* 102:4, 12, 16, 19 103:5, 8, 11, 17, 21 104:11, 16 105:*5*, *14*, *17* 106:5, 19 107:1, *15, 20* 108:*8, 18* 109:13. 18 110:13, 18 111:5, 9, 19, 22 112:3, 11 113:2, 5, 8, 16, 22 114:6, 25 115:13, 17, 25 116:8, 11, 21, 25 117:*7*, *21*, *24* 118:*11*, *22* 119:1, 11, 14, 24 120:9, 19 121:2, 14, 20, 23 122:13 123:3, *14* 124:3, *10*, 23 125:19, 21 126:11 127:1, 5, 12, 20, 25 128:8 129:12, 16 131:*8*, *17* 132:*9*, 15, 18, 25 133:7, 14, 22 134:3, 9

135:*10*, *17* 136:7 137:2, 8 138:8, 22, 25 139:18. 22 140:*16* 141:*21*, *24* 142:3, *24* 143:4, 5, 8, 14 circumstances 122:17 City 17:4 32:21 33:12 43:12, 16 44:16 46:18 49:8, 11 50:16, 19 51:1, 5, 17 52:8, 9, 16 53:6, 10, 16, 19 54:9, 15, 17, 19 55:6, 8, 23, 25 57:21, 23, 25 58:23 59:1, 6, 8, 14 60:7 65:23, 24 66:9 67:5, 15 69:25 70:7, 11, 20 71:6, 17, 18 72:8, 11, 15, 23 73:5, 14 80:3, 8 81:7, 17 82:20 83:4 84:1, 6, 14, 20 86:22 88:6 90:3 92:19 93:23 94:5, 7 97:11 104:13, 21 105:19, 23 106:*9*. *10* 116:*16* 124:*7*, 15, 16, 24 125:13, 22 128:*20* 130:*14* 141:11, 20 142:9 City-caused 44:1 **City's** 66:3 68:20 125:2 civil 4:9 7:21 8:17 45:25 48:13 CJV 35:22 **claim** 32:23 33:11 43:15 51:6, 10 62:4 claiming 76:16 **claims** 41:20 43:11 47:6 clarify 11:8

clear 12:10 15:6 17:1 37:5 42:1 60:8 65:17 66:7 119:2 121:24 123:9 131:1 clearly 15:6 36:8 73:24 86:20 140:19 client 74:25 91:15 93:16 clients 39:15 41:20 close 12:15 17:16, 25 120:17 140:21 closed 14:11 cocounsel 3:6 code 100:2 Co-Lead 2:3 collaborative 3:6 61:7 colleague 143:1 collecting 125:12 collective 115:6 116:17 combination 106:8 come 11:1 15:5 24:12 29:22 72:24 129:10 comes 10:3 16:9, 10 49:4, 6 52:18 89:23 97:23 98:16 coming 7:25 8:13 98:17 109:3 138:16 commence 3:14
commencing
3: <i>1</i>
comments 39:13
commercial 61:4 71:5, 21
78: <i>18</i> 130: <i>12</i>
131:1 142:10
commercially
78:21 80:14
COMMISSION
1:6 2:1 3:11
20:3 47:23
commissioned
128: <i>13</i>

commissioning 10:*13* 12:*2*, *4*, 25 15:17 22:20, 25 23:3 35:12 48:12 80:2, 7 108:1 110:8 111:23 121:12 129:2 132:*4* 134:25 Commission's 3:5, 12, 15, 18 commit 136:22 commitment 66:17 97:8 114:12 139:16 committee 5:5 6:2, 7, 13, 17, 18 9:24 10:1 77:10, 17 113:17, 18 118:*12* **common** 61:8, 9 91:20 communicate 75:3 companies 57:4 58:5, 22 63:19 64:17 85:19 104:9 106:14 129:17 130:2 company 5:2, 25 7:5, 24 51:17 70:8 92:24 144:20 compared 75:23 compensated 63:4 compensation 43:24 138:1 complement 24:14 complete 33:2 completed 33:1 90:8 98:10 100:8 102:1, 8 completely 125:23 completing 32:25 63:21, 22 completion 65:2, 9, 19 77:16 99:17 100:*4*, *9*, *10*

101:2, 19, 21, 22

128:23 129:*6*, 11 130:24 complex 48:8 89:23 complexity 21:12 compliance 117:17 component 9:6 14:16 15:10 26:8, 9, 18 30:4 31:6 33:12, 13, 14 47:7 48:3, 8 51:11 71:19 82:9 92:21 94:11 96:11 99:2 101:20 130:10 135:8 138:24 141:19 components 13:3 16:19 22:9 32:23 50:5, 11 52:7 90:17, 23 99:23 100:8 101:*12* 140:22 142:23 comprehend 122:7 compressed 110:14, 24 compromise 59:9 concerned 32:16 **concerns** 38:16, 22 39:12, 14 82:6 112:12 113:*9*, *14* 114:15 118:13 concessionaire 52:19 104:8 concluded 33:9 140:11 143:16 conclusion 32:14 115:8 119:22 concrete 17:1 114:*19* concurrently 75:20 condition 127:*14* conditions 127:*14*

confidential 3:19 18:12 confidentiality 62:4 configuration 95:8 confirmation 64.9 confirmed 38:7 52:24 conflict 24:4 **connect** 71:13 connected 31:7 81:22 94:*17* 121:10, 11 135:15 connectivity 46:3 49:1 consecutive 121:3 conservative 119:*18* consider 92:12 consideration 94:9 considered 25:25 consortium 23:8. 14 constituted 20:12 constraints 127:7 construct 47:21 constructed 86:7 112:8 128:12, 24 constructing 127:10 construction 7:24 8:6 9:7, *13* 10:5 12:9, 12 17:6 23:23, 25 24:7, 11, 16 46:1 47:16 52:20 53:12 57:3 62:13 63:11 64:8 65:11, 12 80:16 82:16, 24 83:2, 8 87:22, 23 88:14, 18, 23 89:1 118:18 123:21 128:17, 22 142:18

constructor 96:13 97:10, 15 102:22 104:8 Constructors 2:9 consultant 17:11 consulting 12:19 contemplated 53:13 **content** 86:21 context 29:9 33:8 35:15 40:19 41:21 53:7 57:19 74:5 123:*4* continuance 48:1 continue 5:16 40:12 69:22 136:*14* continued 53:6 71:17 continues 139:15 continuing 65:14 continuity 76:6 112:6 continuous 30:1 65:4 67:7 108:5 continuously 22:18 81:16, 17 contract 9:7 20:18 23:1 24:1 38:3 39:10 40:2, 16, 18 52:21 53:11 58:12 60:23, 25 62:15 63:7, 21 66:10 76:20 82:25 83:8 86:14, 19 91:8 94:19 95:3 104:*4*, 7 114:*18* 117:*4* 118:*4* 120:7, 14 122:4 123:18 125:4 128:18 contractor 52:20 124:19 contracts 9:11

11:21 13:21

35:3 63:2 <i>4</i>
88:2 91:25
103:19 104:10
contract's
119: <i>10</i>
contractual
15:6 25:12
41:11 70:19
contractually
40:2 <i>4</i> 78:1 <i>8</i> , 21
80:2 <i>4</i>
contribute 58:7,
17, 19 87:14
130: <i>4</i>
contributed
60:24 87:5
88:15 89:12
90:18, 22 95:7
contributing
58:21
control 12:2
13: <i>4</i> , <i>11</i> , <i>16</i>
18:8 20: <i>4</i>
26:10 11 29:13
26:10, 11 29:13, 17, 20, 23, 25
17, 20, 23, 23 17:25 51:20
47:25 54:20 94:19 101:16
111: <i>14</i> , <i>16</i>
controls 8:4
conversation
120: <i>15</i> 139: <i>12</i>
140:20
conversations
51:16 67:23, 24
77:7 113:3, 7
120:5, 8, 12 convey 71:11
convey 71:11
conveyed 73:14
113:9
conveying
109: <i>20</i>
convoluted
132:5
coordinated
35:14 127:21
coordination
15:13 22:3
95:23 105:22
106:3, 16 129:7
coordinations
104:2 <i>1</i>
correct 3:22
31:17 45:9
53:2 75:20
99:18, 19
33.10, 1 3

115:20 122:23 127:3 133:21 144:*14* corrections 3:16, 18, 25 corrective 88:9 correctly 138:18 **cost** 64:20 140:13 cost-cutting 64:12, 20, 23 **costing** 61:17 85:*9* 136:*4* costs 44:10 cost-saving 70:6 COUNSEL 2:1, 3, 4 3:8, 19 59:23 countersued 49:20 countersuit 55:23 counting 13:4 **couple** 27:19 65:*4* 114:*14* course 112:7 **court** 71:5 144:22 **covered** 143:12 **create** 24:13 32:19 created 43:22 86:25 crew 27:10 criteria 117:2, 8, 25 118:2 125:4 critical 11:22 22:9 24:23 27:25 28:13 30:3 31:6 32:23 35:18, 21 39:13 46:6, 7, 9, 10, 16, 17 47:1, 7 48:5. 15 69:14 71:18 77:14 82:9 95:4 96:18, 22 97:7 99:9 100:8 106:9 108:22 112:25 115:23 117:*18*, 23 128:23 135:8 136:*20* 138:*6*, *20*, *24*

140:20 141:19 142:7, 8, 10, 23 criticality 28:13 49:6 69:6 100:11 critically 22:7 26:2, *4*, 20 27:17, 22 30:23 48:25 129:1 138:*18* Crown 4:11 **CSR** 144:21 **cube** 17:1 114:*19* current 5:17 91:3 currently 5:20 135:3 **custody** 97:20 < D > daily 22:3, 4 37:3 53:2, *4* 54:2 56:16 105:*25* 108:*17* damage 44:9 52:18 damages 46:22 51:2, 7, 10 52:3, 7 56:16 88:5, 6 dashboard 9:20 107:7 117:13 date 30:25 33:17, 20 39:3 40:23 41:23, 25 42:3, 11 43:13, 17, 20, 21, 22 44:*14*, *24* 45:*9* 50:23 55:13, 17 67:22 69:10 73:4, 5 74:14, 18 76:11 78:3, 18 84:2 133:3, 15. 21 134:1 135:*13* **Dated** 144:16 dates 27:25 40:*18* 80:*14*, *22* 83:17 84:9, 10, 12, 16, 23 day 1:13 13:19 19:22 22:21 25:22 30:21 34:20 36:7

39:7 45:19

46:10 54:3 69:2 90:2 95:*4* 108:*11* 122:*4*, *5* 124:*18* 135:23 137:11 144:16 days 21:8 121:*4*, 8 122:7 day-to-day 6:24 deal 55:7 79:19 109:2, 6 dealing 57:1 113:*15* **dear** 61:*15* **Deasy** 2:17 **debt** 52:22 54:12, 15, 16 55:25 decision 67:18 141:18, 19 decisionmaking 6:14 95:23 141:*14*, *22* 142:11, 12, 13 decisions 6:22 **deck** 106:18 dedicated 8:23 deducted 55:5 58:*4* deducting 55:2 deductions 66:18, 19 125:24 deemed 4:5 default 18:3 defect 87:22, 23 88:14, 19, 23 89:1, 6 **defects** 104:1 129:10 deferral 102:22 deferred 98:9 102:17 deficiencies 99:11, 21 100:1, 4 129:7. 9 deficiency 100:21 **defined** 16:25 definition 61:9 degree 7:22 delay 25:17 32:20 33:3, 11, 18 42:21 43:11, 12, 15 44:16 45:25 46:15, 17 47:2, 7 48:6, 13

49:8 51:3, *6*, *8*, *11, 12 52:4, 18* 54:17, 18 78:13, 20 103:2 delayed 27:22 32:24 36:2 38:5 44:19, 21 45:25 46:2, *4* 47:14 48:13 53:*15* 54:*4* 75:25 78:1 96:24 101:5 141:22 142:*14*, 17, 22 delaying 28:10 100:*4* delays 30:8 37:20 43:25 56:22, 25 72:8, 12, 15 78:9 84:1, 2, 8 85:14 90:7 **deliver** 25:11 28:17 114:17 delivered 31:3 63:18 140:12 delivery 20:18 26:20 27:4, 20 35:3 36:4 demobilized 132:10 deny 77:12 **depends** 74:10 derailed 89:7 derailment 87:15, 24 88:5, 9 derailments 87:7, 9 88:16 89:10 design 8:17 9:13 12:4 24:1 27:18 32:20, 21 33:10, 18 47:22 85:11 94:24 96:1 128:21 142:*4*, *12* design-build 9:6. 11 designed 128:12, 24 designs 128:6 despite 44:12 79:1 126:1 detail 69:19 detailed 81:4

1 4 11 00 4
aetaiis 22:1
details 22:1 30:11 32:2
33:23 35:17
36:13 55:20, 22
60:5 79:8
108.10 112.2
120:11 121:7
120.11 121./
deterioration
71:23
determining
77:12
detrimental
123:2 <i>4</i>
developing 39:8
90:19
devising 38:9 dialogue 67:8
dialogue 67.8
00.00
83:22
difference 88:1
93:21
different 10:9,
10 13:20, 21
18:25 23:17
24.73, 70 34.23
63:12 65:13, 21
72:22 74:8
24:13, 18 34:25 63:12 65:13, 21 72:22 74:8 81:1 91:16
02:10 100:10
93:10 100:10
104:9, 10 108:2
112:22 122:25
126: <i>14</i> , <i>17</i> , <i>18</i>
120.74, 77, 70
128: <i>18</i> 130: <i>3</i> , <i>4</i>
differently
72:13 86:16
difficult 120:17
difficulty 23:9
direct 10:4
15:12 89:9
124:7
direction
133:16 135:11
directly 6:11 10
directly 6:11, 12
10: <i>1</i> 2 14: <i>5</i> 35: <i>9</i> 69: <i>25</i>
35:9 69:25
director 6:11
director 6:11, 12 8:6 37:11
12 8.0 3/:11
106:2 133: <i>10</i>
134:6, 7, 12, 16,
17, 21
directors 71:1
disagree 83:6
disclosed 62:9
disconnected
70:16 101:1

··
discrepancy 34:17 discuss 51:6 discussed 77:5 discussion 45:11 47:12 61:16 78:7 109:14 110:5 124:4 discussions 67:13, 14 77:3 110:3 114:7 124:7, 8 126:13, 20 dismiss 39:12 dispute 19:2, 11 102:6, 21 112:17 disputes 70:19 103:22 disruption 107:8 documented 108:17 documents 16:24
110:3 114:7
124: <i>7</i> , <i>8</i> 126: <i>13</i> ,
dismiss 39:12
dispute 19:2 11
102:6, 21 112:17
103:22
doing 15:2
17: <i>18</i> 36: <i>14</i>
40:15 68:10
69:3, 18 79:15
107:9 109:8, 9
116:20 137:1
dollars 57:5 domino 28:11
domino 28:77 doors 130:19
DPICO 22:16
Dragados 5:2
10 14 18 7·10
8:1 91:6 104:9
10, 14, 18 7:19 8:1 91:6 104:9 dragging 71:19
draw 60:16
drive 100:2
driven 108:3
119:21 136:2
driver 138:20
drivers 80:9
132:1
driving 90:24 100:3
drop 120:2
drove 26:19
due 60:19
duplication
13:25
. F .

< E >

eager 84:4

!: 7.7 0.40
earlier 7:7 9:19
21:8 26:7
75:22 77:22
75:22 77:22 88:3 94:24
96:1 140:10
early 5:12 8:17
27:18 34:7
36:21 77:24
140:19 143:15
ease 58:21
easier 27:7 easy 36:18
935V 36:18
58:11
effect 28:11
45:8
effectively
40:2 <i>4</i> 59:9
61:25 129:17
01.20 129.17
effort 14:1
61:7 100:7 108:3 122:25
108:3 122: <i>25</i>
123:7
efforts 44:9
57:1
Eglinton-Finch
91: <i>14</i>
EJV 17:17, 22
18: <i>6</i> , <i>13</i> 19: <i>1</i> ,
11, 18 140:21
elaborate 8:7
42:20 59:10 123:15 127:24
123: <i>15</i> 127:2 <i>4</i>
Elizabeth 2:17
encountered
21:21 89:14, 17
107:4 138:10
encountering
119:2
ended 61:17
85:9 121: <i>10</i>
end-to-end 48:3,
21
engaging 79:21
engineer 8:4, 5
engineering
7:22 12:3, 8, 24
19:16, 20 20:1,
6 22 22.17
6, 22 23:17
24.1 04.12
engineers 23:24
ensure 115:9
enter 3:11
entered 3:16, 20,
24
<u>- '</u>

entire 12:5, 7
13:1 18:7 49:2
104:18 111:6,
10, 12, 13, 18, 24 112:24
entitled 138:3
entitlement
49:12 78:7
entity 19:17
103:20 entry 121:25
environment
6:20 90:5, 11, 20 equipped 16:12
equipped 16:12
error 87:17
errors 3:22 escalated
114: <i>11</i>
escape 10:20
35:23
escapes 12:18
especially 70:14 establish 4:9
87: <i>19</i>
establishing
93:12 119:19
ethical 24:2
evaluate 16: <i>11</i> 131: <i>14</i>
evaluated 86:12
138.2
evaluating 66:15 event 43:15
event 43:15
47:8 49:8, 9 51:6 74:18
events 43:12
85:13 121:6
everybody
22: <i>14</i> , <i>17</i> 32: <i>6</i> 36: <i>25</i> 37: <i>1</i>
50: <i>19</i> , <i>20</i> 65: <i>11</i>
74:6, 18, 19
79:25 80:2, 6
84:4 88:8
100: <i>12</i> 106: <i>10</i> 118: <i>19</i> 121: <i>24</i> ,
25 122: <i>4</i> ,
136: <i>14</i> , <i>18</i> , <i>19</i>
142: <i>15</i>
everybody's
24:11 88:7
89:3 141:8 evidence 3:4,
12, 17, 20, 24
4: <i>14</i> , <i>18</i> , <i>22</i>

66:8, 22 88:10 119:8 evidenced 36:8 **evident** 73:10, 13 evolution 85:11 **evolved** 109:12 118:2 **evolving** 136:21 exacerbated 90:6 **exact** 5:10 44:4 52:6 77:7 104:6 126:19 **exactly** 10:10 27:16 73:9 106:17 109:23 136:12 examination 144:11 example 14:1 72:18 93:7 130:16 **examples** 91:13 exchange 51:25 82:22 exchanged 108:*17* exchanges 51:22 excluding 13:6 **Exco** 7:1 77:1 134:*14* executed 66:11 execution 106:1 **executive** 5:5, 6, 7, 13, 25 6:2, 6, 12, 16, 17, 18 9:24, 25 59:14 68:8 77:10, 17 106:3 108:21, *25* 109:*14* 113:17, 18 114:12 118:12 126:*4* executives 104:19, 20 105:*18* 115:*14* exist 104:25 existed 105:2 existing 93:11 **exists** 33:24 99:13 103:20 108:14

evnect 22:22
expect 22:22 59:1, 5 114:2 125:25 126:1
105.7, 5 114.2
125:25 126:7
128:1 137:16
expectation
22:21 26:15
124:2 <i>4</i> 139: <i>11</i> ,
13
expectations
126:5 139:3
expected 57:19,
20 22 58·25
20, 23 58:25
119:3 136: <i>14</i>
experience 7:18
8:9, 11 10:11,
21, 23 85:20
87:3 134: <i>14</i>
141:25
expert 14:4
16:7 42: <i>1</i> 7
87:13 89:24
92:13 98:22
123:2
expertise 87:4
experts 10:10
12: <i>13</i> , <i>16</i> 13: <i>21</i>
16: <i>5</i>
explain 6:2
43: <i>3</i> , <i>5</i> , <i>9</i>
explained 42:22
explanation 4:24
expressed 38:17
extended 53:9,
•
25
extension 41:3,
6, 8, 16 46:19
77:15, 25 78:11,
<i>14</i> , <i>22</i> 81: <i>7</i> , <i>8</i>
138: <i>4</i>
extensions
81: <i>18</i>
extensive 93:5
99:15
extensively
141:6
extent 9:15
29:21 79:15 90:17, 18, 20, 24
90:17, 18, 20, 24
94:3 98:20
107: <i>4</i> , 9 108: <i>1</i> 9
109:7 122:9
127:6
external 85:14
extra 57:10, 12,

14 6	61: <i>12</i>	131: <i>21</i>
<f></f>		
		15: <i>16</i>
facili	tice	00.70
Tacili	ties	86:23
tacili	ty 8:	15
86:5	, 7, 8	89:15
fact	58:3	15 89:15 70:10, 1, 15, 79:1
18 7	71:3, 4	1, 15,
20 7	78:2 <i>4</i>	79:1
129:	16	
facto	rs 1	36:3
	62:	
	11 1:	
	ial 4	
faile	d 25:	15
failu	re 87	.20
	69: <i>19</i>	
72.0	1 11	5·1 <i>1</i>
	1 11	
119:	12 13	∠1. <i>∠4</i>
122:	2 13	2:9
		77:16
famil	iar 5	51:1
famil	liarity	118: <i>7</i> 51: <i>19</i>
fare	50:7	51: <i>19</i>
58:1	6 14	2:11
fault	41: <i>1</i>	0 79:1
fault	y 87:	15
89:7		
feedl	back	126:2 <i>1</i>
felt	17:16	, 17
	85:2	
114:		
	8: <i>4</i>	16:8
87:4		
	49:23	
	55:2	
filing	49:2	22
	23: <i>9</i> , 2	
24:2		- /
	g 23:	20
final	27:2	0
55: A	64:1	16
05.4	04.1	. <i>E</i>
05.Z	0 76 5 90 7 95	
77:1	5 90	.22
94:1	7 95	100 1
99:1	b, 1/	100: <i>4</i> ,
)1:21	
	10 1	
130:	8 13	7:17
finali	ze 9	6: 12
finali	zed	87:11,
12		
	y 4:2	2
67:2	3	

financial 33:13
56:22 57:3
61:23 62:5, 25
64:3, 14 66:19
70: <i>4</i> 135: <i>18</i> 140: <i>14</i>
financially 64:2
financially 64:2 financing 52:19,
23 54:3
find 16:7 20:6
23:19
finding 23:9
fine 60:2 62:3
65:16
finger 105:12 112:20
112.20 finish 38:1
finish 38:1 52:21 53:7 57:5 61:5 79:7,
57:5 61:5 79:7.
9 81:11
finished 58:6
112:7
finishing 27:24 38:21, 23 79:8
38:21, 23 79:8
firing 118:7 firm 12:19
firm 12:79
firsthand 11:19 fit 40:16, 25
43:3 78:2
flavour 71:21
flawless 121:25
122:6
fleet 32:19
33:5 68:17
123:20, 21
124:1 125:7
flexibility 136: <i>1</i> 137:23
flexible 109:11
float 75:15
flow 51:7
flowed 51:3
fly 34:4 60:17
106: <i>14</i>
focus 137:9 follow 143:6
follow 143:6
followed 42:19 47:17
following 72:19
98: <i>12</i> 132: <i>10</i> , <i>20</i>
follow-up 3:9
143:2
force 39:19
142: <i>16</i>

foregoing 144:5, 13 forget 12:17 37:1 form 15:23 77:6 108:13 formal 112:17 formally 50:6 forth 82:21 144:7 **forward** 49:10 139:2, 16 140:5 forwards 83:3 found 57:24 frame 40:25 54:25 **frankly** 58:4 frequency 106:17 fresher 12:22 front 10:19 21:21 fruition 28:1 fulfill 132:20 full 22:19 31:20 46:21, 22 48:19, 21, 25 55:20 66:10 79:8 107:22 110:15 111:9 112:13, 23 113:10 121:7, 9 124:2*4* 125:2*5* 126:1. 2. 8 fully 28:16 36:14 37:19 38:19, 23 39:14, 17 72:8, 11 81:21 108:14 117:5 **fulsome** 37:13 fulsomeness 37:21 fun 34:5 **funds** 130:13 **future** 91:2 < G >gap 17:16, 22 18:10 120:17 140:21

gaps 12:*15* 14:*11* 17:*25*

140:19

gates 50:7 51:20 58:16 142:11 gauge 16:10, 17 125:3 **gauging** 15:14 general 6:5, 16 9:7 22:13 24:4 30:14 35:18 42:14 55:22 56:24, 25 59:25 60:1 61:16 80:20, 21 94:2 106:13 107:10, 18 118:18 126:21 generalized 60:24 generally 11:16 42:14, 20 62:18 77:10 89:21 111:20 give 7:18 9:4 38:15 56:12 68:7 75:15 78:21 81:18 87:13 107:12 116:*1* 131:*15* 136:19 **given** 3:21 4:12 27:23 57:23 63:6 71:2 86:15 87:3 102:16, 22 115:2 127:6 129:13 **giving** 4:18 globally 103:5 **go/no-go** 68:20 **goal** 61:8 **good** 21:9 88:17 127:13 **govern** 12:14 **governance** 6:7 67:14 77:17 104:*4* governed 6:5, 13 24:5 58:1 65:25 128:14 governs 11:21 gradual 67:25 grandstanded 53:16

grant 41:8 46:18 77:12 81:18 granted 41:3, 16 44:16 78:2. 10, 11, 14 138:1, 3 granting 81:9 **grants** 41:6 granularity 108:13 **Great** 143:8 ground 4:7 40:5 70:25 **group** 34:15 115:7 quaranteed 9:12 118:20 guess 8:11, 12, 13 13:17 21:24 31:21 34:22 44:11 48:23 53:5 55:21 62:9 66:16 69:*12* 71:*9* 80:11 107:6 133:*15* guideway 110:22 **guy** 10:19 guys 107:14 129:25

< H > **HAIRLAHOVIC** 1:7 2:9 5:1, 16, 21, 24 6:4 7:3, 10, 13, 20 8:10, 20 9:1, 5, 10, 18 10:17 11:7, 18 12:21 13:2, 7, 17 14:8, 15 15:*4*, *19*, *21* 16:4 17:5, 8, 13, *15*, *23* 18: *11*, *19* 19:21 20:10, 15 21:1, 5, 13, 24 23:5, 12, 22 25:2, 6, 10, 14, 19 27:1, 13 28:7, 24 29:6, 8 30:10, 13, 20 31:5, 13, 17, 21 32:11 33:8, 22

34:1, 10, 14, 20,

22 35:1, 5, 8 36:12, 24 37:9, 16, 22 38:12, 20 39:*4*, 25 40:*6*, 9 41:1, 5 42:8, 13 43:1, 4, 18 44:3, 18, 22 45:2, 6, 10, 19, 24 46:8, 13 47:10, 16, 21 48:23 49:11, 1*4*, 18 50:15 51:9 52:5 53:3 54:6, 11, 14, 23 55:1, 14, 19 56:1, 4, 9, 11, 18, 20, 24 57:9, 12, 16, 25 59:3, 12, 18, 21 60:4, 6 61:14, 20, 22 62:1, 8, 14, 24 63:8 64:15 65:3. 10 66:6, 25 67:6, 20 68:5, 21, 25 69:12 70:1, 9 71:3 72:1, 9, 17 73:8, 16, 22 74:*4*, 17, 23 75:8, 21 76:13, 19, 25 77:14, 19 79:2 80:6, 20 82:3, 8, 18, 23 83:15, 21 84:3, 17, 21 85:1, 8 86:6. 19 87:8 88:17, 22 89:22 91:4, 22 92:2, 4, 8, 18 93:1, 22 94:1, 10, 25 95:6, 17, 20 96:2, 5, 8, 17 97:6, 16 98:14 99:12, 19, 22 100:19, 24 101:7. 10 102:2. 9, 14, 18, 24 103:7, 10, 14, 18, 24 104:15, 17 105:*7*, *16*, *21* 106:7, *21* 107:*6*, 18, 24 108:9, 20 109:17.21 110:*16* 111:*1*, *8*, 11, 20, 25 112:4, *15* 113:*4*, *6*, *12*,

21, 24 114:9

115:*4*, *16*, *22* 116:1, 9, 13, 23 117:3, 11, 22 118:1. 16. 23 119:5. 13. 16 120:4, 10, 23 121:5, 16, 21 122:3, 18 123:10, 17 124:*6*, *12* 125:*1*, 20 126:3, 16 127:*4*, *9*, *15*, *23* 128:7, 10 129:15.24 131:11, 20 132:12, 16, 22 133:5, 12, 19, 24 134:8. 10 135:*14*, *20* 136:11 137:6, 13 138:13. 23 139:*5*, *21*, *24* 140:18 141:23 142:2, 6 143:12 half 143:13 handed 127:13 handled 131:3 **hands** 106:18 **happen** 44:15 75:20 83:14 85:14 happened 35:22 40:15 45:20 46:1. *10*. *14*. *18*. 20 50:10, 19, 21, 22 67:14 76:1, *4*, 5 77:7 84:8 85:12, 14 92:19 happening 27:8 28:12 42:20 51:*16* 67:*8* 84:24 87:9 99:6 110:4 114:2 122:2*4* 127:8 happens 20:11, 19 36:15 81:2 90:17 137:20 140:*4* happenstance 133:18 **happy** 84:14 **hard** 16:17 85:14 119:6

132:6 139:2*4*

harmonious 58:20 **headway** 13:20 heard 68:21 106:23. *24* hearings 3:5, 12, 13, 14 heavy 111:17 **Held** 1:12 40:23 42:12 53:22 106:6 helped 8:1 47:11 **helps** 93:12 **Hey** 60:12 79:21 109:25 **High** 6:24 10:7 25:22 141:1 **higher** 59:5 71:1 highest 67:15 high-level 22:8 32:12 89:11 110:5 highlighted 83:11 hindsight 21:10 86:4 131:10 **hired** 10:2 **Hmm** 59:12 **hold** 13:22 124:19 **holding** 54:20 60:13 hole 73:25 Holloway 37:10 134:*14*, *19* hope 131:23 **Hornell** 32:10 **hot** 48:6 hotter 48:7 **hourly** 108:*17* hours 22:14 79:22 107:7.8 108:11 109:25 110:1, 10 143:13 huge 55:7 human 24:19 87:17 **hundred** 98:19 hundreds 57:4 hustlers 96:22 hypothetical 45:11 47:11

hypotheticals 45:15 < | > ideal 71:7 86:10 Imbesi 2:4 3:7 56:10 143:1, 3 immediate 75:22 **impact** 43:22 45:16, 19, 20 46:6, 9, 10, 23 48:15 56:7, 22 57:2, 3, 7, 21 63:3, 6, 18 64:7, 8, 9 70:5, 20, 25 71:10 75:22 98:6 impacted 50:11 71:8, 11 76:4, 6 97:3 101:15 137:10 142:17 **impacts** 51:12 63:25 85:11 implement 41:14, 18 implemented 72:21 73:1 **implications** 80:23 81:19 important 48:20, 24 49:5 142:8 **improve** 139:9, 15 improving 22:23 include 6:19 77:3 included 51:10, 11, 12 63:15 128:17 136:17 Including 5:19 13:11 18:7 50:15 63:6 73:16 80:2.8 84:14 95:9, 10 100:6 104:14 106:15 130:7 incompleteness 30:1 inconclusive 50:23 incorporate 101:11

in a a water d
incorporated
33:17 96:11
104:9
increased 65:7
98:11 122:14
increasingly
69:9
incriminate 4:8
independent
37: <i>15</i> 38: <i>17</i> , 22
39:1, 16 76:2
39.1, 10 10.2
indirectly 10:12
indiscernible
83:7
industry 120: <i>15</i>
124: <i>14</i>
influence 93:15
informally 66:25
information
18:23 62:2
81: <i>4</i> 84: <i>4</i>
107:12 114:8
107.72 114.0
117:23 118:9
128:2, 5
informed 37:24
73: <i>4</i> 78:2 <i>4</i>
infrastructure
46:1 92:1 <i>4</i> , 20
101:9 104:2
115: <i>5</i>
initial 33:3
76:2 90:7
132:2 <i>4</i>
initially 31:19
_
initiated 67:5
inject 60:18
61: <i>1</i> 3
injected 57:4
58: <i>5</i> 70: <i>14</i>
injecting 63:5
71: <i>15</i>
injection 65:2
injections 65:4
input 128: <i>11</i>
inputs 27:18
32:21 95: <i>4</i>
Inquiries 4:3
inquiry 4:4, 13 insight 10:7
insignt 10:/
63:76 128:77
131: <i>18</i>
install 47:22
installation 12:1
16:22

0/2022
installed 26:10, 11 29:17 50:2 instance 4:10 7:14 16:3 19:18 42:24 44:15 76:23 89:15 94:5 133:8 instances 52:13
instituted
108:2 <i>4</i>
integrate 111:13
integrated
21: <i>15</i> 37: <i>19</i> 82:2
Integrating
92: <i>13</i>
integration 11:5, 12, 13, 20, 22, 24 12:4, 25 13:15 14:22 18:7 20:23 21:10, 12,
21 23:11 24:10
26:23 29:2, 12
47: <i>15</i> 91: <i>10</i>
107:22 108:1
110: <i>15</i> , <i>19</i> , <i>20</i> ,
23 111: <i>10</i> 113: <i>10</i> 138: <i>11</i>
integrator 23:10,
intended 86:8
intends 3:11
interact 80:19
111: <i>15</i> , <i>16</i>
interacting
69:25 112:6 interaction 89:5
91: <i>16</i>
interested 72:23
interface 12:5, 7
14: <i>11</i> 15: <i>1</i> 3
20:4 25:1
28:20, 23 29:7
128: <i>15</i> , <i>17</i>
129: <i>13</i> , <i>20</i>
137: <i>3</i> , <i>4</i> interfacing
24:25 25:7
interference
44:1
internal 41:14
internally 55:7
58:3 103:23

interpret 36:18

involvement 4:24 6:24 8:13 9:2 10:6 69:13 94:21 108:19 involving 94:23 issue 28:23 29:23 39:19 50:16 69:14 90:22 96:1, 22 104:14 131:5 142:20 issued 99:18 issues 15:15 24:2, 25 25:7 27:25 28:6, 19, 25 29:2, 3, 4, 22 30:17 34:25 37:20 41:14 44:4 51:18 57:2 59:15 61:4 71:5, 21 87:5 89:13, 14 101:24 102:5, 7 107:3, 4, 10 108:4 119:3 122:1 123:7 136:8 138:9 141:8 142:7, 8, 10, 17 item 100:6 130:23 items 35:4 100:17, 20 129:10 iterations 29:14	interpreted 120:21 intervene 3:7 interview 3:3, 6, 9, 10 62:7 intricate 35:17 investigating 50:22 involved 5:4 8:2 11:3 22:6 35:9 56:3, 5 69:9, 16, 20, 22 77:11 79:19 80:7, 24 91:5 95:12, 15 129:1 133:20 134:2, 4, 11
<j></j>	involvement 4:24 6:24 8:13 9:2 10:6 69:13 94:21 108:19 involving 94:23 issue 28:23 29:23 39:19 50:16 69:14 90:22 96:1, 22 104:14 131:5 142:20 issued 99:18 issues 15:15 24:2, 25 25:7 27:25 28:6, 19, 25 29:2, 3, 4, 22 30:17 34:25 37:20 41:14 44:4 51:18 57:2 59:15 61:4 71:5, 21 87:5 89:13, 14 101:24 102:5, 7 107:3, 4, 10 108:4 119:3 122:1 123:7 136:8 138:9 141:8 142:7, 8, 10, 17 item 100:6 130:23 items 35:4 100:17, 20 129:10 iterations 29:14

107:*13* 133:*10* **January** 35:24, 25 **Joanne** 2:16 144:3, 21 **job** 19:4, 24 61:3, 5 63:2*1*, 22 69:18 79:18 85:12, 21 114:13 141:7 **Joe** 133:8 joined 5:1 joint 6:4 12:3, *8*, *9*, *12*, *24* 17:6 18:6 20:1, 6, 12, 22 23:18, 23 24:1, 7, 11, 13, 15, 16 57:3 63:11 65:11 141:3 **July** 134:7 < K > Kartiga 2:10 59:24 60:5 62:3 143:6, 7 keeping 72:11, 24 **key** 135:8 **kickoff** 35:18 **Kiewit** 7:23 8:1, 16, 17 9:8, 10 kilometres 32:3 107:*17* 119:*25* 120:*1* kind 15:22 19:24 28:11 49:6 63:5 85:2 109:9 112:14 114:22 133:17 **kinds** 75:16 87:17 132:3 kinks 122:2 knew 58:13 74:16 knocked 100:5 **knowing** 58:*4* 86:23 knowledge 11:19 12:22 23:7 33:10 59:10 105:6

Jacques 10:*17*

< L > **labour** 89:16 lack 141:25 lag 38:9, 12 lane 53:12 lanes 53:9 large 6:4 8:2 52:8 largely 129:18 late 26:2, 3, 4, 7 27:17, 22 30:23 31:3 36:5 38:1, 6, 7, 21, 24 39:16 53:7 69:16 70:22 77:4 95:15 131:22 **lateness** 112:18 Lawrence 2:16 144:3, 21 **lawsuit** 49:19, 22, 23 53:18, 24 55:22 70:12 layer 94:12 **layers** 10:1 **layout** 95:10 **LDs** 53:20 lead 114:7 leadership 114:*13* 135:*3*, *7* 136:22 leading 26:1 27:14 28:6 30:17 65:5 67:9 68:1 70:15 73:17 81:4 82:10 107:2 115:18 134:15 135:5 **learned** 143:9 **leave** 15:9 **led** 18:10 67:24 120:8 122:12 124:20 **left** 14:22, 24 133:11 135:7 legacy 51:18 legal 59:23 lenders 54:5, 7 74:19, 25 **length** 31:23 **lessons** 143:9 **letting** 143:*15* level 6:24 10:7

11:*14* 21:*10*, *12*,

<i>25</i> 25:22 50: <i>12</i>
59: <i>5</i> , <i>14</i> 69: <i>6</i> ,
19 71:1 77:11
79:20 90:14
105:25 106:1, 2, 3 107:7 109:14
3 107.7 100.14
440.2 444.42
110:3 114: <i>1</i> 2,
21 131:19
133:10 141:15
levels 6:14
67: <i>10</i> , <i>15</i> 69: <i>7</i>
105:22 109: <i>10</i>
liability 4:9
1145 7:05 440:40
life 7:25 118: <i>18</i>
lifting 111:17 LIGHT 1:6 8:11,
LIGHT 1:6 8:11
20
22
liked 107:17
119:3
lined 43:14
liquidated 51:2,
7 52:3, 7, 17
56:16
listen 69:14
literally 60:15
109:3
Litigation 2:4
62:21
living 85:20
LLP 2:11
load 129:22
long 31: <i>19</i>
63·6 68·13
long 31:19 63:6 68:13 78:25 95:16, 18 longer 22:25
76.25 95.16, 16
33:4 35:12
73:3, 10 97:19
101: <i>17</i> 108:2
110: <i>10</i>
looked 35:10
looking 45:21,
22 53:24 60:18
89:3 90:1
118: <i>8</i> 136: <i>17</i>
139: <i>19</i>
looks 15:11
63:14 66:15
81: <i>12</i>
loss 7:4
losses 63:9, 13
Int 36.15 30.8
lot 36:15 39:8
50:3 53:20
50:3 53:20
50:3 53:20 74:24 84:5
50:3 53:20

106:*15* 128:*1* 132:*1*3 140:*1*3 **lots** 85:19 low 97:25 99:8 **LRT** 4:25 5:4, 8, 14 **LRTC** 54:7 66:18 130:19 **LRVs** 30:9 32:9 < M >made 3:16, 25 11:5 31:12 49:17 55:7 59:8 60:8 65:23 67:18 68:4 89:18 135:1 144:10 main 25:9, 10, 17 maintain 33:20 41:*1*3 72:23 73:10, 17 97:22 98:*1*, *2* 105:*9* 116:2, 5 127:3 128:3 maintained 74:15 99:3 116:6 127:14 maintainer 87:21 96:23 97:8, 25 102:22 127:*17* maintaining 100:*15* 127:*10* maintenance 8:15 63:7, 13 86:8 87:16, 17 89:15 96:20 98:12, 25 101:24 102:7 103:13, 25 104:12, 23, 25 105:*1* 116:*4* 122:15, 20, 22, 23 123:1, 8, 20 124:22 127:13 129:22 Mainville 2:3 3:2 5:15, 19, 22 6:1 7:2, 6, 12, 17 8:8, 19, 24 9:3, 9, 14 10:15 11:2, 9 12:20,

23 13:*5*, *14*

14:2, *14*, 20 15:18, 20 16:1 17:*3*, *7*, *12*, *14*, 21 18:5. 14 19:*14* 20:*9*, *14*, 20 21:3, 7, 19 23:2, 6, 15 24:24 25:5, 8, 13, 16 26:22 27:12 28:5, 18 29:1, 7 30:7, 12, 15 31:2, 9, 15, 18 32:8 33:7, 19, 25 34:9, 12, 16, 21, 24 35:2, 7 36:10, 20 37:7, 12, 17 38:8, 14, 25 39:23 40:3, 8, *22* 41:*4* 42:*4*, *9*, 24 43:2, 10 44:2, 11, 20, 23 45:5, 7, 13, 22 46:5, 11 47:9, 13, 20 48:20 49:7, 13, 16 50:14, 25 52:2 53:1 54:2, 8, 13, 21, 24 55:12, 18, 24 56:2, 6, 14, 19, 21 57:6, 11, 14, 18 58:24 59:7, 16, 20, 22 61:11, 19, 21, 24 62:11, 20 63:2 64:6 65:1, 6 66:2, 24 67:3, 17 68:2, 19, 23 69:8, 24 70:3, 23 71:25 72:2, 6, 10 73:6, 12, 19 74:3, 13, 22 75:4, 18 76:8, 18, 22 77:9, 18 78:16 80:4, 11 81:25 82:5, 14, 19 83:13, 19, 25 84:15, 18, 25 85:4 86:2, 17 87:2 88:13, 21 89:8 90:25 91:19 92:1, 3, 6, *17*, *22* 93:20, *24* 94:*4*, *20* 95:*5*, 14, 19, 25 96:3,

7, 16 97:3, 14 98:8 99:10, 14, 20 100:16, 23 101:*4*. *8*. 23 102:*4*, *12*, *16*, *19* 103:5, 8, 11, 17, 21 104:11, 16 105:*5*, *14*, *17* 106:5, 19 107:1, *15, 20* 108:*8, 18* 109:13, 18 110:13, 18 111:5, 9, 19, 22 112:*3*, *11* 113:*2*, 5, 8, 16, 22 114:6, 25 115:13, 17, 25 116:*8*, *11*, *21*, *25* 117:7, 21, 24 118:*11*, *22* 119:1, 11, 14, 24 120:9, 19 121:2, 14, 20, 23 122:13 123:3, *14* 124:3, *10*, *23* 125:19, 21 126:*11* 127:*1*, *5*, *12*, *20*, *25* 128:8 129:12, 16 131:*8*, *17* 132:*9*, 15, 18, 25 133:7, *14*, *22* 134:3, *9* 135:10, 17 136:7 137:2, 8 138:8, 22, 25 139:18, 22 140:*16* 141:*21*, *24* 142:3, *24* 143:*5*, *8*, *14* majority 26:2 making 40:17, 24 43:16 85:1 man 37:10 112:1 **manage** 16:*11* 20:3 26:5 76:20 92:23 93:4 123:8 managed 12:7 43:23 82:24 139:*20*, *25* management 98:23 133:2 manager 8:5

managers 10:21

managing 10:8 70:17 79:12 130:21 131:5 Manconi 133:8 **mandate** 83:16 Manuel 5:5 77:20 manufacturer 89:19 90:12 92:10 103:9 manufacturing 9:16 10:13 75:19, 23 86:4 90:16 97:5 102:8 market 90:19 **massive** 73:25 materialized 85:5 **Matt** 10:22 16:3 68:6 107:*1*3 118:*9*, 11 133:9, 19, 25 134:20, 22, 24 135:*4*, *5* 138:*17* matter 60:11 69:21 94:2. 3 matters 53:8, 23 54:22 58:10 **maximum** 9:*12* mayor 104:14 means 18:22 64:2 69:17 meant 14:19 72:20 121:22 123:16 141:6 **measure** 119:23 measures 41:13, 15, 18, 19, 24 44:13 64:12 70:6 72:22 78:1 measuring 118:5 125:8 medium-sized 8:3 **meet** 6:17 13:12 40:18 41:2, 7, 9, 25 42:2, 11 43:20 44:14 64:24 65:18 73:4, 5 75:2 76:10 80:22 104:13 141:5

meeting 6:21, 22 7:8 43:21
22 7.8 43.21
48·25 107·16
48:25 107:16 113:25 114:1
137: <i>14</i> 139: <i>7</i>
meetings
105:2 <i>0</i> , 25
100.20, 20
106:6 115:18 mega 85:12
mega 85:72
Member 2:3, 4
mentioned 9:19 12:23 49:7
12:23 49:7
51:19 11:22
96:1
merge 80:18
message 106:9
met 33:16
44:24 65:18
75:7 95:9
75:7 95:9 120:2 127:9
131: <i>15</i>
metres 32:3
Metrolinx 8:15
93:7
M-hm 14: <i>14</i>
25:8, 13 44:2
47:20 96:16
mid 11:4 21:17
middle 46:2
73:25
milestone 81:8
milestones
33:16 41:2
72:25 135:18, 21 million 53:9, 19
million 53:9, 19
54:20 55:10, 17
58:4 60:8
61: <i>18</i> , <i>20</i> , <i>21</i>
70:10
million-dollar
52:10
millions 57:5
mind 142:5
mine 82:4
minor 50:10
99:11, 21 100:1
minus 48:19
minuted 6:22
minutes 6:23
MIRSAD 1:7
2:9 5:1, 16, 21,
24 6:4 7:3, 10,
13, 20 8:10, 20
13, 20 0.10, 20
9: <i>1</i> , <i>5</i> , <i>10</i> , <i>18</i> 10: <i>17</i> 11: <i>7</i> , <i>18</i>
10.77 11.7, 78

12:21 13:2, 7, *17* 14:8, *15* 15:*4*, *19*, *21* 16:*4* 17:*5*, *8*, *13*, *15*, *23* 18: *11*, *19* 19:21 20:10, 15 21:1, 5, 13, 24 23:5, 12, 22 25:2, 6, 10, 14, 19 27:1, 13 28:7, 24 29:6, 8 30:10, 13, 20 31:5, 13, 17, 21 32:11 33:8, 22 34: *1*, *10*, *14*, *20*, 22 35:1, 5, 8 36:12, 24 37:9, 16, 22 38:12, 20 39:*4*, *25* 40:*6*, *9* 41:1, 5 42:8, 13 43:1, *4*, 18 44:3, 18, 22 45:2, 6, 10, 19, 24 46:8, 13 47:10, 16, 21 48:23 49:*11*, *14*, 18 50:15 51:9 52:5 53:3 54:6, 11, 14, 23 55:1, 14, 19 56:1, 4, 9, 11, 18, 20, 24 57:9, 12, 16, 25 59:3, 12, 18, 21 60:1, 4, 6 61:14, 20, 22 62:1, 8, 14, 24 63:8 64:15 65:3, 10 66:6, 25 67:6, 20 68:5, 21, 25 69:12 70:1, 9 71:3 72:1, 9, 17 73:8, 16, 22 74:4, 17, 23 75:8, 21 76:13, 19, 25 77:14, 19 79:2 80:6, 20 82:3, 8, 18, 23 83:15, 21 84:3, 17, 21 85:1, 8 86:6, 19 87:8 88:17, 22 89:22 91:4, 22 92:2, 4, 8, 18 93:1, 22 94:1, 10, 25 95:6, 17, 20 96:2, 5, 8, 17

97:6, 16 98:14 99:12, 19, 22 100:19, 24 101:*7*, *10* 102:*2*, 9, 14, 18, 24 103:7, 10, 14, 18, 24 104:15, 17 105:7, 16, 21 106:7, *21* 107:*6*, *18*, *24* 108:9, *20* 109:17, 21 110:*16* 111:*1*, *8*, *11*, *20*, *25* 112:*4*, *15* 113:*4*, *6*, *12*, *21, 24* 114:9 115:*4*, *16*, *22* 116:1, 9, 13, 23 117:3, 11, 22 118:*1*, *16*, *23* 119:5, 13, 16 120:4, 10, 23 121:5, 16, 21 122:3, 18 123:10, 17 124:*6*, *12* 125:*1*, 20 126:3, 16 127:*4*, *9*, *15*, *23* 128:7, 10 129:15, 24 131:11, 20 132:12, 16, 22 133:5, 12, 19, 24 134:8, 10 135:*14*, *20* 136:*11* 137:*6*, 13 138:13, 23 139:5, 21, 24 140:*18* 141:*23* 142:2, 6 143:12 misalignment 36:5, 6 misrepresent 42:7 missed 133:*4*, *15*, *21*, *23* 134:1 135:12 missing 141:20 mitigate 32:25 37:19 38:2 43:23 46:20 61:2 78:8 138:5 141:8 mitigated 33:22 34:2 38:19, 23 39:17 77:4

mitigation 33:17 38:11 41:12, 15, 18 42:21 44:9, 13 72:22 76:24 78:1 91:24 mitigations 57:1 mobility 53:8, 23 54:22 58:10 **moment** 37:23 38:4 money 53:5, 18 57:10, 13, 15 58:5, 12, 16, 17, 19 60:19, 24 61:5, 12 62:18, 19 63:5, 23 64:25 65:15 70:14 71:16 140:*1*3 141:7 **monitor** 16:*11* 130:*18* monitored 27:14 monitoring 15:14 89:4 117:16 **month** 6:17 81:6 monthly 7:8 9:19 42:16 77:1 81:23 83:*17* 108:*20*, 21 126:21 months 27:20 69:15 70:22 72:19 73:2 111:2, 3 131:21 motivated 65:12, 21 66:1 motivation 66:4 93:19 move 32:9 **moved** 26:5 43:17 84:13 134:20 moving 45:8 95:24 115:24 **MSF** 27:6 33:2 86:3 90:8, 17 101:3, 13 multitude 108:4 < N >**names** 10:19

narrow 86:25 **near** 61:*14* necessarily 91:1 **needed** 22:11 101:11 109:10 110:1, 11 117:13 136:24 138:15 141:12 needs 22:14 30:5 96:13, 14 111:23 128:20 **NEESONS** 144:20 negotiations 51:22 59:13 67:8, 12, 13 New 7:22 29:19 60:19 84:15 90:9, 13 **newly** 86:7 **nitty** 35:16 **nobody's** 84:*4* **noise** 105:15 non-critical 99:8 nontypographical 3:24 normal 98:22, 23 100:21 114:9 120:6 122:17 **normally** 129:*19* notes 144:14 **notice** 50:20 notification 87:22 88:24 89:6 notifications 76:16 88:7 notified 76:10 88:7 **notion** 121:3 **number** 20:12 22:10 52:14 62:17 85:9 97:22 98:1 114:*14* 121:*8* 124:8 126:10 142:10 < 0 > object 4:20 objected 4:5 objections

144:10

obligation 41·2
obligation 41:2,
7, 10 44:6 61:2
00:44 70 7
66: <i>14</i> 78:7
93.2 110.24
83:2 118:2 <i>4</i>
127:2
obligations
38:2 39: <i>10</i>
40: <i>18</i> 60: <i>25</i> 63: <i>20</i> 74: <i>25</i>
63:20 74:25
80:22 82:10, 25 120:13 127:10,
80: <i>22</i> 82: <i>10. 25</i>
400 40 407 40
120: <i>13</i> 12 <i>1</i> : <i>10</i> ,
18 131:1 <i>4</i>
132:20 141:6
observations
18: <i>17</i>
abtain 2:2
obtain 3:3
OC 94:21 95:4
JJ J4.21 3J.4
141: <i>14</i>
occupancy 53:9 occurred 72:18
70.40
occurred 72:18
offered 58:15
Offered 56.75
Officer 5:18
0.70
offset 53:8
old 58: <i>12</i>
OLRT 2:9
OLRTC 1:7
9: <i>15</i> 13: <i>14</i>
44.0.05.40.0
14: <i>6</i> , <i>25</i> 16:2
21:9 23:18
21.9 23.70
37:18 39:2
07.70 00.2
42:12 43:16
44:13, 25 49:9
52:3 56:16, 23
57:22 70:8
72:14 74:16
76:10 82:22
10.10 62.22
81.22 06.21
04.22 30.24
105 <i>·2</i> 3 113 <i>·17</i>
84:22 96:24 105:23 113:17
125:25 127:2,
<i>21</i> 128:2, <i>15</i>
129: <i>14</i> , <i>20</i> , <i>22</i>
130: <i>10</i> 132: <i>10</i> ,
10 00 102.70,
19, 22 133:2
135:19 136:9
135.19 136:9
137: <i>4</i> 138:2
139:23
OLDTO:
OLRTC's 25:1
=
27.40 20.04
37:18 39:2 <i>4</i>
37:18 39:2 <i>4</i>
37:18 39:24 40:1 57:7 82:16
37:18 39:24 40:1 57:7 82:16
37:18 39:24 40:1 57:7 82:16 onboard 7:25
37:18 39:24 40:1 57:7 82:16 onboard 7:25
37:18 39:24 40:1 57:7 82:16 onboard 7:25 8:13 10:11, 22
37:18 39:24 40:1 57:7 82:16 onboard 7:25
37:18 39:24 40:1 57:7 82:16 onboard 7:25 8:13 10:11, 22 17:19
37:18 39:24 40:1 57:7 82:16 onboard 7:25 8:13 10:11, 22 17:19 one-off 93:13
37:18 39:24 40:1 57:7 82:16 onboard 7:25 8:13 10:11, 22 17:19 one-off 93:13 ones 13:19
37:18 39:24 40:1 57:7 82:16 onboard 7:25 8:13 10:11, 22 17:19 one-off 93:13 ones 13:19
37:18 39:24 40:1 57:7 82:16 onboard 7:25 8:13 10:11, 22 17:19 one-off 93:13

/2022
78:12 95:6
141:9
ongoing 100:7
onset 95:2, 3
open 84:5, 6
115:8 119:22
operate 97:17
operated 99:3
operates 94:18
Operating 5: 18 90: 12 93:21, 23
90:72 93:27, 23 94:6, 13 129:9
131:6
operation 99:1
124:2 <i>1</i>
Operations 5:3
124: <i>5</i>
operator 94:21
96:23 97:2 <i>4</i>
131: <i>18</i>
operators
116: <i>16</i>
opinion 56: <i>12</i> 58: <i>1</i> , <i>2</i> 87: <i>13</i>
122: <i>10</i> , <i>20</i>
131:16 142:15
opinions 87:11
opportunity 3:21
opposed 68:4
80: <i>15</i> 102: <i>7</i>
opposite 64:16
129:25
optimization
64:20
order 3:13 15:15 20:22
22:15 37:4
40:15 44:7
48· <i>24</i> 61·3
65:18 66:14
96:12, 14
101: <i>1</i> 2 114: <i>14</i>
129:2
orders 21:2
ordinary 24:22
64:11
organization 9:23 10:24
24:3 86: <i>11</i>
103: <i>16</i> 106:23
141: <i>1</i> 3
organizational
organizational 9:23

10:2 67:16

original 27:24 31:10 40:11 53:13 85:6, 10, 17 110:24 133:3, 15, 21 134:1 originally 23:1 OTTAWA 1:6 5:4, 8, 14 27:6 32:10 54:7 66:18 106:11 130:19 Ottawa's 4:25 93:25 outcome 18:12, 16, 21 outline 6:8 32:22 outlines 6:10 outset 35:3 outside 24:8 63:25 64:1 outsourced 14:5, 9 outstanding 100:18 overall 6:7 9:23 14:12 15:16 16:9 17:24 19:6, 12 23:3 37:18 48:10 51:12 56:23 91:24 92:13 112:25	
137: <i>13</i> overanalyzed	
47:5 overarching 14:7 18:9 overhead 62:16 overlap 55:16 overruns 136:2,	
4 overseeing 9:16	
10:4, 8, 16 16:2 37:8 91:7 oversight 18:7 owed 54:4 owner 59:2 91:13 92:23 93:3 94:7 owners 93:4	
ownership 12:10, 11 102:5	

```
< P >
P&L 6:25 7:3
P&Ls 63:12
p.m 1:14
143:16
P3 8:25 9:2
pad 29:17, 19
paid 54:6, 16
58:12
Paliare 2:10
paper 39:20
103:14
paraphrase
44:3 64:7
paraphrased
71:8
paraphrasing
98:4
parents 130:2
part 9:6 12:6
14:21 16:8, 20,
24 18:12 20:18
22:3, 20 23:17,
18 26:13 27:7
28:19, 20 33:10
51:9, 13 53:17
55:19, 20, 21, 22
58:13 59:12, 14
62:9 66:21
70:12, 13 80:2,
5, 9 82:12
83:16 87:15
90:3 91:6
95:13 96:9
100:21, 25
101:21 103:3
115:19, 23
116:22 117:17
118:7 124:6
126:20 127:16,
18 128:13, 23
130:17 137:18,
20 138:6, 16
participants
1:13 2:7 3:19,
23
particular 10:16
20:16 47:15
89:25 105:19
107:25
parties 20:13
23:24 24:12
32:7 65:21
```

69:17, 23 80:24 126:18 **partner** 23:14 59:2 91:2 partners 23:8 61:12 63:4 partnership 6:6 8:16 24:4 57:20 59:4, 5 60:21 61:6 129:20 parts 19:19 27:5 62:17 **party** 36:14 41:17 84:13 140:23 passed 15:7 52:20 73:2, 3 88:5 117:3 passengers 125:11 path 46:6, 7, 9, 10, 16, 17 47:2, 7 48:1, 5 65:14 86:25 pay 53:18 55:11 58:14 59:9 140:25 **paying** 52:23 54:12, 14 130:20, 22 131:6 payment 55:4 124:24 125:9, 25 126:1.8 135:18, 21, 24 payments 55:6 125:6, 13 **peak** 67:19 penalties 53:20 penalty 52:10 53:5 penny 55:9 **people** 10:4, 8, 20, 25 16:2 22:1 24:10, 20 42:18 43:8 69:21 70:25 84:7 104:25 105:4 106:22 107:11 108:14 113:15 130:20, 21 132:13 perceive 114:1

percent 54:19
99:3 118:2 <i>0</i> , 2 <i>4</i>
119: <i>19</i> 120:3
perception
46: <i>21</i> , <i>22</i>
perfect 122:6
perform 16:20
perioriii 10.20
26: <i>14</i> 69: <i>17</i>
93: <i>18</i> 114: <i>17</i> ,
22 124:2 136: <i>15</i>
performance
6:20 9:21
15: <i>15</i> 16: <i>11</i>
19:6 27: <i>14</i>
19.0 27.14
64: <i>4</i> 66: <i>15</i>
109: <i>15</i> 114: <i>21</i> 115:2 118: <i>5</i> 120: <i>1</i> 125: <i>3</i>
115.2 118.5
100.4 105.2
120.1 125.3
137: <i>15</i>
performances
79:21
performing
107:2 113: <i>20</i>
124:2 137: <i>14</i>
norforms 14:12
performs 14:13
period 12:8
68:11 107:22
108:23 129:1, 3
132:5 134: <i>18</i>
perjury 4:17
permits 3:8
person 4:11
10: <i>18</i> 16: <i>7</i>
20:8 23:2 <i>1</i> 68:6 106: <i>6</i>
68:6 106:6
444.04 404.40
114:2 <i>1</i> 134: <i>13</i> ,
<i>22</i> 135: <i>1</i> , <i>5</i>
136: <i>13</i>
perspective
18: <i>17</i> 19: <i>20</i>
78:19 89:11
94:23 118: <i>14</i>
Peter 7:23
Peter 7:23
phase 23:4 phrase 72:12
phrase 72·12
physically 04:12
physically 94:13
picture 37:2
piece 117:23
place 4:16
16:21 42:10
53:21 65:22, 25
66:23 105:3°
116:3 126: <i>1</i> 3
144:6
I I - 00 · 00
placed 92:23

5/2022
plan 11:20 18:2, 3, 4, 9 31:10 32:16 37:5 40:11, 12, 14 69:5 75:9, 10 76:24 106:13 107:25 108:11 109:4, 10 110:8 112:23 129:5 132:24 135:25 planned 22:25 30:19 86:1 107:7 108:2, 3 110:9 111:3 113:24 planning 11:5, 8, 13, 14, 23 plans 11:11 20:23 21:4 77:11 110:25 played 89:20 point 11:22 22:6 23:13 37:9, 13, 23 38:5 51:23 62:25 66:4 68:9 69:6 79:17 81:10 88:11 105:12 109:8 110:4 119:4 130:8 133:17 139:4 141:11 pointed 88:14 104:1 112:19 points 126:15,
17 political 55:8
65:24
popular 58:1, 2
142:15
portfolio 91:6 portion 31:11
position 18:25
63:13 109:19,
23 115:11, 14
122: <i>10</i> 123: <i>4</i>
125:2 possible 73: <i>14</i>
post 60:13, 15
82:11 98:12
130:24 132:23

posted 3:15

post-sinkhole
75:9, 16
potato 48:7
potentially
18: <i>10</i> 88: <i>15</i>
pouring 17: <i>1</i> 114: <i>19</i>
power 114:23
PPP 141: <i>16</i>
practical 58:2
79: <i>18</i> 81: <i>1</i>
practice 15:2
practice 15:2 120:7, 16 124:14 preceded 75:5
preceded 75:5
prefer 92:5 preferable 19:16
prejudice 59:17,
19
premium 141: <i>1</i>
preparations
106:13
prepared 122:16
preparedness 131: <i>19</i>
prequalified
86:22 90:2
presence 129:7
132:20
PRESENT 2:14
76:24 82:20
presented 115: <i>10</i>
President 5:3, 6
pre-sinkhole
75:10, 17
pressure 58:22
65:8, 24 69:16
70:4 84:6 97:8
98: <i>11</i> 114: <i>16</i> 122: <i>14</i>
pretrial 107:23
pretty 75:12
125: <i>14</i>
price 9:12
85:22
priced 85:21
primary 5:13
prior 7:19 8:9,
25 26:23
priority 96: <i>18</i> 97: <i>1</i> , <i>23</i> 98: <i>1</i>
99:8 100:12
private 91:2
92:24

privileged 18:21,
23 59:13, 16
62:2
problem 20:10
61: <i>1</i> 103:3
106: <i>10</i> 140:2
problematic
26:25
procedural 3:13
proceedings
4:10, 15 144:5
process 6:15
71:20 78:6
82:12 104:22
132:5 137:2 <i>1</i>
procurement
10:2 <i>1</i>
produce 42:5
produced 98:18
producing
115:20
product 15:11
94:17, 18 114:4
130:8
production 86:5
professional
7:25 85:19
144: <i>4</i>
144: <i>4</i> profit 7: <i>4</i> 62: <i>16</i>
144: <i>4</i> profit 7: <i>4</i> 62: <i>16</i> profitability
144: <i>4</i> profit 7: <i>4</i> 62: <i>16</i> profitability 63: <i>14</i>
144: <i>4</i> profit 7: <i>4</i> 62: <i>16</i> profitability 63: <i>14</i> profitable 62: <i>22</i>
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1
144: <i>4</i> profit 7: <i>4</i> 62: <i>16</i> profitability 63: <i>14</i> profitable 62: <i>22</i>
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19 7:7 8:5, 6, 18 9:2, 17 11:4, 6, 10, 17 12:17 15:10 19:15, 24,
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19 7:7 8:5, 6, 18 9:2, 17 11:4, 6, 10, 17 12:17 15:10 19:15, 24, 25 20:16 21:17
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19 7:7 8:5, 6, 18 9:2, 17 11:4, 6, 10, 17 12:17 15:10 19:15, 24, 25 20:16 21:17
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19 7:7 8:5, 6, 18 9:2, 17 11:4, 6, 10, 17 12:17 15:10 19:15, 24, 25 20:16 21:17 22:3 26:2
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19 7:7 8:5, 6, 18 9:2, 17 11:4, 6, 10, 17 12:17 15:10 19:15, 24, 25 20:16 21:17 22:3 26:2 35:15 37:11
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19 7:7 8:5, 6, 18 9:2, 17 11:4, 6, 10, 17 12:17 15:10 19:15, 24, 25 20:16 21:17 22:3 26:2 35:15 37:11 39:8 42:15
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19 7:7 8:5, 6, 18 9:2, 17 11:4, 6, 10, 17 12:17 15:10 19:15, 24, 25 20:16 21:17 22:3 26:2 35:15 37:11 39:8 42:15 45:16, 25 46:2,
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19 7:7 8:5, 6, 18 9:2, 17 11:4, 6, 10, 17 12:17 15:10 19:15, 24, 25 20:16 21:17 22:3 26:2 35:15 37:11 39:8 42:15 45:16, 25 46:2, 3, 4 48:22
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19 7:7 8:5, 6, 18 9:2, 17 11:4, 6, 10, 17 12:17 15:10 19:15, 24, 25 20:16 21:17 22:3 26:2 35:15 37:11 39:8 42:15 45:16, 25 46:2, 3, 4 48:22 50:12 53:14, 15
144:4 profit 7:4 62:16 profitability 63:14 profitable 62:22 progress 11:1 104:22 progressed 84:2 135:23 progressing 109:5 135:22 progressive 124:5 project 5:8, 25 6:8, 9, 10, 12, 19 7:7 8:5, 6, 18 9:2, 17 11:4, 6, 10, 17 12:17 15:10 19:15, 24, 25 20:16 21:17 22:3 26:2 35:15 37:11 39:8 42:15 45:16, 25 46:2, 3, 4 48:22

59:2 61:13 62:22, 24 63:3, 9, 18 64:4, 19, 21, 25 70:8, 15, 25 71:6, 16 72:8, 12, 15, 21 73:25 74:1 79:12, 25 84:24 85:5, 7, 9, 12, 25 89:20, 23 90:21 91:14 93:8 94:22 95:3, 21 105:25 108:24 120:21 127:16, 19 128:19, 25 133:10, 20 134:2, 7, 16, 17, 21 135:4 137:15 139:20 141:5, 16 142:1 projects 5:8 8:2, 3, 9, 25 74:8 91:2, 3, 5, 17 93:8 111:21 141:*18* prolongation 51:11 **proper** 16:22 39:5, 9 91:24 92:15 properly 17:19 36:19 127:14 128:3 **proposal** 126:*14* prorated 126:9 prosecution 4:17 protect 44:7 protocols 87:16, 17 prototype 32:17 33:4 90:4, 19 prototypes 33:6 90:8 **prove** 22:15 28:4 132:7 **proven** 54:17 121:*13* provide 6:7 17:24 41:23 50:1 114:4 130:7 provided 12:16 37:14, 16 116:16

Mirsad Hairlahovic on s
providing 38:1,
proving 14: <i>16</i>
public 3:5, 12,
15 4:3 33:10
84:5 85:2
publicly 84:16,
19 124:17
public-private
59:4 60:21 61:6
pure 119:8
purely 119:21
purpose 3:3
purposes 125:9 pursuant 4:2
pursuant 4:2
pursuit 11:20
push 64: <i>16</i>
114:23
put 16: <i>13</i>
29: <i>19</i> 37: <i>4</i>
39:7, 18 43:8
50: <i>19</i> 61:3
65:24 70:17
72:19 78:1
85:22 99:16
144:7
putting 28:8
63:23 69:16
114: <i>16</i>
< Q >
qualifications 45:3
quality 6:20
16: <i>18</i> , <i>21</i> 24: <i>20</i>
113:1
quantified 53:24

quantified 53:24 quantify 27:8 **question** 4:6, 21 11:25 23:13 24:6 25:3 39:21 70:9 79:4 88:18 102:10, 20 110:*17* 126:*6* 127:24 133:16, 25 questions 3:7, 9 18:22 142:25 143:2 quick 95:23 quickly 125:6, 15 **quite** 64:15

```
99:15 133:1
quiz 117:9
quote 52:14
quoted 34:3
quoting 60:7
< R >
RAIL 1:6 8:9,
11, 14, 22
raised 39:13
87:21 112:12
113:14
ramp 52:12
ran 110:1
134:17, 18
rapid 8:21
rapidly 132:10
rarely 20:11
rationale 68:3
raw 87:11
react 49:21
reacting 141:9
reaction 106:12
readiness 115:1
118:13
reading 108:22
ready 16:14
32:2 115:5, 6,
11 123:5, 12, 13,
17 131:9, 12, 13,
21 132:6
real 9:2
realistic 35:19
39:9. 24
realistically
44:25 80:17
reality 39:20
40:4, 7, 10, 13,
19 78:22 88:1, 8
realization 73:20
really 6:23, 25
7:4 10:9 11:20
24:8 25:4
28:13 37:9
43:4 50:20
52:1 53:20
67:10, 20 69:1
70:5 79:3
87:19 94:9
100:9 106:16
114:20 123:6
125:11 135:8
142:7
reason 10:2
```

31:24 40:9

40:24 60:42
49:2 <i>4</i> 60: <i>12</i> 68:3 87:23
97:2 103:1
112:18 121:17,
18 134:22 135:1
reasonable
41:12, 18 44:9
94: <i>15</i>
reasonably 73:4
reasons 7:16
22:19 25:17
65:13 85:9
rebaseline 81:8
re-baseline
27:17 34:6, 11,
14
re-baselined
33:16
re-baselining
77:23 80:22
recall 5: <i>10</i> 10: <i>15</i> 21:2
30:11, 21 31:2,
5 19 32.2 9 12
5, 19 32:2, 9, 12 33:23 37:13
51:21 52:1, 2, 5,
25 67:21 68:2
73:7 77:7 84: <i>1</i> 7 101:23
84:17 101:23
106: <i>16</i> , <i>20</i>
112: <i>16</i> , <i>20</i>
113:2 117:2 <i>4</i>
118:3 119:2 <i>4</i>
120: <i>5</i> , 23 121: <i>1</i>
134:18 136:7, 12
receivable 4:14
received 38:18 RECESS 72:4
RECESS /2:4
recognized 50:4 recognizing
140: <i>19</i>
recollection
25:23 39:6
43:6 68:5, 8, 22
112: <i>16</i> 121:6
138:14, 19
recommendation
124:13
recommendation
s 120:5
record 72:3
143: <i>15</i>
recorded 144:11
recovered 62:19

recovering 88:4

recovery 76:23
,
77:11
rectify 74:11
107:9
redo 30:4
reduce 67:18 reduced 66:13
119:9 125:7
reduction
119:25
reference 53:14
referencing
105: <i>6</i> , <i>20</i>
107:21 110: <i>19</i>
referring 10:25
27:2 63:11
116:24
reflect 80:13, 16
reflected 44:17
reflecting 40:4 regardless 7:11
48: <i>1</i>
regards 120:22
Region 8:21
Registered
144:3
regular 9:22
22:5, 7
reinforce 136:24
reintegrate
36:22
36:22 rejected 49:8, 11
36:22 rejected 49:8, 11 relate 28:20
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21 70:7, 20 71:8,
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21 70:7, 20 71:8, 10, 12, 24 82:23
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21 70:7, 20 71:8, 10, 12, 24 82:23 93:11
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21 70:7, 20 71:8, 10, 12, 24 82:23 93:11 relationships
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21 70:7, 20 71:8, 10, 12, 24 82:23 93:11 relationships 93:5
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21 70:7, 20 71:8, 10, 12, 24 82:23 93:11 relationships 93:5 releases 85:3
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21 70:7, 20 71:8, 10, 12, 24 82:23 93:11 relationships 93:5 releases 85:3 relevance 10:3
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21 70:7, 20 71:8, 10, 12, 24 82:23 93:11 relationships 93:5 releases 85:3
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21 70:7, 20 71:8, 10, 12, 24 82:23 93:11 relationships 93:5 releases 85:3 relevance 10:3 relevant 8:11 9:6 37:24 reliability 98:6
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21 70:7, 20 71:8, 10, 12, 24 82:23 93:11 relationships 93:5 releases 85:3 relevance 10:3 relevant 8:11 9:6 37:24 reliability 98:6 106:20 109:15
36:22 rejected 49:8, 11 relate 28:20 43:11 100:17 related 110:24 135:18 relates 11:15 52:8 95:25 relating 49:9 51:4 142:4 relationship 56:8 58:21 70:7, 20 71:8, 10, 12, 24 82:23 93:11 relationships 93:5 releases 85:3 relevance 10:3 relevant 8:11 9:6 37:24 reliability 98:6

15 125:5 137:11 139:1 reliance 92:10 122:14 123:25 relied 83:9 114:3 relief 44:16 49:8 51:6, 25 reluctance 72:7, 11, 13 **rely** 82:15 **REM** 91:*14* remaining 13:3 remediation 46:24 remember 10:9 76:15 117:19 121:2. 7 **remote** 106:*16* remotely 1:13 106:6 renegotiate 51:2 renegotiation 125:23 **rep** 5:25 8:17 **repaid** 52:22 **repair** 108:6 **repairs** 26:17 repeat 27:4 80:4 140:6 report 6:18 9:20 11:1 25:22 77:1, 2 108:21 109:3 reported 36:7 Reporter 144:4, 22 REPORTER'S 144:1 reporting 9:20 10:4 42:15 68:9 81:23 83:9 104:21 106:4 117:18 118:*12* 127:*16* reports 6:11, 12 22:6 106:20 representative 5:7, 13 8:18 77:21 134:15 representatives 51:*17* 104:*13* 106:14 108:25

request 43:15
51:1, 5 74:20
81:7
requests 49:17
51:23
required 4:19
21:11 32:1, 6
64:18 75:19
86:20 95:1, 11
121:9 122:21
123:19
requirement
101: <i>17</i> , <i>18</i> , <i>19</i>
130:6
requirements
26:16 40:2, 17 42:16 64:24
42:16 64:2 <i>4</i>
65: <i>17</i> , <i>19</i> 66: <i>10</i>
86:12 89:17
90:20, 21 95:9
99:24 103:4
105:10 117:2 6
100.70 117.2, 0
110.4 119.9, 10
125:15 127:18
105:10 117:2, 6 118:4 119:9, 10 125:15 127:18 128:16, 19
137:15 139:7
141: <i>4</i>
reservation
43:25
reserve 58:9
resigned 134:19
resigning 5:9
resolution
130:12 136:17
142:22
resolve 51:19
70: <i>19</i> 71: <i>4</i> , <i>20</i>
131: <i>4</i> 142:9
resolved 24:5
33: <i>14</i> 61: <i>4</i>
resolving 59:15
resourced 141:7
resources
24:17, 19 57:7
64:18 132:19,
23 136:23
resourcing 57:7
respect 21:22
43:16 62:5
respond 84:1
resnonded
responded
49:19
49:19 responsibilities
49: <i>19</i> responsibilities 6: <i>9</i> , <i>10</i> 15: <i>7</i> , <i>9</i>
49:19 responsibilities

responsibility 6:*25* 9:*13* 13:*8*, 12, 22 14:7 19:7, 12 24:9, 12, 16 41:11 49:25 50:*4*, 17 60:22 70:13 78:20 97:21 116:*4* 131:*3*, *4* 142:20, 21 responsible 11:25 12:3 13:*15*, *25* 14:*6*, *10* 15: *1*, *2* 19: *1*, *19* 20:8 41:*17* 54:17, 18 58:8 78:9, 13 80:15 91:9 94:8 116:*14*. *15* 124:19 130:10 rest 13:7.9 26:5 32:19 33:5 66:17 restoration 46:23 result 52:4 57:21 64:13 67:7, 12 95:15 resulted 68:15, 16 results 113:19 **RESUMING** 72:5 retest 29:20 retrofit 28:9 29:16 30:18 114:2 122:21 retrofits 26:17 28:6 97:5 98:9, 21, 24 99:7, 8, 25 102:17 103:2, 3 105:2, 11 123:20 retrofitted 98:20 retrofitting 30:2 108:6 retrospect 36:17 **revenue** 27:25 32:1 37:5 47:23 52:11 55:5 60:10 64:16 65:5, 8, 13, 20 66:12 67:9 68:10 69:15 70:2, 15,

22 71:14 77:16

78:2, *11* 81:5 82:10, 11, 12 84:9, 12 96:18 97:18, 22 98:12 100:*11*, *14*, *15* 104:18, 19, 24 105:2, 3 108:23 115:*1*, *12* 117:*6*, *14*, *16* 119:*10* 122:8 123:2*4* 126:24 130:24 131:22 132:23, 24 133:12, 15 138:7, 16, 21 **reverse** 60:10 review 3:21 116:22 revise 124:21 **revised** 135:25 revising 38:10 rework 30:2 35:13 rights 44:7 58:10 ring 120:3 ringer 58:3 risk 60:23 63:20 85:24 91:25 92:16, 23 93:4 118:19 risks 85:5 **risky** 92:7 **Rivaya** 5:6, 9 7:9 77:20 road 58:19 93:19 **Roland** 2:10 role 4:24 5:17, 23 6:6 7:5 23:9, 20 24:22, 23 89:20 roles 6:9 8:3 rolling 9:16, 21 10:*5*, *16*, *23* 11:15 13:10, 12, 16 14:23 16:10 18:8 20:17 21:11, 22 25:12, 18 26:6 110:20 **rollout** 67:25 124:*15*, *22* 125:5, 10, 17 **room** 51:*15* root 87:10, 12,

18 rope 114:24 Rosenberg 2:10 Rothstein 2:11 roughly 73:7 **RPR** 144:21 **RSA** 33:17, 20 39:3 43:13, 17, 20, 21 44:14, 24 45:8 55:13, 17 69:10 74:14, 17 76:11 84:1 102:19 105:19 107:2 111:2 115:*18* 118:*13* 127:3 131:9 132:11, 21 133:3, 21 134:1 135:*12* **RTG** 37:14 38:18 65:21 66:14 72:14 82:5, 8 83:3, 8, 9, 10, 18 84:19, 22 105:23 125:12 126:1 128:11, 18 130:6, 9 139:12 **RTG's** 55:25 82:24 **RTM** 88:6 105:23 125:12 127:22 128:2, 10, 15, 20 129:*14*, *18* 130:6, 9, 15, 16, 21 131:2, 9 139:12 **run** 16:*15* 22:15, 18 31:20 65:22 68:11 79:22 109:25 111:*6*, *12* 113:25 116:*14* 118:21 120:1 running 15:25 22:22 28:2, *4*, 20 29:3 30:16, 18 47:24 48:3, 18, 19, 21 49:3 68:11, 13, 14 69:*15* 84:*7* 105:*4* 107:*16*, 21, 23 108:19 110:22 112:13

113:*10*, *19* 115:3, *7*, *20*, *21*, 23 116:9, 18, 22 117:2, 8, 25 118:6 119:*21* 120:2, 22 121:4, 9, 12 123:25 125:6, 11, 16 126:1, 8, 10, 24 129:8 **Rupert** 37:10 68:6 107:13 134:*14*, *19* 135:2, 7 **Rupert's** 135:7 < S > **safety** 6:20

12:16, 17 14:1,

17 17:24, 25 140:21 sampling 140:8, 17 **sat** 104:20 **satisfy** 142:14 **SATs** 20:24 scattered 132:14 scenario 86:10 scenes 64:1 67:1 schedule 9:21 25:12 26:20 27:14, 16, 18, 20, 24 28:16 33:13, 15, 23 34:2 35:11, 19, 21 37:18, 19 38:1, 5, 10, 21, 23 40:16, 25 41:2, 13, 23 42:5, 19 43:14 44:6, 17, 19, 21, 24 45:4, 17 46:14 50:11 72:23, 25 73:11, 17 75:8, 16, 19 77:2, 12, 23, 24 78:*4*, *23*, *24* 79:12 80:13, 16, 25 81:1, 11, 12, 20, 21, 23 82:6, 11, 16, 22 83:1, 9, 11, 17, 23 84:11 schedules 34:18 35:10, 19

26.2 1 22
36: <i>3</i> , <i>4</i> , <i>22</i>
37:14, 21 38:18
JI.17, ZI JO.10
39:9, 16, 17, 24
40-4-00-44-00
40: <i>1</i> , <i>20</i> 41: <i>22</i>
12:16 25 12:10
42:16, 25 43:19
75:6 78:5
80:23 81: <i>4</i>
82:1 83:2
137:2 <i>4</i> 140:3
scheduling 40:5
127:7
scope 15: <i>13</i>
91: <i>16</i> 101: <i>15</i>
31.70 101.73
112:23 127:19
scopes 15:8
seat 104:17
Secondhand
84:3
Section 4:2, 19,
21
21
security 60:13,
15
SEMP 12:20
17: <i>4</i> , <i>5</i> , <i>9</i> , <i>10</i>
17.4, 5, 9, 10
18: <i>4</i> 19: <i>3</i> , <i>8</i> , <i>9</i>
10.7 10.0, 0, 0
sense 7:18 9:4
19:18 89:18 120:15 124:13 125:17 126:12
19:18 89:18
120.15 121.13
120.75 124.75
125: <i>17</i> 126: <i>1</i> 2
100.0
1.20.0
138: <i>9</i>
separate 62: <i>4</i>
separate 62:4
separate 62: <i>4</i> 103: <i>15</i>
separate 62: <i>4</i> 103: <i>15</i>
separate 62: <i>4</i> 103: <i>15</i> separated 92: <i>20</i>
separate 62:4 103:15 separated 92:20 serve 5:17
separate 62:4 103:15 separated 92:20 serve 5:17
separate 62: <i>4</i> 103: <i>15</i> separated 92: <i>20</i> serve 5: <i>17</i> served 5: <i>7</i>
separate 62: <i>4</i> 103: <i>15</i> separated 92: <i>20</i> serve 5: <i>17</i> served 5: <i>7</i>
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8,
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15,
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3 12 81:5
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3 12 81:5
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3 12 81:5
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3 12 81:5
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19,
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19,
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19, 22 98:2, 13
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19, 22 98:2, 13
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19, 22 98:2, 13 100:11, 14, 15
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19, 22 98:2, 13 100:11, 14, 15 104:19, 24
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19, 22 98:2, 13 100:11, 14, 15 104:19, 24
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19, 22 98:2, 13 100:11, 14, 15 104:19, 24 105:2, 3 108:23
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19, 22 98:2, 13 100:11, 14, 15 104:19, 24 105:2, 3 108:23
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19, 22 98:2, 13 100:11, 14, 15 104:19, 24 105:2, 3 108:23 115:2, 12 117:6,
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19, 22 98:2, 13 100:11, 14, 15 104:19, 24 105:2, 3 108:23 115:2, 12 117:6, 15, 16 119:10
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19, 22 98:2, 13 100:11, 14, 15 104:19, 24 105:2, 3 108:23 115:2, 12 117:6, 15, 16 119:10
separate 62:4 103:15 separated 92:20 serve 5:17 served 5:7 service 27:25 32:1 37:6 47:24 52:12 53:21 55:5 64:17 65:5, 8, 13, 20 66:12, 18 67:9, 19 68:10 69:15 70:2, 15, 22 71:14 77:16 78:3, 12 81:5 82:10, 11, 12 84:8, 9, 12 96:18, 20 97:19, 22 98:2, 13 100:11, 14, 15 104:19, 24 105:2, 3 108:23 115:2, 12 117:6,

123:24 126:24 127:21 130:25 131:22 132:23, 24 133:13, 15 138:*7*, *16*, *21* **session** 35:18 **set** 11:10 36:18 130:3 144:6 **sets** 24:13 **settle** 50:5 settlement 58:15 **shape** 15:23 **share** 143:10 **shared** 3:18, 23 sheet 66:8, 12, 13, 21, 22 67:4, 7, 11, 12, 22 98:10 100:17, 20 118:2, 19 119:7 125:7 130:17, 23 **shoes** 23:21 **Shoot** 35:22 **short** 8:13 24:21 shorthand 144:*14* Shortly 5:3 **show** 42:2, 3 120:11 showed 27:24, 25 137:23 showing 81:5 **shown** 27:23 **shut** 108:7 **shy** 141:5 **side** 87:25 102:8 123:8 129:23 **sign** 58:6 signalling 21:11, 23 28:22 48:10 110:21 138:11 **signed** 61:*1* 86:13 110:9 123:18 significance 50:13 significant 57:2 65:8 74:18 80:23 85:13 95:21 137:5 **signing** 122:*4*

similar 8:22 99:7 **simple** 13:18 20:5 49:14 **sinkhole** 45:15. 16, 20, 24 46:8, 9, 14, 18, 23 47:3 49:9 50:16, 17, 24 51:10, 20 72:18 75:23 76:1, *4*, *5*, 7 sinkholes 51:3, **sit-down** 28:*15* **site** 31:13 136:10 **SITs** 20:25 situation 21:16 57:24 79:11 **size** 74:11 skill 24:13 130:3 **Slade** 10:22 16:3 68:6 107:13 118:10, *12* 133:9, *19*, *25* 134:20, 22, 24 135:*4*, *5* 138:*1*7 smaller 12:6 50:10 122:25 **smart** 25:24 47:3 85:16 smoothly 22:22 **SNC** 20:1 23:7, 13, 18, 24 134:15, 19 **SNC's** 24:9 soft 124:4, 14, *22* 125:*5*, *10*, *17* 126:13 **softer** 124:25 software 29:13 137:17, 18, 19 138:*14* **solely** 15:10 somebody 13:24 15:10 19:9 37:25 41:5 66:22 136:*16* 138:*2* somebody's 61:1 Sons 7:24

Sorry 9:5 11:7 15:20, 21 20:16 23:12 27:1, 2 28:24 29:13 36:*11* 38:*6*, *12*, 20 40:7 43:18 45:12 47:10, 22 49:13 54:13 55:12 59:18 64:23 72:9 76:14 79:4 80:4 94:2 97:14 101:3 102:2, *14* 105:15 106:1 110:16 116:10 117:15, 21 119:14 123:11 127:23 130:25 133:22 134:*4* 137:6 142:21 **sound** 105:*13* **space** 32:5 123:20 **speak** 9:15 11:4 24:25 55:25 56:22 60:1 speaking 63:9 specific 6:8 48:9 90:21 118:*4* specifically 45:17 96:13 specifications 12:12 13:10, 13 specifics 38:15 speculate 60:21 speculated 125:8 speculates 82:25 speculation 88:12 89:2 **speed** 31:20 97:4 129:3 **spending** 65:16 **spends** 39:8 **spent** 7:24 57:10, 11 62:19 64:25 141:7 **split** 19:*17* **spoke** 59:7 **spoken** 59:25

spotters 130:18 131:*5*, *7* stabilize 46:25 **staff** 136:10 **Stage** 4:24 5:4, 14 36:6 43:7 69:2 87:11 92:19 96:10 101:1, 2, 3, 5, 11, 12, 17, 18, 20, 22 102:3, 11, 12, 13, 15, 16 123:18, 19, 21 stages 8:17 stanchions 32:22 95:10 standard 120:*16* 124:*14* **start** 4:23 21:17 27:10 30:19, 22 36:25 37:1, 4 45:14 115:7 121:11 124:4, 5, 25 126:*14*, *23* 127:21 139:23 started 7:23 8:4 11:3 20:2 28:12, 19 29:3 32:7 55:1 105:1 **starts** 11:20 28:10 **stated** 124:17 statement 69:19 statements 22:12 59:8, 11 61:23 62:6 85:2 **station** 48:11 **status** 6:19 Stenographer/Tra nscriptionist 2:16 stenographically 144:11 **step** 139:10 stepping 89:9 steps 41:22 stock 9:17, 21 10:*5*, *16*, *24* 11:16 13:11, 12, *16* 14:23 16:*10* 18:8 20:17 21:11, 22 25:12, 18 26:6 28:10

110:20 stood 123:25 stop 30:5
storage 8:14 strain 64:14 70:4 135:19
strategic 104:3 strict 130:5
strictly 63: <i>16</i> 104: <i>3</i> striving 139: <i>14</i>
strong 24:15 stronger 141:13
structure 95:22 struggles 132:2 struggling
35: <i>14</i> 80: <i>12</i> 131: <i>25</i> stuck 114: <i>22</i>
stuff 6:24 21:18 22:4 53:25 85:20
100:3 108:7 subcontract 77: <i>15</i>
subcontractors 15:1 subject 43:15
45:2 subjective 75:12
submission 83: <i>17</i> submissions
42:23 83:1, 3 submit 39:11 44:18, 20 83:2
submittal 16:24 submitted 38:5, 21 43:19 45:3 83:24
subsequent 78:5
substantial 65:9, 19 100:10 101:2, 19, 21 117:15 128:22 129:6 130:24
success 61:9 63:1 123:24
successful 74:10 suffering 56:19
suffering 56:19 sufficient 132:19 sufficiently 128:9

suggested 100:22 106:11 suitability 86:3 suitable 86:5 94:7 suited 22:2 93:17 **summary** 107:19 summer 5:2 76:11 133:3, 11 supplemented 18:3 **supplied** 91:*15* 102:11 supplier 92:5, 11 93:7, 15 122:11 suppliers 87:24 93:6 **supply** 12:1 40:20 80:9 91:1, 8, 10, 12, 18 92:20 94:8, 16 103:12 104:23 116:*15* supposed 7:15 17:17, 22 19:9 30:24 31:11 32:3 33:1 80:13 99:5 109:6 122:23 surfacing 30:17 surprisingly 130:*1* sustained 68:17 **system** 8:21 12:*5*, *11* 13:*1*, *3*, 8, 9, 16 14:10, 12, 13, 18, 24 15:16 16:21 18:2 19:*6*, *19* 21:12, 15, 23 22:15, 19 28:22 29:17 48:9, 19, 21 49:3 65:22, 23, 24 66:23 76:6 84:5, 6 90:5, 10 91:13 92:13 97:17, 20, 24 109:16 110:2*1*, 23 111:*13*, *17* 112:2*4* 115:8, 11 116:3, 5 118:*15*, *21*

119:2, 8, 22 121:*1*3 122:*6* 124:21 125:11 127:3, 11, 13 128:3, *12*, *21*, *22*, 24 129:8 131:6 135:6 137:*10*, 12 138:10, 11 139:1, 3, 6, 14 **systems** 11:5, 11, 13, 16, 19, 22, *24* 12:6 14:*12* 18:1, 9 20:23, 24 21:21 23:10, 11, 20 112:7 134:5, 11 136:8 138:12 **system's** 115:1 118:*13* < T > table 24:12 69:21 84:14 104:18, 20 105:19 115:10 **tail** 5:11

takeaway 113:23 takes 95:22 100:11 129:21, 22 talk 45:17 62:5, 6 69:22 137:2 142:3 talked 70:5 talking 34:10, 12 45:15 48:5 61:16 63:16 66:9 84:10 90:15 102:13 target 84:2, 9, 10, 12, 16 team 9:22 10:14 35:15 39:8 70:15 71:16 79:13, 25 85:22 90:3 116:17, 22 120:6 127:*1*6 133:2 136:25 teams 71:1 98:12 team's 42:15 technical 12:18 29:22 97:2

106:*1*

technically 93:16 Technician 2:17 tend 4:7.8 tension 102:21 103:12, 22 term 24:21 63:6 66:8, 12, 21 67:3, 4, 6, 11, 22 75:12 98:9 100:17, 20 118:1, 19 119:7 125:7 130:17, 23 terms 6:16 9:8 14:23 22:13 29:2, 4 30:14, 15 40:4 42:6, 14 56:25 59:11, 25 60:1 62:11, 21 64:11 70:6 72:13 77:11 78:22 80:21 82:6, 16 94:2, 20 98:8 103:6 107:*10*, *19* 114:10 120:1 124:21 127:25 132:25 135:12 139:2, 3, 19 test 20:23 21:4 22:16 28:2 30:24 31:3, 10, 23 47:23 48:2, 17 49:1 108:12 110:22 111:*1*2 112:10 tested 29:18 32:17 33:5 86:6 111:14 testify 120:25 testimony 144:9 testing 12:1, 4, 25 15:16 22:11, 20, 24 23:3 26:9, 12, 23, 24 29:10 30:3, 4, 9, 22 31:8, 25 32:6, 7, 9 35:11 47:14, 15, 24 48:10, 12 49:4 68:10 75:20, 24 76:2, 5 80:1, 7 90:9 91:10 107:23 108:1

110:8, 15, 19

111:23 112:*10*, 14, 24 113:10 121:12 122:12 126:23 127:7 129:2 132:*4* 134:25 136:8, 10 137:24 testing/commissi oning 92:21 135:6 tests 20:23, 24 **Thales** 14:23, 24 15:7, 12 22:17 28:21 34:18 35:12, 13 76:9 96:14 105:24 110:21 113:3, 7, 9 136:18, 19 137:3, 4, 14, 16, 22 138:6 **Thales's** 35:20 136:8, 21 **Thanks** 143:3 Thavaraj 2:10 59:24 60:5 62:3 143:7 thick 140:1, 3 **thing** 17:*18* 27:3 28:14 29:11 33:9 50:6 83:12 92:18 110:2, 7 124:18 130:13 136:5 140:*14* 142:16 things 16:9, 12, 13, 17 19:10 25:25 28:9 36:16 37:3 40:15 42:22 45:11 47:22 48:2, *4* 58:8 60:14 67:25 75:16 76:1, 17 77:5 80:17 87:14, 18 89:11 95:24 98:19 99:5, 9 100:1, 3 103:15 105:8 109:11 123:19, 22, 23 126:22 130:4 132:2, 3 135:15 136:5, 20 139:8 140:6

142:5, 13, 17
143:10
thinking 37:2
thorough 130:5
thought 13:24
14:3, 5 17:22
19:1, 2, 8, 11, 13
26:16 20:6
36:70 38:0
36:16 38:6 46:19 83:10 118:25 122:5
118·25 122·5
thoughts 142:0
thoughts 143:9
threw 71:9
tight 85:7
time 3:8 11:20
21:13, 17 24:17
28:17 30:3, 6
20.77 00.0, 0
32:5, 13, 24 36:8 37:11, 13
36: <i>8</i> 37: <i>11</i> , <i>13</i>
38:1, 9, 12 39:8,
45.04.40.05
<i>15</i> , <i>24</i> 40: <i>25</i>
41:3, <i>6</i> , <i>8</i> , <i>17</i>
46:19 49:3
50:21 51:14
52: <i>4</i> , 10, 11, 21,
22 54:25 63:22
66:1 69:14
00.1 09.14
72:21 73:1, 2, 9 74:15 77:8, 25 78:10, 11, 15
74:15 77:8.25
78:10 11 15
70.70, 77, 73
79:7, 8, 9 81:2,
7, 8, 12, 18
87:19 90:11
07.19 90.11
95: <i>13</i> 98: <i>24</i>
99: <i>4</i> 103:25
105:23 108:23
109:24 112: <i>1</i> 2
119: <i>4</i> 122:7
126: <i>15</i> , <i>17</i>
120.70, 77
129:4 131:70
129: <i>4</i> 131: <i>10</i> 133: <i>17</i> 134: <i>18</i> ,
<i>24</i> 135: <i>4</i> 139: <i>4</i>
144:6, 7, 10
timelines 53:14
76·15 11 <i>1</i> ·18
10:10 114:10
timely 73:75
times 36: <i>15</i>
timely 73:15 times 36:15 39:15 41:7
71.0 10 02.5
74:9, 10 83:5
99: <i>4</i> 106: <i>8</i>
112:6 113:25
114: <i>14</i> 118: <i>16</i>
117.17 110.10
126: <i>19</i> 138: <i>4</i>
timing 5:10
today 46:9
today 46:9 69:3, 4 79:13,
US.S, 4 18.15,

14, *23* 81: *12*, *14* 109:9 **today's** 3:3 **told** 79:6 115:5 132:*14* tomorrow 69:5 79:15 81:13, 14 109:9 tone 135:11 tools 61:4 topic 124:9 126:16 totally 76:2 track 30:24 31:3, 10, 11, 23, 24 39:2 48:17, 18 76:3 110:21 111:*18* 116:*6* **train** 10:12, 13 12:2 13:*4*, *11*, 16 16:18 18:8 20:4 26:1, 8, 9, 10, 11 27:8 28:4 29:13, 17, 18, 20, 23, 24 30:1, 4, 5, 22 31:*22* 36:*4* 47:25 48:17 49:1 75:23, 25 79:24 86:3 89:7, *24*, *25* 90:10, 11 91:17 92:5, 9, 10, 12 93:6, 7, 15 94:6, 16 95:8 96:19 99:1, 2 101:16 105:*10* 108:*5*, *11* 109:1, *4*, *25* 111:*14*, *15*, *16* 113:1 122:11 125:16 130:19 134:*14*, *25* 135:6 137:19 training 132:1 **trains** 13:4, 6, 19 15:24 22:10, 15, 18 26:13, 21, 24 27:5, 11 28:2, 3, 8, 19, 21 29:3 30:16, 19 31:7, 20 32:1, 17, 18 33:1, 4 46:14 47:3, 24 48:18 66:11, 13, 16, 17, 20 67:18

68:*4*, 11, 12, 16 76:3 79:22, 23 84:7 86:9, 20 89:24 91:8, 11, *12*, *14* 93:9, *10*, 21, 23 94:13 96:14, 20 98:7 99:4 101:25 102:3 104:2 105:3 107:2 109:2, 15 110:12, 22 113:19 114:22 115:9, 21, 24 116:2, 6, 7, 15, *16* 118:*5* 119:18, 23 121:12, 19 124:*18* 125:*4*, *8*, 9 126:8, 10 132:3, 8 134:24 transcribed 3:10 144:12 transcript 3:11, 14, 17, 21, 23 4:1 144:14 transfer 128:2 130:13 transferred 130:23 transit 8:21 transparent 72:14 **Transpo** 94:21 95:4 141:14 treated 138:7 tremendous 71:22, 23 trial 4:15 29:10 107:21 108:19 113:*19* 115:*2*, *7*, 20, 21, 23 116:7, *14*, *18*, *22* 117:2, 8, 25 118:6 119:21 120:2, 22 121:4, 9 126:*24* **Triple** 20:2 **trouble** 23:20 true 86:6 87:13 132:17 144:13 truth 112:21 **trying** 5:10 11:24 25:3 39:5 44:12

51:19 71:11, 12 78:16, 23 79:4, 16 102:9, 10 123:10 125:19, 20 132:7 tunnel 46:16 turned 119:8 type 28:22 64:3 79:19 109:2, 6 141:25 types 29:3 107:3 typos 3:22 < U > ultimate 6:25 7:3 12:11 13:22 16:25 19:7 69:10 91:12 ultimately 12:9 13:15, 18, 21 14:10, 13, 18, 25 16:25 18:23, 25 19:3, *5*, *10*, *25* 20:2 21:15 22:24 24:15 25:19 26:1, 19 27:21 32:13 46:4 47:1, 6 48:6, 9 49:24 50:3, 6 62:22 63:18 67:11, 12 80:8 86:24 87:6 91:11 93:5 95:3 96:4, 25 109:24 110:*6*, *11* 115:*10* 121:*17* 130:25 132:7 134:12 140:12, 22 141:9 142:18 understand 14:21 16:6, 13 20:21 23:13, 16 25:4, 21 28:15 34:17 36:14 39:14 43:11 44:12 47:18 48:21 76:9 78:17, 23 79:3, 5 82:15 83:5, 17 99:14 102:10 110:17

120:20 123:5 128:3 understanding 21:9, 20 25:17 30:8 40:23 63:10 80:12 83:23 98:16 124:11, 12, 15 125:2 139:6 understood 72:20 118:20 122:13 underwriting 55:25 unfold 36:17 85:25 110:9 unfolded 73:2 112:*24* unfolding 106:12 university 7:21, 22 **update** 6:19 22:8 77:2 101:13 109:1 updated 93:10 138:*15* **updates** 106:13 126:*21* **UTO** 96:9, 12 97:24 99:8, 24 100:25 101:*11*, 20, 22 < V > validation 30:9 **value** 53:12 64:12 94:23 **various** 8:2, 3 47:5 83:4 84:1 128:5 **varying** 91:*16* **vehicle** 89:17, 19 90:4 91:1

V > validation 30:9 value 53:12 64:12 94:23 various 8:2, 3 47:5 83:4 84:1 128:5 varying 91:16 vehicle 89:17, 19 90:4 91:1 92:20 94:8 108:1 vehicles 22:10, 16 25:20 26:24 87:6 96:10 97:4 98:2 99:25 101:3, 6, 9, 14 102:11, 15 venture 12:3, 8, 9, 13, 24 17:6 18:6 20:1, 6, 12,

129:10

22 23:18, 19, 23	ways 72:24	wrongfully 53:6,
24:2, 11, 15, 17	website 3:15	22
57:4 63:11	week 109:4	wrote 94:19
65: <i>11</i> 141: <i>4</i>	weekly 108:24	109:23
ventures 6:5	114: <i>11</i>	WSP 20:1, 2
24:14	weeks 72:19	
venture's 24:7	78:3	< Y >
verified 55:3	whatnot 70:6	yard 96: <i>4</i> , <i>12</i> ,
VERITEXT	128:6	22 101:22
144:20	wheels 27:9	Yeah 9:18
versa 13: <i>12</i>	whiff 74:24	15:20 17: <i>1</i> 3
version 29:12	without-	35:24 36:11, 24
33:15 77:24	prejudice 51:15	42:13 55:1 <i>4</i>
137: <i>16, 17</i>	witness 4:4, 8,	60: <i>4</i> 66: <i>6</i>
versions 138:15	12 66:2, 3	68: <i>18</i> 71: <i>4</i>
versus 19:1	144:7, 9	73:22 81: <i>15</i>
36:17 47:3	wonder 94:5	88:21 89:22
61:17 62:19	won't 29:11	91:4 92:3, 4, 8
75:9, 17 86:7	wood 50:1, 2	94:1 96:2
88:2 96:21	51: <i>19</i> 58: <i>15</i>	99:23 103:7, 9
99:9 100:13	142: <i>1</i> 2	104: <i>16</i> 118:22
107:8 108:15	wordings 44:4	121:20 128:10
112:2 <i>4</i> 116: <i>1</i> 9	words 82:4	136: <i>18</i> , <i>24</i>
120:7 121:9	work 8:25 15:3,	141:17
122:24 140:3,	8, 13 19:8	year 5:12 30:25
15 142:15, 16	30:18 36:21	years 15:24
Vice 5:2, 6	37:3 45:1	25:23 27:16
13:11	46:24 50:3	34:4 35:22
Videoconferenci	71:17 74:9	65:5 71:6
ng 1:12	84:23 85:23	85:19 93:9
view 11:23	98: <i>10</i> 101: <i>5</i> , <i>15</i> ,	98:19
18:17 23:14	25 102:7, 23	York 8:21
25:14 62:25	111:18 122:21	young 7:21
68:9 86:3 87:3,	135:22, 2 <i>4</i>	young 1.21
4 90:1 95:12	136:22 137:1,	<z></z>
98:4 104:5	10 141:1	Zoom 1:12
114:3 115: <i>1</i> , <i>4</i>	working 71:17	200111 1.72
131:9, 11 139:1	81:20 97:12	
141: <i>11</i>	works 6:3	
Virtual 2:17	13:10 14:11, 17	
Viva 8:21	22:16 46:15, 16	
VIVA 0.27	48:13 49:5	
< W >	world 90:13	
walls 24:3	137:19	
wanted 49:23	worldwide 86:11	
54:10 58:9, 19	worse 141:18	
60:15 65:22	write 20:22	
96:24 136:19	21:3	
143:10	written 21:2	
wanting 58:7	63:24	
59:9 66:23	wrong 29:23, 24	
101:24 102:4	83:10 85:18	
warranty 100:6	89:25 136:3	
	55.25 .55.5	

141:18