Ottawa Light Rail Commission

Duane Duquette on Tuesday, May 17, 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	CITY OF OTTAWA - DUANE DUQUETTE
8	MAY 17, 2022
9	
10	
11	
12	
13	
14	Held via Zoom Videoconferencing, with all
15	participants attending remotely, on the 17th day
16	of May, 2022, 9:00 a.m. to 12:02 p.m.
17	
18	
19	
20	
21	
22	
23	
24	
25	

```
1
    COMMISSION COUNSEL:
 2
 3
    Emily Young, Litigation Counsel Member
 4
    Anthony Imbesi, Litigation Counsel Member
 5
 6
 7
    PARTICIPANTS:
 8
 9
    Duane Duquette, City of Ottawa
10
11
    Jesse Gardner and Lauren Gruenberger,
12
    Singleton, Urquhart, Reynolds, Vogel LLP
13
14
15
16
17
    ALSO PRESENT:
18
19
    Judith Caputo, Stenographer/Transcriptionist
20
    Alicia Sims, Virtual Technician
21
22
23
24
25
```

_

1	INDEX OF EXHIBITS
2	
3	NUMBER/DESCRIPTION PAGE NO.
4	1: Curriculum Vitae of Duane Duquette. 9
5	
6	
7	
8	
9	* * The following is a list of documents undertaken
10	to be produced or other items to be followed up \ast \ast
11	
12	INDEX OF UNDERTAKINGS
13	
14	The documents to be produced are noted by U/T and
15	appear on the following pages: (None).
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

1	Upon commencing 9:00 a.m.
2	
3	
4	DUANE DUQUETTE: AFFIRMED.
5	EMILY YOUNG: To start today,
6	Mr. Duquette, I'll just give a brief introduction
7	that will give you some information about the
8	parameters of the interview, and then we'll get
9	into it.
10	The purpose of today 's interview is to
11	obtain your evidence under oath or solemn
12	declaration for use at the Commission's Public
13	Hearings.
14	This will be a collaborative interview,
15	such that my co-counsel, Mr. Imbesi, may intervene
16	to ask certain questions. If time permits, your
17	counsel may also ask follow-up questions at the end
18	of this interview.
19	The interview is being transcribed, and
20	the Commission intends to enter this transcript
21	into evidence at the Commission's Public Hearings,
22	either at the hearings or by way of procedural
23	order before the hearings commence.
24	The transcript will be posted to the
25	Commission's public website, along with any

1 corrections made to it after it is entered into 2 evidence. 3 The transcript, along with any 4 corrections later made to it, will be shared with 5 the Commission's participants and their counsel on 6 a confidential basis before being entered into 7 evidence. 8 You will be given the opportunity to 9 review your transcript and correct any typos or 10 other errors before the transcript is shared with 11 the participants or entered into evidence. Any 12 non-typographical corrections made, will be 13 appended to the transcript. 14 Pursuant to Section 33 (6) of the 15 Public Inquiries Act 2009: A witness at an inquiry 16 shall be deemed to have objected to answer any 17 question asked of him or her upon the ground that 18 his or her answer may tend to incriminate the 19 witness, or may tend to establish his or her 20 liability to civil proceedings at the instance of 21 the Crown or of any person, and no answer given by 22 a witness at an inquiry shall be used or be 23 receivable in evidence against him or her in any 24 trial or other proceedings against him or her 25 thereafter taking place, other than a prosecution

1	for perjury, in giving such evidence.
2	As required by Section 33 (7) of that
3	Act, you are hereby advised that you have the right
4	to object to answer any question under Section 5 of
5	the Canada Evidence Act.
6	To let you know, throughout this
7	interview, if you need a break at any point please
8	let us know and we will take one. We usually will
9	take one around 10:30 anyway, hopefully that suits
10	you.
11	DUANE DUQUETTE: Good.
12	EMILY YOUNG: To start, Mr. Duquette,
13	I'm going to put the CV that your counsel provided
14	up on the screen.
15	DUANE DUQUETTE: Okay.
16	EMILY YOUNG: Can you see that?
17	DUANE DUQUETTE: Yes.
18	EMILY YOUNG: It looks like the CV
19	might not be quite up-to-date; is that right?
20	DUANE DUQUETTE: That's correct. I
21	haven't looked for a job in five years.
22	EMILY YOUNG: Fair enough. I haven't
23	updated mine in a while either, so I understand.
24	Can you tell us about your rail
25	experience prior to working for the City in

1	relation to the Ottawa LRT project?
2	DUANE DUQUETTE: Absolutely. I was
3	hired on as a conductor for Canadian Pacific
4	Railway, I spent a short time as conductor, that's
5	doing groundwork.
6	I then progressed to a supervisor's
7	position, which is an entry-level manager. Then
8	train master, then terminal train master. Terminal
9	train master, manager of Alyth. Alyth is Canada's
10	largest yard.
11	I'm not sure how familiar you are with
12	the rail industry, but the rail industry, what
13	happens is, trains come in from a bunch of
14	different directions, just to oversimplify it, we
15	bust them up, and then rebuild new ones and send
16	them out in four different directions. That's very
17	high level, but that's what we did. We had diesel
18	shops, as well as car shops, and then of course
19	operations.
20	We generally controlled every area from
21	Calgary to Field, British Columbia; up to Red Deer,
22	Alberta, Lethbridge and Medicine Hat.
23	EMILY YOUNG: As terminal train master,
24	you were overseeing the yard in which that work was
25	taking place?

1 That is correct. DUANE DUQUETTE: 2 EMILY YOUNG: And you worked for CP, 3 that started in 2008 and lasted until when? 4 DUANE DUQUETTE: Until I joined the 5 City in 2017. 6 EMILY YOUNG: Did you have any 7 experience before joining the City working on 8 public-private partnerships? 9 DUANE DUOUETTE: No. 10 EMILY YOUNG: Is there any other 11 education, training or experience before your work 12 for the City that related to your role with the 13 City or prepared you for that role? Aside from 14 what we've already discussed, your rail experience. 15 DUANE DUQUETTE: I believe it's listed 16 under there. Most of my experience prior to that 17 would have been management experience in 18 restaurants. 19 Oddly enough, working for transit 20 system, that customer service experience has been 21 invaluable. 22 EMILY YOUNG: Can you explain that a 23 little bit? 24 DUANE DUQUETTE: Well, the public 25 transit is actually a mesh of railway and customer

Γ

1	service. So the experience I gained as a manager
2	of a restaurant, has taught me a lot about
3	satisfying customer needs, understanding and
4	addressing their issues, and going forward that
5	way.
6	My experience in rail taught me the
7	nuts and bolts, if you would, of the industry.
8	EMILY YOUNG: Thank you. I'll take
9	down your CV there.
10	And madam reporter, if we can make that
11	the first exhibit. Thank you.
12	EXHIBIT NO. 1: Curriculum Vitae of
13	Duane Duquette.
14	EMILY YOUNG: So you started with the
15	City in 2017. What was your role then?
16	DUANE DUQUETTE: I was hired on as the
17	program manager of rail operations.
18	EMILY YOUNG: And it sounds like you
19	were probably hired because of your previous
20	experience working in rail?
21	DUANE DUQUETTE: That is correct.
22	EMILY YOUNG: And how long were you in
23	the program manager role, Mr. Duquette?
24	DUANE DUQUETTE: Approximately, two
25	years.

Ottawa Light Rail Commission Duane Duquette on 5/17/2022

1	EMILY YOUNG: And what role did you
2	transition to after that?
3	DUANE DUQUETTE: Director of Rail
4	Operations.
5	EMILY YOUNG: And how long were you in
6	that role?
7	DUANE DUQUETTE: Until about January of
8	this year. So three years'ish, two and a half,
9	three years. Sorry. Right before we launched
10	until about January of this year.
11	EMILY YOUNG: And then you moved into
12	the role of Acting Chief Safety Officer for a time;
13	is that correct?
14	DUANE DUQUETTE: That is correct. And
15	I currently employ the Deputy Chief Safety Officer
16	position.
17	EMILY YOUNG: Okay. And Brandon
18	Richards was in the Chief Safety Officer role
19	before you; is that right?
20	DUANE DUQUETTE: Prior to me taking the
21	position, that is correct. Upon his departure,
22	they asked me to act while they searched out a new
23	chief.
24	EMILY YOUNG: In going back to your
25	first role from 2017 to 2019 as program manager of

1	rail operations. Could you describe your
2	responsibilities and duties in that role?
3	DUANE DUQUETTE: Certainly. Again, at
4	a high level, of course, but the primary duties for
5	those first two years is, we were recruiting rail
6	operators, and then also establishing procedures
7	and rules for the railway.
8	So writing up the SOPs, writing up the
9	rule book. And then, of course, extensive hiring
10	of rail operators, rail supervisors, station
11	attendants, that sort of thing. They actually came
12	a little bit later, but assisted with the
13	onboarding of the controllers, any rail
14	operations-type personnel.
15	EMILY YOUNG: When you were onboarding
16	the controllers and operators, would you also have
17	been overseeing their training?
18	DUANE DUQUETTE: No. Training was done
19	with a different department.
20	EMILY YOUNG: What department?
21	DUANE DUQUETTE: Training.
22	EMILY YOUNG: Okay.
23	DUANE DUQUETTE: I believe at the time,
24	it may have had right now we call it "SRTD",
25	Safety, Reliability, Training and Development. But

1	I can't remember exactly the title of the
2	department, and they do tend to change every couple
3	of years.
4	EMILY YOUNG: Is that department still
5	within OC Transpo?
6	DUANE DUQUETTE: Yes.
7	EMILY YOUNG: So it would have been
8	overseen at the time by John Manconi?
9	DUANE DUQUETTE: I guess everything is
10	overseen by John Manconi. But the Chief Safety
11	Officer at the time was Jim Hopkins. So it would
12	have fell under his portfolio. And Greg Davis was
13	the manager. I apologize, I can't remember, he was
14	a program manager or a manager, regardless, he was
15	the one in charge of that.
16	EMILY YOUNG: And can you tell me how
17	your role changed once you moved into the Director
18	of Rail Operations position?
19	DUANE DUQUETTE: Absolutely. So that's
20	when I transitioned from strictly looking at rail
21	as an operational position, to overseeing, at that
22	time, the contracts department and the trains and
23	systems department.
24	This happened about two months prior to
25	launch.

1	EMILY YOUNG: And what does the
2	contracts department do?
3	DUANE DUQUETTE: They work with the
4	contracts department at RTM/RTG apologies,
5	whichever one you want to refer to it as and
6	oversee like the daily, I don't know. The daily
7	back and forths, whether work gets done, or work
8	doesn't get done, if penalties are applied, that
9	sort of thing.
10	EMILY YOUNG: Okay. So contract
11	management, I guess?
12	DUANE DUQUETTE: Absolutely.
13	EMILY YOUNG: Okay. And what was the
14	other branch that you mentioned?
15	DUANE DUQUETTE: Trains and systems.
16	EMILY YOUNG: Is that more technical?
17	DUANE DUQUETTE: Absolutely.
18	EMILY YOUNG: Can you explain that a
19	little bit more?
20	DUANE DUQUETTE: Yes. So it actually
21	differs from like my experience at CP, where we
22	have our own like our own engineering department,
23	where they physically do the work. Because the
24	project is a P3, our trains and systems department
25	is more of audit-type function. I don't know if

1	that's the exact type term, but what they do is,
2	they would oversee them. We don't have anybody
3	that goes out there and pounds spikes, or adjusts
4	the OCS. But we do have people in our department
5	that would look to ensure that RTM or slash RTG is
6	doing the work that is required.
7	EMILY YOUNG: Okay. So is that mainly
8	looking at, once you go into operations, are they
9	maintaining the trains, the track, the OCS, that
10	kind of thing?
11	DUANE DUQUETTE: That's correct.
12	EMILY YOUNG: Okay. So we'll get into
13	that a little bit more later.
14	Could you speak about your mandate on
15	Chief Safety Officer and now Deputy Safety Officer?
16	DUANE DUQUETTE: What do you mean by
17	"mandate"?
18	EMILY YOUNG: What's your role?
19	DUANE DUQUETTE: Okay. So as a Chief
20	Safety Officer, again, overseeing the safety
21	reliability sorry, safety, regulatory,
22	compliance and training.
23	So again, to simplify that, we have
24	training, safety and regulatory departments that
25	feed into the Chief Safety Officer at the time. So

1	those three departments would basically be managed
2	by myself for those couple of months.
3	Since then, in the last month, we've
4	also brought SCU, which is our Special Constable
5	Units into the safety department, and now they
б	report directly to me as well.
7	EMILY YOUNG: And could you tell me who
8	you were reporting to in each of your successive
9	roles?
10	DUANE DUQUETTE: Certainly. As program
11	manager, I was hired by Michael Morgan. However, I
12	only reported to him for and I can't tell you
13	exactly, it was a month or two, it was a very short
14	time period, after he quickly transitioned over to
15	the construction side, RTC. A different name at
16	the time, but that's what it is, rail construction
17	program.
18	After that, it was Joanna Venditti, she
19	was the Director of Rail Operations, I reported to
20	her for about two years. Upon her departure, I
21	took over her position, and I reported to Troy
22	Charter.
23	As the Chief Safety Officer, I reported
24	directly to Renée Amilcar, our current GM. And
25	then as the deputy, I report to Paul Treboutat

1 I'm not great with the last name -- but he is the 2 Chief Safety Officer. 3 Is it Treboutat? EMILY YOUNG: 4 DUANE DUQUETTE: That sounds correct, 5 Sorry. yes. 6 EMILY YOUNG: We might both be 7 pronouncing it wrong, but hopefully we have it 8 probably right. 9 DUANE DUQUETTE: I was trying to avoid 10 mispronouncing it. 11 Well, luckily for us only EMILY YOUNG: 12 the spelling shows up on the transcript. 13 DUANE DUOUETTE: Perfect. 14 EMILY YOUNG: So we don't have to worry 15 about that. 16 As a Chief Safety Officer and Deputy, 17 what powers do you have to make decisions about 18 safety on the line? 19 DUANE DUOUETTE: As a Chief Safety 20 Officer, I suppose you have ultimate power. You 21 have the ability to stop anything. But for that 22 matter, all employees at OC Transpo are empowered 23 to escalate any safety issues. So whether Chief 24 Safety Officer to an operator. 25 As Chief Safety Officer, EMILY YOUNG:

1	are you saying you have the authority to shut down
2	service?
3	DUANE DUQUETTE: Absolutely. Whether
4	it be bus, rail or para.
5	EMILY YOUNG: Are you able to do things
б	that are short of that, less drastic than shutting
7	down the service?
8	DUANE DUQUETTE: Oh, absolutely. If
9	there's any multiple different levels that you
10	would honestly, the shutting down of operations,
11	you know, that would be a difficult decision to
12	make. Even from a safety perspective, because you
13	have to remember, people rely on the
14	transportation. So there's actually a safety
15	element to shutting things down, too.
16	When you shut things down, people are
17	left stranded. You know, you come into stations,
18	if your train is not coming every five minutes
19	it's not as big a deal during the pandemic, but
20	prior to the pandemic, every three minutes
21	600 people are coming into that station. They
22	continue to crowd, that becomes a safety concern
23	unto itself as well.
24	EMILY YOUNG: So what other sorry.
25	DUANE DUQUETTE: I was just

1	reiterating, during the pandemic that was less of a
2	concern because ridership went down.
3	EMILY YOUNG: So what are some of the
4	tools at your disposal that are less severe than
5	shutting down the line?
6	DUANE DUQUETTE: One of the tools we
7	employed most of the time is correspondence with
8	one another, with our contractor.
9	We also, through those correspondence,
10	we can request quite a bit in regards to
11	information, but then also corrective actions
12	determined on those sort of things.
13	We can also employ audits. We go in
14	and do audits to ensure that they're complying,
15	which we've done a couple of those as well.
16	I'm trying to think here. And then of
17	course for the most part, however, the reality of
18	it is, is we'd get together with our partners and
19	we try to work with them to determine if there was
20	an issue. Workaround, that sort of thing.
21	EMILY YOUNG: Okay. Are you able to
22	tell me about the kinds of audits that you've
23	undertaken in your safety role?
24	DUANE DUQUETTE: To be quite honest, in
25	the safety role, I was only in that position for

1	about three months, and then I've been the deputy
2	or three or four months, three and a half. And
3	I've only been the deputy for about a month, so
4	nothing was generally initiated by myself.
5	So there has been some audits. I know
6	most recently, like we even did an audit we had
7	a third party do an audit of our training programs;
8	we've had, you know, you look at TRA, that's a type
9	of audit on their return to service, that's one
10	that's ongoing right now.
11	And then their maintenance
12	capabilities, that sort of thing. Those are the
13	ones that are primarily going on right now.
14	There's been several that have probably been done
15	before me, but again, I've only been in the
16	position for a short amount of time.
17	EMILY YOUNG: Fair enough. We're only
18	asking you what you know, sitting where you are
19	today.
20	Are you able to share any of the
21	results of the third-party audit of the training?
22	Were there any issues that were identified?
23	DUANE DUQUETTE: To be honest with you,
24	I don't really have the information in front of me.
25	And that was a like we have that

1 was actually, I believe, an audit of our internal 2 training on bus. So I don't know if it's relevant 3 to what you're looking for. 4 I don't know. 5 EMILY YOUNG: We are more interested in 6 You're right about that. LRT, yes. 7 ANTHONY IMBESI: Who would have 8 performed that audit? 9 DUANE DUOUETTE: I believe the 10 gentleman's name is Ron Hopkins through STV. 11 EMILY YOUNG: And then the TRA review 12 of the return to service plan, that we're aware of. 13 You said that's still ongoing? 14 DUANE DUOUETTE: That is correct. Ι 15 don't think it would be termed as an audit, it's 16 now just a return to service where they monitor to 17 ensure progress, and then we're given reports on 18 that, or updates on that. 19 EMILY YOUNG: So they started by 20 reviewing the return to service plan, and now 21 they're looking at whether RTM is implementing that 22 plan; is that right? 23 DUANE DUQUETTE: That is correct. 24 They're also looking at other stuff, including like 25 from more of a safety perspective, they are looking

1 at their SMS system. 2 EMILY YOUNG: Is that "Safety 3 Management System"? 4 DUANE DUQUETTE: That is correct. 5 EMILY YOUNG: Okay. And had they 6 identified any concerns in relation to their SMS? 7 DUANE DUOUETTE: Yes. Primarily, that 8 it hadn't been updated, I guess, since launch of 9 service. 10 EMILY YOUNG: And how was that 11 identified? Was that TRA who identified that? 12 DUANE DUQUETTE: I would only be 13 speculating. Again, that happened before I came 14 Since I've come in, I know that we've been in. 15 monitoring their progress to get it up to date. 16 Through TRA. 17 EMILY YOUNG: You mentioned that there 18 had also been an audit of RTM's maintenance 19 capabilities. Can you explain what that is? 20 DUANE DUOUETTE: I'm not sure if I --21 I'm trying to think here. I'm wondering if I 22 misspoke. 23 I mean, we do continuous oversight of 24 their maintenance. And I apologize if I used the 25 term incorrectly. So the trains and systems

1	department goes in on a regular basis and takes a
2	look at what they've done, the documentation
3	they've provided.
4	Oh, and, actually, I believe STV and
5	sorry, TRA. There's so many acronyms here. But
6	they've also done the they've looked to see
7	the TRA is continuing to see and I wish I had
8	the paper in front of me, it would be easier to get
9	the terminology but their maintenance practices,
10	to see if they're trending towards what they refer
11	to as a "highly reliable organization". So there
12	is a component to TRA's work that would be
13	classified, I suppose, as an audit of their
14	maintenance, yes.
15	EMILY YOUNG: And that type of
16	oversight you were talking about, the trains and
17	systems department looking at their maintenance,
18	has that been going on since service started?
19	DUANE DUQUETTE: For the most part,
20	yes. It's grown since first launch. And it's
21	become more extensive as time has gone on, and
22	then, yeah. It's just grown.
23	EMILY YOUNG: And why has it grown?
24	DUANE DUQUETTE: I believe one of the
25	things we identified early, was that we needed more

1 oversight of the contractor. 2 To put it into perspective, you know, 3 when we launched, the concept was to, you know, 4 take a look at what they did last week to ensure, 5 vou know, the I's were dotted an the T's were 6 crossed, to the point where now we have to make 7 sure that they're tightening bolts, because at 8 points it seems like they couldn't do that. So that's quite a shift in required resources. 9 10 So it sounds like what EMILY YOUNG: 11 you're describing is sort of, at the start of 12 service, the perspective of OC Transpo and your 13 department is that you're dealing with a maintainer 14 who is reliable, is going to fulfill their 15 obligations, and then over time you've sort of lost 16 trust in their ability to do that? 17 DUANE DUQUETTE: I would say that's 18 accurate, yes. 19 EMILY YOUNG: Did you have any 20 involvement at all in the procurement or design 21 phases of the project? 22 DUANE DUQUETTE: No. 23 EMILY YOUNG: Have you encountered any 24 challenges or issues in your work that suggested to 25 you that it would have been helpful to have

OC Transpo involved earlier on in the design phase 1 2 in their operator role? 3 DUANE DUOUETTE: I'm not sure what you 4 I apologize, I'm... mean. 5 EMILY YOUNG: No, no, that's fine. Ι 6 don't know that I've explained that clearly. 7 I guess the question is, whether any 8 issues have come up that have made you think, oh, 9 the way that this was set up or designed, maybe 10 isn't the most sensible. And if we had had input 11 in that at an earlier stage, it might have 12 mitigated that issue or avoided that problem? The 13 answer may be, no; it may be, yes; I'm just asking. 14 DUANE DUQUETTE: Yeah, not 15 specifically. And to my knowledge, OC Transpo, I 16 mean, through the rail construction program or 17 whatever it was labelled at the time, did have, you 18 know, regular input as to what was going on there. 19 And they did design reviews, you know, at multiple 20 different stages. So there was input there. 21 And what they didn't have, and again, I 22 wasn't there, but my understanding is, for whatever 23 expertise they didn't have in-house, they used 24 contractors and stuff to help build up that 25 knowledge base.

1 EMILY YOUNG: Do you have any view 2 about whether there was sufficient planning for the 3 Like how the overall integration of the system? 4 whole of it would work together? 5 DUANE DUQUETTE: What do you mean, like 6 what system specifically? Or are we just talking 7 the system in like with the bus system, or are we 8 talking about specific like the SCADA or -- I'm not 9 sure you what you mean. 10 Like rail system with the bus system, 11 OC Transpo, pardon the term, but it planned that 12 one to death. We have a habit of over planning --13 well, that's not the proper term -- but we plan to 14 -- we extensively plan here at OC Transpo. 15 So guite a bit, like with the 16 integration of the rail system, the bus system, 17 that was well-thought-out. 18 EMILY YOUNG: I'm thinking more of the 19 integration of the different aspects of the rail 20 system. 21 So the vehicles with the track, with 22 the stations and passengers, you know, RTM working 23 with OC Transpo, and also engaging with OLRT-C as 24 well, so just how the whole fits together, whether 25 you've noticed any issues in that regard?

1 DUANE DUQUETTE: Not really. When the 2 system is working, it works quite well. 3 EMILY YOUNG: And in your view, the 4 issues, or the times when the system doesn't work, 5 aren't a result of integration issues as between 6 all the parts of the rail system? 7 DUANE DUQUETTE: Not in my opinion, but 8 I'm also not a systems engineer. 9 So from a layman's perspective, they 10 seem to work together. 11 EMILY YOUNG: Did you have any 12 involvement in the construction process? 13 DUANE DUOUETTE: No. I quess the only 14 thing is, you know, provided operators for testing 15 and commissioning. But that's after the 16 construction process was done so yeah. 17 EMILY YOUNG: Have you heard of a third 18 party called "SEMP"? 19 DUANE DUOUETTE: Sounds familiar. Τs 20 that the safety something ... 21 EMILY YOUNG: Yes. And I'm not going 22 to know the proper term, either. 23 DUANE DUQUETTE: Is that the safety 24 certifier? 25 EMILY YOUNG: They're not a safety

1	certifier, there was an independent safety auditor
2	as well. But they did work on looking at the
3	safety and I think what they called "systems
4	engineering".
5	DUANE DUQUETTE: No direct knowledge.
6	But I mean, obviously, you know, it's not a very
7	big company, you hear and see things. You know
8	what I mean? Titles and stuff.
9	EMILY YOUNG: Are you aware of the
10	independent safety auditor and their involvement?
11	DUANE DUQUETTE: Again, only from a
12	high level, or a distant level at the time I
13	mean, now I would be very much involved with them.
14	But at the time, it was not really part of my work.
15	I was aware there was one.
16	EMILY YOUNG: Okay. When you were
17	you mentioned that in your first role, 2017 to 2019
18	program manager, you were doing work on standard
19	operating procedures and rules and things like
20	that.
21	In that work, were you looking at
22	safety requirements when drafting those things?
23	DUANE DUQUETTE: The safety plays an
24	element in all that type of work, absolutely.
25	And we work with the safety department,

1 and in specific, we work with actually the Chief 2 Safety Officer during that, Jim Hopkins played a 3 large role in it as well. 4 EMILY YOUNG: The reason that I ask is 5 because -- although perhaps you weren't as aware of 6 it from your end, I understand that the independent safety auditor was looking at things like the 7 8 standard operating procedures and rules that were 9 being put in place for operations. 10 It doesn't surprise DUANE DUQUETTE: 11 That's probably where Jim Hopkins involvement me. 12 came in, it was a large part of it, yeah. 13 EMILY YOUNG: How do you update 14 operating procedures and training to account for 15 changes that are made to trains and software and 16 things like that? 17 DUANE DUQUETTE: So if anything like 18 was immediate, we can issue what's called a 19 "bulletin". There's two different ways to -- okay. 20 There's two different ways to communicate things 21 out. One is a communication and then one is a 22 bulletin. 23 Communications are just for general 24 information. You know, Canada Day is coming up, 25 we're going to need extra stuff, blah, blah, blah.

1 Bulletins are rules effecting, or 2 procedural effecting. When a bulletin comes out, 3 it goes out to the entire operations. Everybody in 4 an operational position is required to sign off 5 that they've seen it, and it's just a mandate of 6 your position. So that's how you do an immediate 7 change. 8 If it's a less immediate change, we 9 have what we call a "Rule Book Committee". But 10 it's a committee that meets on a regular basis and 11 once a year, basically, takes all these bulletins, 12 if they're still in effect, and brings them into 13 either the procedures or into the rules. And then 14 we re-issue the procedures and/or reissue the rule 15 book with those integrated into it. 16 EMILY YOUNG: And so those are the ways 17 that you would communicate those changes to, for 18 example, operators and controllers? 19 DUANE DUQUETTE: Operators, controllers 20 and to our contractors. Anybody working on the 21 railway is required to understand, read and 22 understand. 23 EMILY YOUNG: Would there ever be 24 additional training provided when there was a 25 change?

1	DUANE DUQUETTE: Absolutely, if
2	required. If the change was substantial enough
3	and, primarily, that would probably be just, you
4	know, a risk assessment would be done, and would
5	say that, you know, that's one of the mitigations
6	to bring it up to an acceptable level of risk.
7	EMILY YOUNG: Are you aware of whether
8	that has happened yet, since service began?
9	DUANE DUQUETTE: I'm trying to think.
10	Well, I can tell you for certain,
11	bulletins have been issued, that's a definite. But
12	you're referring to the rules, correct?
13	EMILY YOUNG: I'm referring to an
14	instance where you issue a bulletin, or change the
15	rules, and you decide that we need to give
16	everybody some additional training right now as
17	well on this change.
18	DUANE DUQUETTE: I apologize, I can't
19	maybe if we, you know, if I go back over the last
20	three years. But off the top of my head, I can't
21	think one way or another, I apologize.
22	EMILY YOUNG: That's no problem at all.
23	So I just want to speak a little bit
24	about the delegated authority framework for safety
25	at the City.

Т

1	DUANE DUQUETTE: All right.
2	EMILY YOUNG: Our understanding is that
3	Transportation Canada has delegated regulatory
4	authority to the City by way of an agreement.
5	DUANE DUQUETTE: Uhm-hmm.
6	EMILY YOUNG: Do you know why this is
7	necessary?
8	DUANE DUQUETTE: I don't know. I mean,
9	"why" is a bit of an odd question. I can tell you
10	that I believe it was done because most transit
11	systems in this country are self-regulated.
12	So it would actually almost be, you
13	know, singling out Ottawa as not.
14	EMILY YOUNG: So this sort of thing is
15	typical for municipal rail?
16	DUANE DUQUETTE: That is correct.
17	EMILY YOUNG: Are you aware of the
18	contents of the agreement between the City and
19	Transportation Canada?
20	DUANE DUQUETTE: Not the specifics.
21	EMILY YOUNG: Do you know who would
22	have devised the regulations of the agreement and
23	negotiated it?
24	DUANE DUQUETTE: Not specifically.
25	Again, that would be well prior to me

1 arriving here. I mean, I know where I can find it 2 right now, my regulatory department can pull it up 3 quite quickly and get me the information. That's 4 how it works now. 5 But, you know, what happened -- and I 6 would assume that that probably happened, you know, 7 the talks happened quite a bit a while ago. Ι 8 would assume it had City legal and such, as well as 9 some safety elements to it, but I would only be 10 theorizing. 11 EMILY YOUNG: Fair enough. 12 Do you have any understanding of how 13 the regulations that applied at the City are 14 different from the Federal regulations? 15 DUANE DUOUETTE: Again, not specifics. 16 And what I can tell you is, when it comes to like 17 rules and stuff, we actually mimic -- rules, 18 regulations, whatever you want to refer to them --19 we actually mimic the best practices. Whether it's 20 either the Federally regulated or other railways. 21 I'm very well aware of how we went 22 about designing that. Like when it came to the 23 rule books, and again back to your procedures and 24 such. 25 They were all -- we did even site

1	visits to other rail, municipal railways.
2	As well, we have our own Trillium Line
3	here, which is CROR managed, which is what I am far
4	more familiar with. Well, when I hired on anyways,
5	so I was more familiar with it. Now I've helped to
6	work on our rule book, so I'm actually probably
7	more familiar with that now.
8	But the CROR, which is the Federal
9	Railway Rule Book, Canadian Rail Operating Rules.
10	That's owned by Transport Canada. Each railway in
11	Canada goes into it, it's an extensive, extensive
12	book, and takes what rules apply to them.
13	Like on our Trillium Line, we don't
14	apply any of the dangerous goods, or special
15	dangerous, because we don't transport dangerous
16	goods or special dangerous, so those ones would be
17	omitted. But passenger service, those would be
18	forefront for us.
19	EMILY YOUNG: Are there any other ways
20	in which you sought to mimic best practices when
21	you're putting together your rule book?
22	You mentioned doing site visits,
23	looking at the Federal rules that you've just
24	alluded to, are there any other
25	DUANE DUQUETTE: Yeah, we looked at the

1 rules books of various other municipal railways. 2 And what were you looking EMILY YOUNG: 3 Like how would you assess whether something for? 4 is something that you want to take on in Ottawa? 5 DUANE DUQUETTE: First off, it would be 6 best practices. And then on top of that, we also 7 brought in a lot of consultants, as well, to assist 8 that have been through this before. 9 STV played a large role. Joe North, 10 Larry Gaul, these gentlemen acted as subject matter 11 experts, as well, to assist us with that. And 12 again, Jim Hopkins with his extensive experience in 13 Vancouver, which has a similar operating system. 14 So you know, myself from freight 15 railway, there's also Joseph North, your Larry 16 Gaul, who have extensive experience in other 17 municipal railways. And then Jim Hopkins, who has 18 extensive experience in the same controls systems 19 that we employ here on this railway. And then 20 various other voices came into play as well. 21 EMILY YOUNG: So, sort of in the next 22 phase of things, implementation, can you speak 23 about who implements the rule book, the 24 regulations, in the course of their work? 25 DUANE DUQUETTE: You mean like who

1 signs off on it? Or who uses it? 2 EMILY YOUNG: Who uses it, who's 3 putting it into practice? 4 DUANE DUQUETTE: Operators, 5 controllers, anybody that works front line on the 6 railway. 7 EMILY YOUNG: And is RTM and Alstom 8 Maintenance, are they also doing that? 9 DUANE DUOUETTE: Anybody that's worked 10 on the railway is required, yes, to follow those 11 same rules. 12 And they're all trained EMILY YOUNG: 13 on those things before they begin, presumably? 14 DUANE DUOUETTE: That is correct. 15 EMILY YOUNG: Were you also working on 16 the safety training when you were developing those 17 rules? 18 DUANE DUOUETTE: See, it's an odd 19 question because there's no specific safety 20 training, but everything involves an element of 21 safety, right? 22 The rail industry is a highly regulated 23 industry, and one of the first things I learnt, you 24 know, and something you try and impart on everybody 25 and you try to think of when you're working to

1 design these things or when you're working to vet 2 them, is railway rules -- and I apologize, but 3 they're written in blood, and there's a reason why 4 they're in place. 5 So every rule, every procedure, has an 6 element of safety to it. I mean, we're dealing 7 with large pieces of steel moving at high speeds; 8 everything has an element of safety. 9 EMILY YOUNG: For sure. And so, given 10 that it sounds like the folks who were creating the 11 safety rules were not the same people that were 12 doing the training, were the safety people -- I'm 13 going to use the word "audited," that's probably 14 not the right word -- were they auditing or looking 15 at that training to make sure that it was properly 16 reflecting all of the safety-related rules? 17 DUANE DUQUETTE: So, that's not 18 Jim Hopkins was the head of the safety accurate. 19 department and he was a large part of the rules and 20 procedures. 21 EMILY YOUNG: Okay. 22 DUANE DUQUETTE: And training, 23 actually, like -- and that's one of the reasons why 24 he was there, because both safety and training 25 reported to him as Chief Safety Officer. So there

1 was a large element of safety being involved there. 2 EMILY YOUNG: And so would Jim Hopkins, 3 he's overseeing that, does he have people who are 4 looking in detail at all of the training 5 requirements? Or would he do that directly? 6 DUANE DUQUETTE: That you'd have to 7 speak with him directly. But I can tell you as 8 well, like, from our perspective, we also, like, 9 because the project was delayed, we vetted this --10 I know we did working groups; like, we did, what 11 are they being referred to as? Table tops. We did 12 But we also other, you know, drills and exercises. 13 did, just when we had the opportunity, we had 14 operators look through these -- operators, 15 controllers, and the people that had some 16 familiarity with the system, look through these and 17 provide their feedback. And then, if required, we 18 made adjustments. 19 EMILY YOUNG: And if you come up with 20

any adjustments that are required now, you would either incorporate those by issuing a bulletin or by incorporating them at the year-end review? DUANE DUQUETTE: Depending on the requirements of, like, what comes up. If it was something that was required immediately, it would 37

1 be a bulletin. 2 If it was something that wasn't 3 required immediately, like, you know, a procedure 4 to sweep the train a different way or something 5 like that -- "sweep" is just a walk-through of the б train to make sure that there's no passengers still 7 on it before you bring it to the yard -- you know, 8 maybe something like that. And I'm just 9 hypothesizing here. Maybe something like that 10 could wait until the yearly review, but if it was 11 something immediate, it would be a bulletin and put 12 in place immediately, as soon as the bulletin can 13 be written and put in place. 14 EMILY YOUNG: What kind of ongoing 15 training do those who are working on the line have? 16 Do they have refreshers every so often, tests, 17 things like that? 18 DUANE DUQUETTE: Yeah. I don't have 19 the curriculum for the refreshers in front of me, 20 but they're required to do a refresher every year, 21 16 hours per operator. Of course, I don't know 22 specifically because they never reported to me. 23 EMILY YOUNG: Who did they report to? 24 DUANE DUQUETTE: They report to, 25 presently, it's Joel Lemieux, and then up to Troy.

Ottawa Light Rail Commission Duane Duquette on 5/17/2022

1 EMILY YOUNG: The 16 hours, is that 2 driving the train? What would that look like? 3 DUANE DUOUETTE: No. These are things 4 that -- driving the train, there's other things for 5 driving the train. We actually, as part of our 6 SMS, our safety management system, we have a 7 requirement for every operator to drive the train 8 in ATPM, which is the manual mode. 9 So I don't know how familiar you are 10 with our trains, but they actually drive 11 themselves; it's a computer-based train control. 12 For the most part, the operators are there 13 primarily as a security and safety function. 14 Really, this is the exact same control system --15 actually, it's an updated control system from the 16 one that's working in Vancouver for the last 20, 17 30 years, driverless. So the whole purpose of the 18 drivers is a safety and security function. 19 Now, having said that, we found them to 20 be incredibly valuable on the train, and it would 21 be foolish for us not to keep up their skill set to 22 be able to drive in a manual mode if, for whatever 23 reason, it's required. Train breaks down, you 24 can't take it in a controlled mode back to the 25 yard, they still need to keep up that skill set.

39

1	There's a requirement on a monthly
2	basis for every operator, I believe, to have a one
3	hour per month of manual driving, or it could be
4	two flips, which works out to be, like, about
5	56 minutes, but that's
б	EMILY YOUNG: Close enough.
7	DUANE DUQUETTE: Yeah.
8	EMILY YOUNG: You mentioned that you
9	found that having the operators on the train,
10	despite using the CBTC system, has been very
11	valuable. Can you speak a bit more about that?
12	DUANE DUQUETTE: Certainly. One of the
13	site visits we did prior to launch was to
14	Vancouver, specifically because they have such a
15	similar system to ours from a computer-based
16	control system.
17	We discussed it with them and they
18	chose to take their staff and for the most part,
19	they have a they have a similar staffing, you
20	know, ratio, if you would, miles traveled to amount
21	of people employed. However, they've chosen to put
22	theirs on the platform and ours are in the actual
23	trains.
24	What we found is because the trains
25	haven't always been as reliable as we'd like, it's

1	beneficial to have the operators in position
2	already; whereas, in Vancouver, they would have to
3	hold the train, they have the risk of people
4	pulling the emergency releases, that sort of thing.
5	Whereas, what we found is having an operator on the
6	train A) gives us somebody directly in a position
7	to do troubleshooting; and then, B) if the
8	situation gets worse, there's somebody already in
9	position that can assist with any kind of, if it's
10	required to, you know, remove passengers from the
11	train or any of that sort of thing. Or, for the
12	very basics, just to be able to communicate with
13	the passengers: "Standby," you know, "there's just
14	a train with an issue ahead of us. We'll be moving
15	shortly."
16	We found, you know, from those bunch of
17	varied perspectives, it's been really beneficial to
18	have them actually in position on the train. It
19	turned out to be a very good decision.
20	EMILY YOUNG: So they've been able to
21	do kind of the initial layer of troubleshooting and
22	dealing with issues as they arise?
23	DUANE DUQUETTE: Absolutely.
24	It's unfortunate all the focus is on
25	the negativity with this rail line, but, actually,

1	the operations have been kind of a good news story
2	that kind of got glossed over.
3	EMILY YOUNG: And have you found that
4	the operators have been able to work well with RTM
5	and Alstom Maintenance in coordinating response to
6	issues like that, like, when there's a person on
7	the train that's responding? And then I guess, if
8	they're not able to troubleshoot, fix the problem,
9	would then a maintenance person come in?
10	DUANE DUQUETTE: Now that's the way it
11	works. And there's been an evolution. We've gone
12	through a couple of different things.
13	At first, there was times where there
14	was actually an Alstom tech stationed in the
15	control room. So, if the train had issues, the
16	Alstom tech could actually come on the radio and
17	help guide them through it while somebody is being
18	dispatched as well.
19	We've evolved to the point where our
20	controllers actually take that position now. We've
21	developed quite a bit of troubleshooting manuals
22	and provided training to the controllers, as well
23	as the operators, so that they can, you know, guide
24	them through step by step. We've found it works
25	really well because, when you're in one of those

	•
1	situations and you have a train full of passengers,
2	sometimes you get a bit nervous, and if you have
3	that calm voice from control being able to guide
4	you step by step, we've found it to be very
5	beneficial. And it's reduced, you know, some of
6	the trouble, some of the problems.
7	That's what I mean by operations, it's
8	kind of an unsung hero in this whole system. We've
9	been able to adapt very quickly and, honestly, you
10	know, solve a lot of problems.
11	EMILY YOUNG: And so that the move
12	towards that approach, having controllers come
13	online, speak to passengers, and having those
14	troubleshooting manuals in place for them, that has
15	developed since service started?
16	DUANE DUQUETTE: So, the controllers
17	wouldn't speak to passengers. The operators would
18	speak to passengers.
19	The controllers would provide guidance
20	to the operator while they're doing
21	troubleshooting. A lot of the troubleshooting
22	and you've got to think of it like this, it's a
23	small room, it could be dark. There's a cabinet
24	that you got to go in. So you've got toggle
25	breakers that are required for brake faults and

1	stuff like that. And so, instead of having a book
2	and trying to flip through it and have your light,
3	you have somebody on the radio, "All right, now go
4	to this switch, toggle it twice." And I'm
5	oversimplifying it but I'm trying to give you a
6	picture as to why that's beneficial.
7	And, yes, it was a growth. At first,
8	you know, the concept was we were buying a fully
9	automated system, shouldn't have to worry about too
10	much.
11	Now, anybody that's worked in the rail
12	industry, myself included, would tell you
13	mechanical things break down. It doesn't matter
14	how well maintained, how many things, there's too
15	many variables, things are going to break down.
16	You're best to prepare for those things.
17	We didn't expect the level that we
18	have, and we've adapted to it. And, again, we've
19	been very successful.
20	EMILY YOUNG: Would you say you were
21	prepared for, I guess, a lower level of those types
22	of breakdowns?
23	DUANE DUQUETTE: Absolutely.
24	EMILY YOUNG: And has there been any
25	evolution in how the operators and controllers have

1	interacted with the maintenance techs and
2	maintenance staff when responding to issues on the
3	line?
4	DUANE DUQUETTE: Yeah. Like I said, at
5	one point there was an Alstom tech right in the
6	TOCC. I can't specifically remember when they were
7	moved, when the controllers took over that
8	capacity, but definitely in that sense.
9	In the field, not a lot's changed. You
10	know, the techs get dispatched and, by the time
11	they get there, the operator already either has the
12	issue solved or it's something beyond their
13	capacity.
14	There are certain faults that the train
15	can display that they can't be done by resets or
16	can't be done by it's a fairly sophisticated
17	system. Sometimes a technician has to physically
18	plug their laptop in and go in and rectify some
19	issues. And that's something the operators could
20	never do and will never be able to do.
21	EMILY YOUNG: Have there been any
22	issues encountered with the interfaces between
23	OC Transpo's control of the trains on the line and
24	what I understand to be RTM's control of the trains
25	in the yard, sort of handing over control between

1 those two? 2 DUANE DUQUETTE: Generally not. Ι 3 mean, we've had -- I think there's been a couple of 4 rules infractions where it's just somebody 5 exceeding their authority. You know, you were told 6 that you can come to here, and they went five feet beyond it. Yeah, each one of those were addressed 7 8 as issues. 9 There was one incident where I believe 10 a controller removed the joint region of authority 11 and they've been -- well, I don't know how much I 12 can disclose, but they've been -- that issue has 13 been addressed. But there's definitely nothing 14 systemic. It's actually been a very, very clean 15 interaction between the two, and that was 16 established well before we went into operations. 17 EMILY YOUNG: And how was that 18 established? 19 DUANE DUQUETTE: Through, again, these 20 procedures, the rule books, and then a lot of 21 meetings, honestly, you know. And then documenting 22 the meetings in this form of procedures. 23 EMILY YOUNG: And those meetings and 24 the process of developing the procedures would have 25 included RTG/RTM?

1 DUANE DUQUETTE: Absolutely. In fact, 2 actually, when I talked about developing the SOPs, 3 a lot of the material came from RTG/RTM, and they 4 had a delegate that worked with us. I'm not going 5 to be able to remember -- or maybe I can. Tom Pate б was one of them, Murray Hill, and then Matt 7 Boisvenue, something, a Matt gentleman --8 apologies. Those were their primary three that 9 work with us as well when it came to these 10 procedures and stuff, and they were the RTG's 11 representatives. They were a full-time partner in 12 that development. 13 EMILY YOUNG: Do you remember any 14 significant disagreements between OC Transpo and 15 the RTG side when you were working on developing 16 those procedures? 17 DUANE DUQUETTE: Nothing significant, 18 no. I mean, there's -- you've got to remember, 19 when you have about six or eight different people 20 from different backgrounds, all rail-related, 21 someone might think this way is better than that 22 But I don't remember any significant, you wav. 23 know -- not that I was part of. 24 EMILY YOUNG: So, back to the 25 regulatory framework that we were talking about,

47

Т

1	are you familiar with what the City's reporting
2	obligations to Transportation Canada are?
3	DUANE DUQUETTE: The City's reporting,
4	yeah, they're the same as any other railway.
5	EMILY YOUNG: And what does that
6	involve?
7	DUANE DUQUETTE: Oh, sorry, I thought
8	my apologies. I was thinking TSB, Transport
9	Canada. Sorry, my apology.
10	It would be the same as anybody else.
11	And, actually, Transport Canada, I can't tell you.
12	I imagine it's quite similar to everybody else.
13	But, yes, we develop a report once a year, based
14	on, you know, safety and operations, and deliver
15	that to Transport Canada.
16	EMILY YOUNG: Are you familiar with any
17	sort of auditing requirement as well?
18	DUANE DUQUETTE: Yeah. We're required
19	to audit our SMS and, again, I'd go to my
20	regulatory I apologize, I don't I write
21	things down for a reason, right? Things are
22	written in a book, rules, for a reason. But, yes,
23	there is a requirement to audit our SMS. I'd have
24	to check on the regulatory I believe it's every
25	three years.

1	EMILY YOUNG: I think that's our
2	understanding, too, so we'll go with that.
3	Has the City completed any of those
4	audits yet?
5	DUANE DUQUETTE: On our SMS? I know
6	we've done it on the Trillium Line, which we've
7	been which is shut down now. And then,
8	actually, I believe we I believe there was one
9	done on ours, but, again, that was prior to me
10	coming to the safety department.
11	EMILY YOUNG: Okay.
12	DUANE DUQUETTE: And I'm only
13	hypothesizing, I apologize. Yeah, I shouldn't
14	really speak because I'm just guessing.
15	EMILY YOUNG: Okay. And so then you
16	wouldn't necessarily be aware of any issues that
17	that first audit might have identified?
18	DUANE DUQUETTE: No. Again, my role
19	would have been significantly different at that
20	time.
21	EMILY YOUNG: How does your role relate
22	to the role of the regulatory monitor and
23	compliance officer, Sam Berrada?
24	DUANE DUQUETTE: The RMCO is
25	independent of us. For the most part, he meets

1	with us on a regular basis. He asks us for
2	documentation. We provide him whatever
3	documentation he requests. We also help arrange
4	site visits and that sort of thing. But, for the
5	most part, and it's designed this way on purpose,
6	it's at arm's length. He is an independent
7	individual that decides what he wants to monitor or
8	audit again, I apologize if I use the term
9	incorrectly but he decides what he wants to look
10	at.
11	We provide whatever documentation, we
12	provide a liaison to RTG at times. And then, of
13	course, he has action items. We fulfil those
14	action items if they're directed at us. And we
15	also work with RTG/RTM to try to get them to fulfil
16	their requirements as well.
17	EMILY YOUNG: Can you give us a sense
18	of what an action item might look like?
19	DUANE DUQUETTE: Yeah. I'm trying to
20	think. Honestly, we've done fairly well, from the
21	City's perspective, we've been very well prepared,
22	and I know we have lists and lists of them when we
23	go to meetings. But there is lists of them that
24	would go to meetings with RTG. Oh, one thing, the
25	track inspections, their documentation, I think,

1	wasn't as complete as what he would expect.
2	So that would have been an action item
3	that they're required to have better documentation
4	for when they do track inspections for stuff like
5	heat. The reason I can remember that, it came up
6	just last week, we had a heat wave, so that was one
7	of the things, so
8	EMILY YOUNG: Is he mainly looking at
9	your documentation?
10	DUANE DUQUETTE: Oh, he does site
11	visits as well. But, again, those site visits are
12	primarily RTG. We don't I mean, he's more than
13	welcome to come and take a look at the operations.
14	And, again, I think he did one of safety or not
15	of safety, of training, but that would have been
16	prior to me coming over to this department, and I
17	couldn't tell you what kind of physical interaction
18	he had here.
19	Most of the ones I've been aware of
20	since I've been here, he's been over, dealing with
21	RTG when it looks for, like, track and OCS
22	maintenance and that sort of stuff.
23	A large portion of it, it begins with
24	the documentation. I guess much the same as your
25	process, right? You look at the documentation.

1 EMILY YOUNG: We definitely look at 2 plenty of documents. 3 How would you describe your 4 understanding of what his job is? Like, what is he 5 assessing? 6 DUANE DUOUETTE: I see him as a checks 7 I see him as for, you know -- and I and balances. 8 have a gift for simplifying things, if you would. 9 I see him as our version of Transport 10 Canada, if you would. To a mild degree, not 11 completely. There's -- you know what I mean? 12 There's differences there. But I see him providing 13 that type of level of checks and balances. He's an 14 over -- he's a regulatory oversight, if you would, 15 that provides an independent lens. So those of us 16 that are involved in the day-to-day minutia are 17 reminded of things we may overlook and stuff like 18 that. 19 Would you agree that the EMILY YOUNG: 20 City is the actor that's responsible for ensuring 21 the safety of the system? 22 DUANE DUQUETTE: Yes and no. I mean, 23 like, I go back, everybody's responsibility is 24 safety when it comes to that sort of thing. But 25 having said that, I mean, with this system, there's

1	a lot of things that were engineered safety
2	mechanisms.
3	Case in point, one of our disruptions
4	were actually engineered safety "mechanisms" is
5	not quite the right word but engineering safety
6	assurances and what have you.
7	So, I mean, the safety element is
8	shared by a lot of people. On a day-to-day basis,
9	the safety of the operators, absolutely. The
10	safety of the passengers, yes, we play a large
11	part. But the partner plays a part as well;
12	everybody is required to play a part when it comes
13	to safety.
14	EMILY YOUNG: And what would you say
15	are sort of the limits of the City's safety work?
16	Like, where does that stop and someone else's
17	responsibility come in?
18	DUANE DUQUETTE: Again, I think it's
19	just a difference in ideology. And I apologize,
20	but safety never stops. Like, I'm not trying to be
21	clichéd here. And if anybody ever recognizes a
22	safety concern, it's their responsibility to either
23	fix it or report it and get it fixed. And it's
24	that simple, whether it's the City, whether it's
25	the maintainer, whether it's anybody, supervisor,

1	operator, controller, myself, anybody.
2	EMILY YOUNG: Are there certain spheres
3	within which one organization I guess maybe a
4	way to reframe it would be, where one organization
5	is responsible for safety versus another? So, you
6	know, the safety of the maintenance work, is that
7	RTM that's responsible? Or would you still
8	consider the City to be kind of above that,
9	overseeing and having the role of making sure that
10	they're doing maintenance safely?
11	DUANE DUQUETTE: I say it's a
12	partnership. But, I mean, I'm not sure if this is
13	where you're going, I mean, primarily they run the
14	yard, so And they have their own safety
15	department and, again, their own SMS for their
16	employees, which is supposed to basically mirror
17	ours. Like, they run the MSF. They run the
18	maintenance crews. They provide them their
19	training. They provide them their certification,
20	that sort of thing. So, if that's what you're
21	referring, there is that separation.
22	Again, ultimately, I just don't see the
23	separation that way. I see it more of a level
24	where everybody is responsible for safety; if they
1	

1 EMILY YOUNG: Fair enough. The 2 question is just sort of trying to get at, on a 3 day-to-day basis, who is making sure the system is 4 actually operated safely, and it sounds like you're 5 saying everyone. 6 DUANE DUQUETTE: Absolutely. I mean, 7 again, we ensure that the operators are doing the 8 safe thing, that, you know, controllers are taking 9 the safest course of action, and we empower all our 10 employees to speak up. 11 It's never happened in rail, but I 12 believe it's happened on the bus side, where we've 13 had work refusals for unsafe conditions. So there 14 is that element with OC Transpo that everybody 15 knows that they're empowered to stop something if 16 they can. 17 Now, having said that, none of my 18 employees or none of OC's employees turns the bolts 19 in the garage, nor do we have a supervisor or 20 anybody there. So, ultimately, it would be them 21 responsible for that minutia, but they should be 22 empowered the exact same way as we are. And if it 23 was to come out and we saw something we didn't 24 like, we wouldn't take it. 25 And what would you do in EMILY YOUNG:

1 response to seeing something that you didn't like 2 from a safety perspective? 3 I don't know that it's DUANE DUOUETTE: 4 ever happened from a safety perspective in that 5 respect, but we've refused vehicles for -- and that 6 term makes it sound bad. But, you know, we have 7 not accepted vehicles because, you know, it can be 8 something as trivial as the floors aren't clean or 9 there's a crack in the windshield. You know what I 10 And there is established criteria for that, mean? 11 but we have the ability to refuse vehicles if we 12 want. 13 EMILY YOUNG: So when you refuse a 14 vehicle, you are potentially saying, "You can't put 15 this into service until you've solved the issue 16 we've identified"? 17 DUANE DUQUETTE: That is correct. 18 EMILY YOUNG: When you say that the 19 criteria for refusing a vehicle are all set out, is 20 that in the Project Agreement or somewhere else? 21 DUANE DUOUETTE: Refresh, Matt would be 22 the best to go to that, but yeah. So the VMOS is 23 "Vehicle Minimum Operating Standards," that would 24 when it's on the line. I can't recall if it's in 25 the PA or if it's -- it probably stems from the PA

1	one way or another, but vehicles must be ready for
2	service at that there's two different things.
3	If something happens during service, we have what's
4	called a VMOS, a Vehicle Minimum Operating
5	Standards. There are certain things that are
6	acceptable that can go, continue on in service.
7	For example, one of the doors, you
8	know, we have seven doors per train, per LRV. So,
9	if one of the doors is for whatever reason, has
10	to get isolated, well, that train doesn't have to
11	be immediately removed, right?
12	However, if it came to the handover
13	platform in the morning and that door wasn't
14	working, we would not take it.
15	EMILY YOUNG: Because that would be
16	something you would expect to have been fixed
17	overnight?
18	DUANE DUQUETTE: That is correct.
19	EMILY YOUNG: Do you know how the VMOS
20	would have been devised?
21	DUANE DUQUETTE: I know it's been
22	updated. I know how it's been updated because I'm
23	aware of that, but the actual devising of it, I
24	don't have the specifics. But I know it's been
25	updated with a joint effort through, again, our

1	train and systems team and then Alstom/RTG.
2	EMILY YOUNG: Okay. So it's sort of
3	the updates at least have been negotiated or
4	agreed, kind of?
5	DUANE DUQUETTE: Agreed.
6	"Negotiation," I don't think is the right word.
7	EMILY YOUNG: Okay.
8	DUANE DUQUETTE: Agreed.
9	EMILY YOUNG: Okay. And you mentioned
10	that RTM or Alstom Maintenance safety management
11	system should look like OC Transpo's safety
12	management system. Can you explain why that is and
13	whether OC Transpo was involved in doing work on
14	RTM's SMS?
15	DUANE DUQUETTE: We're not involved in
16	doing work on their SMS, and it comes from
17	again, I apologize because I'm a person that
18	books are written for people like me; I go back to
19	them to refer to them. But it would come it
20	comes from the contract. I don't remember the
21	particular verbiage that's written is what I'm
22	trying to get at. But it does come from the
23	Project Agreement contract, that they are required
24	to again, I'm going to oversimplify it, but
25	they're required to be in line with our safety

Г

1	management system.
2	EMILY YOUNG: So is there anything that
3	OC Transpo would have done to ensure the system was
4	safe when it entered into service that we haven't
5	already talked about?
6	DUANE DUQUETTE: I mean, I think we've
7	touched on a lot. There's a lot there. You
8	mentioned the independent safety certifier, that's
9	what my understanding was, that was their primary
10	position or primary job. That would have been a
11	big one.
12	I know, like I said, there was quite a
13	bit of that design review, so that a lot of the
14	safety systems would have been a lot of safety
15	risks were intended to be designed out because
16	that's your when it comes to eliminating safety
17	concerns, an engineered solution is always the
18	preferable one.
19	And then there was a hazard review
20	where they did I know that was primarily Jim and
21	Troy, but offered some, you know, subject matter
22	expertise on that sort of thing as well.
23	I think we've touched on most of it, I
24	guess.
25	EMILY YOUNG: You mentioned that I

1	guess it's always better to design or engineer a
2	safety risk out of the system.
3	DUANE DUQUETTE: Yes.
4	EMILY YOUNG: But my understanding, and
5	correct me if I'm wrong, is that if you can't do
6	that or you're too late in the project to do that,
7	then you would mitigate the risk through standard
8	operating procedure or rule or something like that?
9	DUANE DUQUETTE: That's correct, yup.
10	If it can't be it's not just a matter of later
11	stuff; sometimes things can't get engineered out.
12	Sometimes it's just a procedure that's a better way
13	to do it. Or sometimes, and not my personal
14	favourite, but sometimes training, additional
15	training you know what I mean can be a bit of
16	a mitigation. But, again, that falls to, you know,
17	a procedure or a work instruction which would
18	accompany that, so, yeah.
19	EMILY YOUNG: Do you recall whether you
20	had to do a lot of that when preparing the standard
21	operating procedures going into service? Were
22	there a lot of safety risks that you were
23	mitigating through the SOPs?
24	DUANE DUQUETTE: No, I don't actually
25	recall a lot. In fact, coming from a freight rail

1	system, I actually found that the level of
2	engineered solutions was high on this. In fact,
3	it's one of the things that drew me to this
4	project.
5	From my position as a manager in
6	freight railway anyways, one of the big things
7	is crossings. I've reported to a lot of crossing
8	incidents; they're horrible. No crossings here.
9	You know what I mean? GIDS system. And like I
10	mentioned earlier, some of our disruptions are
11	actually a lot of the times, they're actually an
12	engineered safety solution that's actually
13	producing that's causing the disruptions.
14	A lot of our systems, when they and
15	I'm going to simplify it here, but if the train was
16	a big computer, right? And it's a highly
17	intelligent computer, a lot of systems talking to
18	one another. And if, for whatever reason, it
19	doesn't recognize the commands or it doesn't
20	recognize this or something just seems abnormal,
21	even the slightest, it defaults to stop. It puts
22	the brakes on, and that's when you need a
23	technician to come in and actually plug into the
24	system and diagnose why. That's one where the
25	operators couldn't do the reset, couldn't do a

1 simple reset. 2 If it's just a regular default, they 3 can do a reset. But if it's a safety mechanism 4 that's, you know, couplers, whatever, we've had a 5 couple of variety of other things where it might 6 not even be an unsafe situation, but as soon as the 7 train recognizes the situation where they don't --8 the computer recognizes or identifies a situation 9 where they don't have complete understanding or it 10 doesn't fall within those specific guidelines that 11 it's been programmed, it defaults to the safest 12 course of action, which is stop. 13 EMILY YOUNG: So an emergency brake, 14 basically? 15 DUANE DUOUETTE: You got it, 16 absolutely. 17 It doesn't always have to be emergency. 18 That would be if it's in motion. If it's stopped, 19 it would just apply the brake. 20 It's the same as an emergency brake, 21 but when you put the term "emergency brake," 22 everybody thinks of the grinding halt. It would 23 apply all the brakes, if it's already just stopped 24 and it just has a command it doesn't recognize. 25 EMILY YOUNG: When you're developing

1 those standard operating procedures, how do you 2 identify the safety risks that need to be mitigated 3 through the SOPs? 4 DUANE DUQUETTE: A lot of that work was 5 done prior. There were certain things that were 6 identified prior through various working groups in 7 the design phase and that sort of thing. Hazard 8 assessments, that sort of thing. That was all on 9 -- a lot of that was identified prior. 10 Now, I can't tell you specifically, 11 there might have been one or two that came up while 12 we were still designing, and I don't recall how it 13 would have been communicated to us. But the 14 primary would have been in the design phase, where 15 they identified risks that had to be mitigated 16 through procedure. 17 EMILY YOUNG: Are you aware of the 18 operator safety case that I understand would have 19 been provided to the independent safety auditor? 20 DUANE DUQUETTE: Again, it wasn't my 21 primary function at the time. I'm aware it 22 I have high level -- and I don't even existed. 23 know if I have high level understanding of it, but 24 I have an understanding of it. But, again, not my 25 primary role at the time.

1 EMILY YOUNG: Could you give us your 2 high level understanding? 3 DUANE DUQUETTE: Yeah, sure. It's from 4 an operator safety case. It's just that this 5 system, through either, you know, engineered safety б mechanisms or procedure is deemed safe to operate. I think that's pretty high level, isn't it? 7 8 EMILY YOUNG: No problem. 9 Do you know who prepared that for OC 10 Transpo? 11 DUANE DUOUETTE: No. And here's the 12 thing you have to remember. When we were in, like, 13 prior to operations, there was a lot of different 14 consultants and parties involved, and there was 15 tons on the RCP side that I have -- you know, I'd 16 see occasionally in meetings here or there, but no 17 real knowledge of, you know, even their titles, if 18 you would, a lot of consultants on the RCP side. Т 19 would imagine, like everything -- for that case, 20 everything came through RCP, Rail Construction 21 Program; that's what they're called now. But, 22 anyways, yeah, until the operations of the system, 23 everything was under RCP's mandate. 24 EMILY YOUNG: Are you aware from a 25 document called something like "operation

1	restrictions document"?
2	DUANE DUQUETTE: Not off the top of my
3	head. If you could show it to me, I might be able
4	to know what it is.
5	EMILY YOUNG: I don't have it on hand,
б	but my understanding of what it was is something
7	that was created at the start of service that
8	outlined certain restrictions in operations that
9	were necessary for system safety.
10	DUANE DUQUETTE: Do you have any
11	examples or? Or I guess it doesn't matter.
12	You're the one asking questions, I apologize.
13	EMILY YOUNG: No, that's totally fair.
14	I mean, you have to know what I'm asking you
15	questions about.
16	I can't give you any more detail. So
17	if you're not aware of it, then that's fine and
18	then that's the answer.
19	DUANE DUQUETTE: Not off the top of my
20	head, no.
21	Again, we have a regulatory department
22	and everything that could research everything and
23	bring it up.
24	EMILY YOUNG: So, I think we have
25	talked quite a bit about what role OC Transpo fills

1 now in ensuring the system is safely operated. 2 We've talked about the safety 3 management system. We've talked about some of the 4 audits that your department does. 5 Is there anything else that you can 6 tell us about, in terms of what OC Transpo does to 7 make sure the system is operated safely? 8 DUANE DUOUETTE: I mean, we do have 9 regular meetings with RTG, our partners at RTG, the 10 monthly joint workplace health and safety 11 committee, where we -- where RTG/RTM brings forward 12 their safety metrics and OC Transpo brings forward 13 their safety metrics as discussed on a monthly 14 basis; that's one of the elements we do. Our 15 safety department works with theirs in, you know, 16 providing them copies of our SMS and stuff like 17 But aside from that, nothing else that I can that. think of specifically. 18 19 EMILY YOUNG: And the SMS is something 20 that -- it sounds like it's kind of being worked on 21 all the time. Can you explain to us how that 22 operates? 23 DUANE DUQUETTE: Yeah, it's updated 24 once per year. And what it is, the updates once 25 per year aren't -- they're not an extensive

1	overhaul but it's a readjustment of your targets
2	and initiatives, primarily. If there's something
3	lacking in the SMS or if there's something that's
4	an error or something like that, you definitely go
5	in and edit it.
6	One of the primary things that we're
7	working on is our updates of targets and
8	initiatives. And what we do with that is basically
9	we take our data, our metrics, from the year
10	previous for a lot of your, like it depends what
11	you're looking at. Some of it's your you're
12	taking your data for all your, you know, your
13	accidents and injuries, customer accidents,
14	employee injuries, these sort of things, and you're
15	setting targets to improve upon what you did last
16	year.
17	But then you're also setting targets
18	and initiatives for the stuff that you believe is
19	essential to the safe operations; like I mentioned
20	before, an hour of ATPM drive time. We have
21	compliance tests. Okay, there's some. It's not
22	directly from the safety department, but it's part
23	of our SMS project.
24	The compliance tests, our operations

²⁵ department, supervisors and superintendents, are

1	required to go out and basically observe the
2	operators for rules compliance. And they have
3	and I don't have the number in front of me, but
4	they have X amount of compliance tests they have to
5	do per person, and I believe it's on a monthly
6	basis.
7	So the SMS is a large portion of that.
8	And what we do is, on a yearly basis, we review to
9	see, is this enough? Is it not enough? Should we
10	be focusing elsewhere? That sort of thing.
11	Until you do your, like, I believe we
12	discussed it was a three-year audit, you wouldn't
13	do a lot of overhauling. On a yearly basis, it
14	would mostly be an adjustment of your targets and
15	initiatives.
16	EMILY YOUNG: I think I understand what
17	you mean by targets, but could you explain what
18	initiatives might look like?
19	DUANE DUQUETTE: Well, that's your
20	ATPM. So the targets are basically your so
21	targets could be anything, but a lot of the targets
22	are your, you know, accidents and injuries and
23	stuff like that. You're looking to have better
24	results year after year.
25	Your initiatives and stuff that I was

68

1	talking about, like your ATPM drive time would be
2	one, your compliance testing would be another,
3	these are the initiatives that you put in place to
4	try and reduce those numbers. So they work
5	together.
6	I hope I'm explaining that properly.
7	EMILY YOUNG: Yes.
8	DUANE DUQUETTE: So your initiatives
9	are what you put in place to try and reduce the
10	metrics that, you know, to achieve your targets.
11	EMILY YOUNG: Yeah, that makes sense,
12	then. Thank you.
13	Do you have any examples of
14	initiatives, other than the ones that you've given?
15	DUANE DUQUETTE: Those are two of the
16	big ones. I mean, actually, those refresher
17	courses, they're actually part of our initiatives
18	too. The 16 hours, that's another one of the
19	initiatives. Compliance test, ATPM drive time,
20	there's about eight or so, and I apologize, the
21	rest escape me right at the moment but there are
22	more.
23	Oh, oversight, the trains and system,
24	how many times they do an oversight of the line,
25	that stuff, track walks.

1	EMILY YOUNG: Have you increased that?
2	DUANE DUQUETTE: I would have to check,
3	but I believe, yes, it was increased. Or,
4	actually, I don't think it was in the first one.
5	It was incorporated in the second one, so that's an
6	increase into itself. That's one thing, you know,
7	it is a greenfield operation, so there has been
8	some adjustments over the last couple of years.
9	EMILY YOUNG: Do you recall why that
10	was increased?
11	DUANE DUQUETTE: I think it just has to
12	do with the reliability of the system.
13	EMILY YOUNG: So, in terms of the
14	safety standards investigating and reporting, that
15	is done by the Chief Safety Officer's department.
16	Our understanding is that there are
17	sort of two sides to it. You have proactive safety
18	assessments like audits.
19	DUANE DUQUETTE: Yup.
20	EMILY YOUNG: Is there anything else
21	that you would consider to be a sort of proactive
22	safety assessment?
23	DUANE DUQUETTE: Apologies, I'm just
24	trying to think. I mean, we do like, we do
25	safety bulletins and stuff. We, of course, have

Γ

1	our workplace health and safety committees.
2	A lot of these are your proactive
3	elements, you know, workplace health and safety
4	committees, drive a lot, these type things. So
5	those would be your proactive, so, yeah, safety
6	bulletins, safety messaging, that sort of thing,
7	and then your workplace health and safety
8	committees.
9	EMILY YOUNG: And what do you do in the
10	way of post-incident investigations?
11	DUANE DUQUETTE: Incidents are
12	investigated, reported upon, and then, if required,
13	which most of the time they are because action
14	items will come out of that, and then we would
15	follow up the action items to completion.
16	EMILY YOUNG: And when you say
17	"reported," would that be to the TSB usually?
18	DUANE DUQUETTE: It depends on the
19	nature of the incident, but most things would get
20	reported to the TSB, correct.
21	But that's most rail-related things. I
22	mean, safety goes across the gamut. TSB doesn't
23	care if somebody slips on the tile, but we do,
24	right? So there is a difference. So maybe even
25	not mostly; in fact, we probably have more slips on

1 tiles than we actually have incidents on the rail, 2 do you know what I mean? 3 And then the action items EMILY YOUNG: 4 are those things that you're devising and 5 implementing internally? 6 DUANE DUQUETTE: Depends on what it is, 7 like what the actual, what we're investigating is. 8 Some things, if they're under our mandate, yes. Ιf 9 not, they would be done, you know, with whatever 10 partner is required. 11 Again, it's not strictly rail. We have 12 the bus and everything else, too, right? So 13 there's across the whole system. 14 EMILY YOUNG: So is it possible that 15 you would be working with RTG/RTM on some of those 16 action items? 17 DUANE DUQUETTE: Absolutely. And the 18 person we generally work with over there is Tammy 19 She's their -- I apologize, I don't know Lévesque. 20 her exact title, but she's their safety manager. 21 EMILY YOUNG: Are there any of these 22 that you can recall off the top of your head, 23 action items implemented in conjunction with 24 RTG/RTM? 25 DUANE DUQUETTE: I can't recall any

1	that well, none of them have been done in the
2	last, like, three, four months since I've been
3	here. I would I go back to the tile, actually
4	because, oddly enough, that was a large thing here.
5	The tiles in the downtown tunnel, when
6	we first opened, when they got wet, they were
7	extremely slippery. And in conjunction with RTM,
8	we had them apply a coating, and they're required
9	to put the coating back on every five years, that
10	actually, you know, makes it less slippery, for
11	lack of a better way.
12	Another thing, too, like, there's been
13	a couple places where people have gotten injured
14	slipping on a steel plate. You know, Ottawa gets
15	pretty cold and icy in the winter, you know. One,
16	there's been a steel plate, I believe at Hurdman,
17	that wasn't identified early. It was identified.
18	We required, you know, I believe it's referred to
19	as "tack tape" put on it now on a regular basis,
20	and then it has to be regularly maintained as well.
21	EMILY YOUNG: What would you do if you
22	had set an action item and you thought that RTG and
23	RTM weren't really implementing it to your
24	satisfaction?
25	DUANE DUQUETTE: And it depends on the

Γ

1	level of it, but you'd start off with letters,
2	regular meetings, and then eventually get to the
3	what's it referred? A nonconformance. And then,
4	ultimately, if it was it got to an extreme
5	level, like I said, the Chief Safety Officer has
6	the ability to shut things down.
7	EMILY YOUNG: Okay. Within your
8	current department, do you have a team that deals
9	with regulatory compliance, quality control and
10	assurance?
11	DUANE DUQUETTE: Yeah.
12	EMILY YOUNG: And is that a relatively
13	new team?
14	DUANE DUQUETTE: Yes.
15	EMILY YOUNG: Can you speak a bit about
16	what how the team has developed and sort of what
17	state it's in now?
18	DUANE DUQUETTE: So, I can speak to it
19	a bit. Again, timelines, I'm not exact, but it's
20	probably about two years ago or a year ago,
21	something to that effect. And again during COVID
22	time, it kind of melds as well. But it was after
23	launch. There was document control people. I
24	actually as a Director of Rail Operations, I had
25	one of the document control people under me, Donna

1	Lynn what's her name? She's since retired.
2	It's not important, but anyways
3	So, myself, and I believe bus did the
4	same, provided a couple of employees to the safety
5	department so they can develop this that were in
6	line with the what the safety regulatory and
7	compliance department does.
8	So, yeah, from my department, in
9	operations, it was a document control person. You
10	know, the bus may have given other people. But
11	anyways, brought them altogether. A program was
12	developed to basically, yeah, monitor their
13	compliance, in particular when it comes to
14	regulatory, whether it be Transport Canada. I
15	mean, we don't have strict Transport Canada
16	oversight, but even from a PA perspective. And
17	then, you know, TSB still plays a part here.
18	And then we also have our other line as
19	well, the Trillium Line, where Transport Canada
20	does play a large portion on that. And then
21	there's all of bus, which has a whole gamut of
22	regulations, whether it's your licensing from the
23	Ontario Government. Because we travel over the
24	Gatineau Bridge, it's over to Gatineau, from the
25	Federal Government for our buses. So a whole gamut

1	of regulations, whether it be Provincial, Federal,
2	even municipal, and down to the Project Agreement.
3	EMILY YOUNG: Do you know whether the
4	team was were they contemplated from the start
5	of service or was that something where it was felt
6	after service began that there was more need for
7	oversight of regulatory compliance?
8	DUANE DUQUETTE: I apologize, I don't
9	know. I was not part of the discussion. I just
10	had to give somebody up.
11	EMILY YOUNG: Do you know whether that
12	also involves work doing quality control and
13	assurance?
14	DUANE DUQUETTE: It depends on what
15	quality you're looking for. Quality of
16	documentation, yes, but not quality of actual work.
17	Like, these are office work like, this is office
18	work, this isn't, you know, inspecting track or
19	anything like that.
20	EMILY YOUNG: I understand that Brandon
21	Richards, I think, created something called a
22	safety order.
23	DUANE DUQUETTE: Yup.
24	EMILY YOUNG: In the time that you have
25	been the Chief Safety Officer and Deputy Safety

1	Officer, have you made any of these safety orders?
2	DUANE DUQUETTE: No.
3	EMILY YOUNG: We might have talked
4	about this already, but
5	DUANE DUQUETTE: Oh, and just to
6	actually put that into perspective, as a deputy, I
7	wouldn't. That would fall on the chief.
8	EMILY YOUNG: Confederation Line safety
9	meetings, are those the types of meetings that we
10	have already been discussing?
11	DUANE DUQUETTE: Yeah, that would be
12	your I believe I called them the joint health
13	and safety meeting.
14	EMILY YOUNG: And those are held?
15	DUANE DUQUETTE: Monthly.
16	EMILY YOUNG: Monthly, okay. And who
17	would be present at those meetings?
18	DUANE DUQUETTE: It was varied, but
19	myself, the Chief Safety Officer. Like, I was
20	there for the last three months hosting it. Prior
21	to that, as the Director of Rail Operations, I
22	attended, as well as Troy, the Director of Transit,
23	from our side.
24	From RTG's side, they've had turnover
25	of employees, but it's been attended the

	•
1	consistent would be their safety manager is
2	definitely there. But they've also had turnover of
3	employees so, I mean, they've had various people at
4	different times. They've even had a gentleman, Tom
5	Pate, who just passed away, like, he was there for
6	quite a while.
7	James Messel was there on a regular
8	basis. Since I came into the safety department,
9	it's been initiated, we've requested, and it's been
10	okayed, I guess, by RTG that Alstom will actually
11	have a place at the table going forward as well
12	now, but they haven't in the past.
13	EMILY YOUNG: Why did you request
14	Alstom being involved there?
15	DUANE DUQUETTE: Just because they're
16	the ones that actually manage the people doing the
17	work. I think there's value yeah, I believe
18	there's a lot of value in the people actually doing
19	the work getting a say and getting involved. I'm a
20	firm believer in that.
21	And, yeah, same reason why, you know,
22	we had the operators and the controllers look
23	through the SOPs and stuff like that. People that
24	are doing the work should have a say.
25	EMILY YOUNG: And I imagine it might

1 also make your ability to communicate with them a 2 bit more direct and efficient? 3 DUANE DUOUETTE: I'm hopeful. 4 EMILY YOUNG: Are you aware at all of 5 OC Transpo's involvement in the testing and 6 commissioning process? So, before operations, when 7 the system was going through. 8 DUANE DUOUETTE: I have knowledge of 9 it, yeah, not extensive, but I think I mentioned it 10 before. I was, as the program manager of rail 11 operations, I was required to provide the 12 operators. 13 EMILY YOUNG: Okay. And are you aware 14 of delays that occurred in the testing and 15 commissioning process? 16 DUANE DUQUETTE: Not the specifics but, 17 yes, there was delays. 18 EMILY YOUNG: Were there any 19 implications of that that you saw? 20 DUANE DUQUETTE: What do you mean, 21 implications? 22 EMILY YOUNG: Compression of the 23 testing process, maybe issues with receiving 24 documents, any kinds of issues you can think of. 25 DUANE DUQUETTE: No. Actually, I saw

1	it more from the other side. I actually saw it
2	from the side that, you know, we had longer to
3	train people. We had more exposure to more
4	failures, which, even to this day, our senior
5	operators can coach some of our junior operators to
6	things that they would rarely see on the line
7	because of that exposure. So, yeah, no, I saw it
8	from the other perspective. It actually gave us
9	advantages, the delays.
10	EMILY YOUNG: Was there a lot of
11	competition for operator time and track time?
12	DUANE DUQUETTE: There was competition,
13	yeah. There was, you know, competition, scheduling
14	it had to be scheduled and we didn't always get
15	what we wanted, sometimes we got more when we
16	didn't want it, but we tried to adapt.
17	EMILY YOUNG: And you felt that, in the
18	end, you were able to adapt and
19	DUANE DUQUETTE: Like I said,
20	ultimately and, again, I'm not speaking from the
21	training department here, I'm speaking from the
22	operations department. I felt it gained us a lot
23	of exposure, a lot more exposure, and gained us a
24	lot of extra time out there which, you know, if it
25	would if it had gone quicker, we wouldn't have
1	

1 had that extra time and that extra exposure. 2 EMILY YOUNG: Did you have any 3 involvement in the winter testing that took place? 4 DUANE DUQUETTE: How do you mean 5 involved? Again, my involvement, I managed the 6 operators, so I was -- I provided operators for it 7 all, whether it was winter or summer. 8 EMILY YOUNG: Yes. I quess the 9 question is really, were you aware of the results 10 of any winter testing that took place? 11 DUANE DUQUETTE: I wasn't really aware 12 of many of the results, to be quite honest. At the 13 time I -- yeah, you have to remember, we -- and I'm 14 just trying to be as straightforward as possible. 15 As program manager of rail operations, there was 16 actually an operating line as well as this line. 17 You know, I'm not out searching for other people's 18 work, sorry. You know? 19 EMILY YOUNG: Not at all. So I think 20 it actually might be a good time to take a break, 21 if that suits you, Mr. Duquette. 22 When DUANE DUQUETTE: That's good. 23 would you like us back? 24 EMILY YOUNG: In 15 minutes. 25 DUANE DUQUETTE: Sounds good.

1 EMILY YOUNG: Okay, we can go off the 2 record. 3 -- RECESS TAKEN AT 10:33 A.M. --4 -- UPON RESUMING AT 10:47 A.M. --5 ANTHONY IMBESI: Just if I may, before 6 you continue, Emily. 7 I just had a follow-up question for 8 you, Mr. Duquette. You were talking about, during 9 the testing and commissioning, it was your role to 10 provide the drivers or the operators to perform the 11 testing and commissioning. 12 Was there ever an issue from OC 13 Transpo's side in being able to provide a 14 sufficient number of drivers or just to provide 15 sufficient training to the drivers to ensure that 16 there was an appropriate number of trained 17 operators to engage in the testing and 18 commissioning at the times required? 19 DUANE DUQUETTE: No. And, in fact, we 20 had more operators than what they needed most of 21 the time. 22 We'd actually put operators, additional 23 operators, on the trains to allow for extra breaks 24 and stuff like that. 25 ANTHONY IMBESI: Okay, thank you.

EMILY YOUNG: And Mr. Duquette, when
you were working on the hiring the operators and
other staff, is it correct that the operators you
were hiring would have previously only had bus
experience, except for those who might have worked
on the Trillium Line?
DUANE DUQUETTE: That's correct. And I
can't recall specifically if there there
probably was some that came from the Trillium Line.
We brought in 80-plus operators. But that is
correct, we drew from the bus operator pool.
EMILY YOUNG: Was that a result mainly
of labour reasons, I guess, you can call it?
DUANE DUQUETTE: I believe so. Again,
and I feel bad because I keep saying that was
before me, but, again, that decision was before me.
This is the mandate I was given when I came in.
These were the yeah, so I believe so, though it
was probably a result of labour negotiations.
EMILY YOUNG: Did you find that the
fact that most of the new operators had only done
bus work before presented any particular challenges
or issues when you were training them up?
DUANE DUQUETTE: No, not really. And,
again, I didn't do the training. But, from my

1 perspective, actually, you can look at it two 2 different ways: oh, they don't have the 3 experience; or yeah, they don't have the bad habits 4 either. 5 So we were able to train them from a 6 greenfield operations and train them in the right 7 way to do things, as opposed to those existing bad 8 habits. 9 Like, we have that problem on the bus, 10 Because people have been driving their cars right? 11 for 10, 15 years, their arm's up here, they're 12 holding the steering wheel down here. We were able 13 to come in and say, no, this is the way to do it, 14 right from the get-go, so it actually -- it helps 15 in that respect. 16 EMILY YOUNG: Do you recall when the 17 training process was completed for the operators? 18 DUANE DUQUETTE: We're continuing to 19 train right now. We actually have an ongoing 20 training all the time, so it never ends. And, like 21 I said, there are refreshers. 22 It never really ended. Even once we --23 like, once we had enough operators to run the 24 system, we have what we call a contingency pool of 25 And these are, you know, so that if operators.

1	ever, you know and we've had to use some of them
2	during COVID.
3	Whenever you have an incident like
4	this, where you have a draw on the operators or
5	operators leave, for whatever reasons, or whatever
6	the case may be, you can bring people up, and
7	without needing the full six weeks or eight weeks
8	of training, they can be refreshed in a week and
9	brought up to speed to be operators again. And we
10	try to keep that around 12. And just with
11	attrition, it's been you know, we're required to
12	train on a regular basis.
13	EMILY YOUNG: And fair enough, you
14	know, on your answer that training is never
15	complete.
16	I would reframe the question to: When
17	were you ready to go into operations, from the
18	perspective of your operators being ready and
19	trained?
20	DUANE DUQUETTE: I don't remember the
21	exact date, but it would have been prior to
22	substantial completion.
23	EMILY YOUNG: And so that allowed you
24	some time, I suppose, to practice once you were
25	ready?

1 DUANE DUQUETTE: Yeah. I don't know 2 that it was a great deal, but, like -- so the way 3 we did it is, I mean, there was various cohorts so 4 not all 80 were trained at once. 5 Some of them, like, the first two 6 cohorts were onboarded quite a bit in advance, like 7 probably two years prior to operating. So they 8 were trained for guite some time. But the last 9 cohort, I believe -- and, again, I don't have the 10 date in front of me -- but they would have been 11 done shortly before substantial completion. 12 But to that point, yeah, with the other operators, we did technical drills the whole time, 13 14 making sure that their skill set was up and trying 15 to get them exposed to things that they wouldn't 16 see on a regular basis. 17 EMILY YOUNG: Were you a participant in, or aware of, trial running and how that 18 19 proceeded? 20 DUANE DUQUETTE: You mean by "trial 21 running," like, the 14 days or... 22 EMILY YOUNG: Yeah, that phase of the 23 process. 24 DUANE DUQUETTE: Yes, I sat in for Troy 25 on two occasions.

1 EMILY YOUNG: Okay. And was OC 2 Transpo, to your knowledge, involved in developing 3 the parameters for trial running? 4 DUANE DUQUETTE: I believe so. But, 5 again, not my mandate, but I believe we were --6 well, and I apologize, here is where I get a little 7 bit -- it probably was just RCP, and OC Transpo may 8 have had some involvement. But we have a mandate 9 here, it's one city, one team, right? So the lines 10 get blurred. 11 Do you recall any changes EMILY YOUNG: 12 being made to the criteria for trial running? 13 DUANE DUOUETTE: I do believe there was 14 one, but I don't recall the specifics around it. 15 Again, I wouldn't have been part of that 16 decision-making process. 17 EMILY YOUNG: Did you feel that the 18 trial running process provided a good assessment of 19 operational readiness? 20 DUANE DUQUETTE: To the best of my 21 knowledge, yes. 22 EMILY YOUNG: Was there any of the 23 scoring that would have related to the performance 24 of operators and controllers that you remember? 25 Not during trial DUANE DUQUETTE:

1	running. They would have been scored; like, they
2	have exams, so they have and it's not just one
3	exam at the end, there's various checks and
4	balances along the way. You have to achieve a
5	certain amount of hours, you have to achieve a
6	certain there's tests on signals; there's tests
7	on rules; there's tests on procedures, there's
8	tests on that; and then there is, of course,
9	there's the final exam. So I don't believe there
10	was any in trial running, but there definitely was
11	checks and balances when it came to the training
12	systems.
13	EMILY YOUNG: Would that testing have
14	occurred prior to trial running for most operators?
15	DUANE DUQUETTE: Yes.
16	EMILY YOUNG: And can you sort of, when
17	you say you sat in on the trial running process for
18	Mr. Charter on a couple of days, can you describe
19	what you would have done in that respect? What did
20	the day look like?
21	DUANE DUQUETTE: Yeah. Well, it wasn't
22	a day. It was a meeting the following day to
23	discuss the day before. And if I recall correctly,
24	I mean, it wasn't, you know, hours upon hours. It
25	would have been a half hour to an hour and we would

1	have just assessed the previous day's results.
2	EMILY YOUNG: And would you have
3	assessed them together, or would different people
4	be responsible for different aspects of the score?
5	DUANE DUQUETTE: To my recollection, it
6	was all of us together in a room assessing it.
7	There was input provided by various
8	groups, right? There was if I recall correctly,
9	RCP, Rail Construction Program, had different
10	people out there checking certain systems and stuff
11	like that. So they fed us information. And, yeah,
12	control would have also given us information on the
13	actual operations; planning would have given us
14	information on, you know, whether they achieved
15	their times and stuff like that.
16	So, it would have other groups would
17	have fed into it, but I don't believe it was the
18	assessment wasn't done in isolation, like kind of
19	what you were saying there.
20	EMILY YOUNG: Okay. And do you
21	remember what the possible results were for each
22	day?
23	DUANE DUQUETTE: Like, the days I was
24	there?
25	EMILY YOUNG: Well, in general terms,

Γ

L

1	what could be the assessment of each day? I'm
2	thinking along the lines of pass-fail-repeat or
3	those the options.
4	DUANE DUQUETTE: Yeah.
5	EMILY YOUNG: And was there anyone in
6	those meetings who kind of had the final say about
7	what the day would be?
8	DUANE DUQUETTE: I believe they I
9	don't know if it was a final say of the day. The
10	engineer of record, I think, may have had to have
11	final sign-off, but other than that, no.
12	EMILY YOUNG: When you were in those
13	meetings, do you recall disagreements arising about
14	whether a day or an aspect of a day was a pass or a
15	fail?
16	DUANE DUQUETTE: No disagreements;
17	discussions, but no disagreements.
18	EMILY YOUNG: And who would have been
19	in those meetings, aside from Mr. Charter and/or
20	you? I assume Mr. Manconi was in the meetings, or
21	was he
22	DUANE DUQUETTE: No.
23	EMILY YOUNG: No?
24	DUANE DUQUETTE: I can't speak for any
25	of the other days. I only sat in for Troy for two

1 days on the weekend so he could get a break. Ιt 2 was a long process. 3 But I can't speak for the other days, 4 But maybe he was there on the weekdays. I don't 5 know. I got the weekend duty on the B squad. 6 Do you remember who else EMILY YOUNG: 7 was there? 8 DUANE DUOUETTE: Yeah. Not everybody, 9 but I remember Richard Holder, Larry Gaul. Ι 10 believe Tom Pate was there. I'm trying to remember 11 if Matt Slade was there from the other side. 12 There's the engineer who I don't 13 remember his name. But probably about eight 14 people'ish, eight to ten. 15 Do you remember EMILY YOUNG: 16 OC Transpo having any concerns about how trial 17 running was going? 18 DUANE DUQUETTE: What do you mean? 19 EMILY YOUNG: Concerns about, you know, 20 whether the system would be able to pass, meet the 21 criteria, or concerns that, you know, it wasn't 22 ready. 23 DUANE DUQUETTE: Nothing to that -- I 24 know there were a couple of fails at the beginning, 25 so those were obvious concerns. Beyond that, no.

Ottawa Light Rail Commission Duane Duquette on 5/17/2022

Τ

1	EMILY YOUNG: Do you know what the
2	response to those failures was like?
3	DUANE DUQUETTE: No, I'm afraid not.
4	EMILY YOUNG: And when it was
5	completed, was, to your knowledge, OC Transpo
6	satisfied that the system was ready to go?
7	DUANE DUQUETTE: To my knowledge, yes.
8	EMILY YOUNG: Do you have any awareness
9	of a pretrial running process?
10	DUANE DUQUETTE: Again, anything that
11	involved an operator, I would have I would have
12	had some element of knowledge to, because they were
13	all under my, you know, purview or mandate.
14	So anything that would have involved an
15	operator, I would have had at least some knowledge
16	of.
17	EMILY YOUNG: Do you know what the
18	purpose of the pretrial running phase was?
19	DUANE DUQUETTE: No. Do you mean
20	like
21	EMILY YOUNG: My understanding is that
22	it allowed certain kind of incidents and scenarios
23	to be run so that it could be checked before trial
24	running.
25	DUANE DUQUETTE: Okay. Yeah, I mean,

1	absolutely. There's like, we did a lot of
2	technical drills, that type of stuff, and even ones
3	that involved external partners, and then a lot of
4	familiarization with, like, the stakeholders in the
5	City, like the hearing impaired, visually impaired.
6	We provided a lot of them with tours of the
7	stations, getting them to know the accessibility
8	features on the vehicles, getting them to know the
9	features of the station and stuff like that. And
10	not strictly to those two groups. There was I
11	mean, OPS, OFS I apologize for going too
12	quickly. That's Ottawa Police Services, Ottawa
13	Fire Services, EMS, Emergency Services.
14	So, pretty much anybody that has a
15	group in Ottawa, we tried to make sure that they
16	got some familiarity in those times, and then again
17	during the I mean, you've got to remember
18	there's quite a few different stakeholders in the
19	City of Ottawa, a city of this size, so that also
20	flowed into or overflowed into the after the
21	trial running, when we were we had a couple of
22	weeks of just dry running there, that's not the
23	term we used for it, but soft opening, dry run.
24	EMILY YOUNG: So, between the end of
25	trial running and the start of operations?

Ottawa Light Rail Commission Duane Duquette on 5/17/2022

1 DUANE DUQUETTE: Correct. And we did a 2 lot of -- like, from my perspective, both of those 3 two times were fairly similar, a lot of, you know, 4 technical drills, a lot of looking to see --5 validating our SOPs, to make sure that they're as б accurate as they could be, validating anything like 7 And then giving exposures to external that. 8 groups, and actually to even internal groups. 9 Up until that three weeks prior to --10 like, after the trial running, up until that three 11 weeks, you know, none of the bus operators of our, 12 you know, thousand-plus bus operators had much 13 exposure to it. So -- and they were going to, you 14 know, need to talk to customers, so made it 15 available to them to get some exposure and that 16 sort of stuff. 17 EMILY YOUNG: And you mentioned 18 validating SOPs. What would that look like? 19 DUANE DUQUETTE: Just like -- so, we've 20 had a -- and not just our SOPs. Ottawa Fire 21 Services, OPS. We had one where we simulated a 22 breakdown in the tunnel, where OFS had to come and 23 assist us and take a passenger with a mobility 24 device off the train back to the station, that type 25 of stuff.

1	EMILY YOUNG: So, is it kind of like
2	running the SOPs in practice to see how they work
3	and whether they're missing any kind of like
4	instructions or pieces?
5	DUANE DUQUETTE: Absolutely. And we
6	actually we continue like, SOPs are a living
7	document. You're continuously trying to improve.
8	Any time we have an incident, we do a debrief, and
9	to see if there's ways to improve it, see if
10	there's any way we can adjust it to make ourselves
11	better in the future. We're in a constant process
12	of continuous improvement. And that's what good
13	organizations do.
14	EMILY YOUNG: When you were in the
15	around the time of trial running, did you feel that
16	there was pressure to get to revenue service at
17	that point?
18	DUANE DUQUETTE: I mean, did I feel any
19	pressure being applied to me? No. But did I feel
20	that the project had to get to a finish line at
21	some point? Yes.
22	I mean, anybody in the City would tell
23	you that.
24	EMILY YOUNG: Do you think that had any
25	effect on how those final steps went, trial running

1	and then post trial running, pre-service?
2	DUANE DUQUETTE: I don't believe so.
3	All I can answer is for myself, and they had no
4	effect on me.
5	EMILY YOUNG: Are you familiar with the
6	minor deficiencies list that RTG and the City
7	entered into before substantial completion?
8	DUANE DUQUETTE: Again, not the
9	specifics, but I am aware of a minor deficiency
10	list.
11	EMILY YOUNG: Is that something that
12	you would have reviewed at the time it was being
13	prepared?
14	DUANE DUQUETTE: I would have probably
15	provided some input towards it, yes.
16	EMILY YOUNG: Do you have a
17	recollection of what kind of input you would have
18	been providing?
19	DUANE DUQUETTE: Not specifics. Again,
20	I apologize for this. I'm not very good at
21	remembering stuff three years ago. I've always
22	been up on the mandate. You know, a manager told
23	me once: You don't have to know everything off the
24	top of your head; you just have to know where to
25	find it.

1 Do you want me to go find the main line 2 deficiencies list? I can probably do it, you know, 3 quickly, but to recollect it three years ago, 4 specifics, I mean, I think -- wayside cameras, I 5 believe that -- that one comes to mind because it's 6 still forefront, so I know that one specifically. 7 But there's probably a lot more on there that I 8 would know as soon as I looked at it, but... 9 EMILY YOUNG: That's no problem. On 10 the wayside cameras, is that forefront because it's 11 still an issue? 12 DUANE DUQUETTE: It's actually being --13 we're discussing it right now to remove it, but 14 yes. 15 EMILY YOUNG: Sorry. To remove it from 16 the minor deficiencies list, or to remove it as a 17 requirement; what do you mean by that? 18 To have the -- has it DUANE DUOUETTE: 19 progressed to the point where, I guess, yes, would 20 it be removed from the deficiencies list? They 21 were able to mitigate it with -- I don't know if 22 you're familiar with it -- we call them a couple of 23 things, but the CamCom spotters, or the 24 whistleblowers. 25 I'm not, but I don't EMILY YOUNG:

1 think we need to get into that. 2 It sounds like you've been involved, at 3 least to some extent, in assessing whether items on 4 that list have been fulfilled since going into 5 service. 6 DUANE DUOUETTE: Not so much in the 7 fulfillment. I'm playing a little bit of a part in this one, but anything else would have been mostly 8 9 That's part of their -- they own the held by RCP. 10 main line deficiency lists, because it's a 11 deficiency from construction. They handed over the 12 keys at operations; everything was theirs up until 13 then. 14 EMILY YOUNG: Have any of the 15 deficiencies represented an obstacle to operations, 16 or impeded your ability to conduct operations in 17 any way? 18 Not specifically. DUANE DUQUETTE: 19 Like, I go back to these wayside cameras. I mean, 20 without the mitigation, we couldn't have operated, 21 but, with mitigation, we are able to operate 22 safely. 23 EMILY YOUNG: And would the mitigation 24 have been something that was established or agreed 25 at the time it was put on the minor deficiencies

1	list?
2	DUANE DUQUETTE: I would have thought
3	prior, but, yeah, around the same time.
4	EMILY YOUNG: Right. So it's something
5	that, as you said, you need it to operate. So,
6	obviously, it's not going to be on the list unless
7	you have another way of dealing with the issue?
8	Okay.
9	DUANE DUQUETTE: Well, we wouldn't
10	operate if there wasn't another way to mitigate it.
11	It might still be on the list. Like, there's
12	probably some things on the list that don't require
13	mitigation, like maybe, you know, one of the
14	bathrooms isn't working properly in St. Laurent.
15	That one doesn't require mitigation, but anything
16	operational would have required mitigation to
17	operate.
18	EMILY YOUNG: Are you familiar with the
19	term sheet that RTG and the City entered into
20	before revenue service availability?
21	DUANE DUQUETTE: Vaguely. I'm far more
22	familiar with and, again, I need to look at them
23	because I don't have that kind of memory, but more
24	familiar with the ones afterwards. But the one
25	prior, I just have knowledge of.

EMILY YOUNG: I mean, I'm sure you 1 2 would have knowledge of aspects of it, like the 3 requirement for 15 trains in peak service being 4 downgraded to 13. I'm sure that's something that 5 you would have known about. 6 DUANE DUOUETTE: Absolutely, because I 7 provide the staffing for it, so absolutely. 8 EMILY YOUNG: Would you have --9 DUANE DUOUETTE: But then again, I 10 wouldn't have been aware of, like, the negotiations 11 or anything. 12 EMILY YOUNG: Okay. Would you have 13 been consulted as part of that, do you know? 14 DUANE DUOUETTE: No. At the time, I 15 just took the direct decision right before we 16 launched. Like I said, I've been involved in the 17 ones past that; I have a lot more knowledge. Т 18 would have been involved in some of those, but not 19 the one prior. 20 EMILY YOUNG: Can you explain what the 21 ones past that were? What are you referring to 22 there? 23 DUANE DUQUETTE: Well, we've had ones 24 for -- during COVID, where we reduced our service 25 during COVID. We have those.

1 There's been-- again, there's been --2 I think there's even one right now in place for the 3 return to service after the derailments, stuff like 4 There's a couple of more, I don't have them that. 5 in front of me, but those are the ones I'm 6 referring to. 7 EMILY YOUNG: Okay. And those are all 8 negotiated between the City and RTG? 9 DUANE DUOUETTE: That's correct. From 10 the City's perspective, depending on the nature of 11 the term sheet, it would be depending on whether 12 RCP gets involved, or Rail Construction Program 13 gets involved as well. But for the most part, it 14 would be OC Transpo on behalf of the City with RTG. 15 And were you personally EMILY YOUNG: 16 involved in the negotiations for those term sheets 17 that you've mentioned? 18 I wouldn't label DUANE DUOUETTE: 19 myself as a negotiator. I would label myself as a 20 subject matter expert. 21 EMILY YOUNG: Okay. Fair enough. 22 Do you have any view or sense of why 23 the City agreed to go into service with the 13 24 instead of 15 trains at peak service? 25 DUANE DUQUETTE: Not really. I can

	•
1	tell you why now, like during the last two years,
2	we haven't had like, we've agreed to have less
3	service because and that's just because of COVID
4	and the ridership. At the launch, no, I don't know
5	the specifics.
6	EMILY YOUNG: Do you think that that
7	decision caused any difficulties at the start of
8	service?
9	DUANE DUQUETTE: No, not that I can
10	recall. The bigger difficulties would have been
11	the reliability of the vehicles caused
12	difficulties. I don't know that 13 versus 15
13	you know, you'd have to crunch the numbers to see
14	if we could handle it, but that would have been all
15	vetted through the planning department anyways, to
16	see if 13 could handle the ridership.
17	EMILY YOUNG: Okay. So that analysis
18	would have had to have been done for the City to
19	agree to have the 13 trains in service?
20	DUANE DUQUETTE: I can only assume. I
21	know if I was part of the negotiations, I would
22	have asked for it, but that's I can't sorry.
23	EMILY YOUNG: Do you have any views on
24	what caused the project to be delayed?
25	DUANE DUQUETTE: I thought it was just
L	

	•
1	construction delays.
2	EMILY YOUNG: And based on what you've
3	told us about what you've done in your role, it
4	sounds like the answer to this is probably no, but
5	did you have any involvement in looking at these
6	schedules that RTG provided in the lead-up to RSA?
7	DUANE DUQUETTE: No. Schedules would
8	have all been gone through RCP. We would have been
9	made aware of them after the fact, but all of that
10	would have been, again, through Rail Construction
11	Program, Michael Morgan and Richard Holder's group.
12	EMILY YOUNG: Were there any issues
13	relating to the transfer of documents to OC Transpo
14	or RTM in the lead-up to revenue service?
15	DUANE DUQUETTE: Not that I recall.
16	I mean, they take a while, but, yeah.
17	I come from the private sector, where you can do
18	things a little bit quicker, whereas this way, when
19	you have to vet them through people, it usually
20	takes seven or eight days, it takes a bit longer.
21	EMILY YOUNG: Do you think that the
22	preparation that went into the interfaces that
23	would be involved at the start of operations, that
24	we've talked about a little bit, between OC
25	Transpo, RTM, Alstom, do you think there was

1	sufficient preparation for those interfaces to run
2	smoothly?
3	DUANE DUQUETTE: Can you be more
4	specific on which interfaces? I mean, I don't
5	recall any of them not being planned out well.
6	EMILY YOUNG: Yeah. I mean, that
7	sounds like an answer.
8	DUANE DUQUETTE: Yeah, yeah.
9	EMILY YOUNG: And we did talk a little
10	bit about the interface between operators and
11	between the maintenance staff in responding to
12	issues and how they would work together in doing
13	that.
14	DUANE DUQUETTE: No. So, no, I don't
15	the system is pretty clean. The operators
16	report to the control centre, the control centre
17	reports to RTM, RTM dispatched the maintainers,
18	depending on what the issue is.
19	EMILY YOUNG: And that process was all
20	set out before you started?
21	DUANE DUQUETTE: That process was, yes.
22	EMILY YOUNG: Do you have any knowledge
23	of the discussions about the possibility of a soft
24	opening, also known as a vetting-in period?
25	DUANE DUQUETTE: I've heard the term

1 "soft opening," and I actually kind of thought that 2 that's what that three weeks prior to us -- and we 3 may have used some other term for it, but that's 4 what that three weeks was. 5 It was for us to allow us to, from our 6 perspective, to allow exposure to those other 7 groups, and to -- you know, we did conduct a couple 8 more drills and stuff like that. But --9 EMILY YOUNG: Okay. And would you say 10 that -- sorry? 11 DUANE DUQUETTE: No, that's all I've... 12 Is it, in your EMILY YOUNG: 13 experience, typical to have that kind of soft 14 opening in rail projects? 15 DUANE DUOUETTE: This would be my first 16 municipal rail project. Having said that, from the 17 freight world, no. Once the contractor signs off 18 on it that it's built, and the engineers have 19 signed off that it's good, we're running trains; 20 that's what we paid for. 21 EMILY YOUNG: Do you think that having 22 a longer period than you did would have done 23 anything to help avoid some of the issues that were 24 later encountered? 25 DUANE DUQUETTE: Not really.

Ottawa Light Rail Commission Duane Duquette on 5/17/2022

1	EMILY YOUNG: Were you aware of any
2	discussions about the possibility of having a
3	shadow operator at the start of operations, so to
4	help OC Transpo?
5	DUANE DUQUETTE: First time I've heard
6	that term. Maybe I've heard it under a different
7	term but I no.
8	EMILY YOUNG: Did you or OC Transpo
9	have any concerns about readiness going into
10	operations?
11	DUANE DUQUETTE: What do you mean?
12	EMILY YOUNG: General concerns about
13	the readiness, or issues that you had seen that you
14	thought might come up?
15	DUANE DUQUETTE: There's always
16	concerns about certain things, but we were assured
17	everything would be ready by launch.
18	EMILY YOUNG: When you say "we were
19	assured," who was reassuring you?
20	DUANE DUQUETTE: It would have been
21	like, RTG would have been the voice, but we speak
22	through RTG, right? Like, RCP again, sorry, so
23	many acronyms.
24	Yeah, we RTG RCP holds the
25	contract. We go through RCP. And RTG would have

1 been the voice saying, "Yeah, no, we're ready, 2 we're ready." 3 EMILY YOUNG: In hindsight, do you 4 think that RTM was ready to conduct maintenance 5 going into service? 6 DUANE DUQUETTE: In hindsight, no. 7 EMILY YOUNG: Did you have any ability 8 to assess their readiness to go into maintenance, 9 leading up to that time? 10 DUANE DUQUETTE: Not directly, no. Т 11 mean, we -- you're privy to all the information as 12 to what's going on on the system. Like I said, any 13 concerns, we would have raised to RCP, and the 14 answer we got from RTG consistently is, "We'll be 15 ready for revenue service, we'll be ready for 16 revenue service." 17 EMILY YOUNG: Was trial running kind of 18 one mechanism that you had to assess whether RTM 19 was ready to maintain? 20 DUANE DUQUETTE: I would say yes. Yup. 21 EMILY YOUNG: Did any concerns arise 22 about their ability to do maintenance from that 23 process? 24 DUANE DUQUETTE: Not that I can recall. 25 EMILY YOUNG: So, OC Transpo, I think

Г

1	and correct me if I'm wrong uses the IMIRS,
2	or I-M-I-R-S system, to log issues and defects; is
3	that right?
4	DUANE DUQUETTE: Well, RTG uses the
5	IMIRS system. That is the system to log defects,
6	though. But we did, prior to launch, and I guess
7	for the first couple of months, but after that
8	it's, I think, since November I recall this one
9	correctly a little bit more because it was one of
10	the first projects I was working on was the
11	handover for them to use.
12	EMILY YOUNG: And that's November 2019?
13	DUANE DUQUETTE: Yeah. We launched in
14	2019, so it would have been the November, right,
15	like a couple of months right after we launched,
16	correct.
17	EMILY YOUNG: And what was the reason
18	for the handover?
19	DUANE DUQUETTE: They were always
20	supposed to be doing it.
21	EMILY YOUNG: Why weren't they doing it
22	initially?
23	DUANE DUQUETTE: I don't have that
24	answer.
25	EMILY YOUNG: And so, at the in the
1	

1 lead-up to operations and at the start, was it then 2 OC Transpo that was determining how to categorize 3 an issue in that system? So, for example, as 4 urgent, as safety-critical? 5 DUANE DUQUETTE: It was us doing the 6 inputting, that is correct. However, when it comes 7 to categorizing, there's a daily meeting between 8 the two contracts teams, and that's where you would 9 hammer out the issues. 10 EMILY YOUNG: And was that in place 11 from the beginning? 12 DUANE DUQUETTE: Yup. Having said 13 that, well, RTG turned over their staff a couple of 14 times. 15 EMILY YOUNG: When did the City start 16 using the IMIRS system to input information? 17 DUANE DUQUETTE: I couldn't tell you 18 specifically, but it would have been prior to 19 launch, until about that November. At least a 20 couple of months. 21 EMILY YOUNG: And at that time, was it 22 the case that there were City staff who were sort 23 of riding the line and looking for issues? 24 DUANE DUQUETTE: Not -- like, during 25 the trial running, like I mentioned earlier, RCP,

1	Rail Construction Program, had a group that were
2	out there, you know, testing stuff, like e-tels and
3	stuff like that, you know, your emergency
4	telephones, your f-tels, your fire telephones,
5	elevators, escalators.
6	But I if I recall, like, that was
7	those were discussed in meetings. That was
8	actually part of the to my knowledge, part of
9	the trial running requirements.
10	EMILY YOUNG: Okay. And would those
11	have been put into IMIRS and then translated into
12	penalties, or was that prior to that process?
13	DUANE DUQUETTE: No. They well,
14	they wouldn't have been penalties at that point,
15	because the penalties didn't apply until revenue
16	service. But they would have been inputted to
17	IMIRS to facilitate a work order so that RTG would
18	know what's wrong and what to fix. But the
19	penalties wouldn't have applied until revenue
20	service began.
21	EMILY YOUNG: Did RTG and Alstom have
22	any concerns about the City's approach to inputting
23	work orders into IMIRS at the start of service?
24	DUANE DUQUETTE: Not at the start of
25	service, no.

1 Shortly after or at any EMILY YOUNG: 2 time? 3 DUANE DUOUETTE: Yeah, shortly after. 4 That's also one of the reasons why they wanted to 5 take it back over in that November. And we had no 6 arguments with it, because it was always supposed 7 to be their duties to do anyways. They had some 8 concerns, yeah, but they also had various different 9 contract managers that agreed with our 10 interpretations in these daily meetings. So... 11 EMILY YOUNG: What were the nature of 12 their concerns? 13 DUANE DUOUETTE: To this point, some of 14 them are -- even to this day, we have discussions 15 on it because we have daily meetings: Is that a 16 safety concern? Is that not a safety concern? 17 Because different ones require different response 18 times and then rectification times. Of course, 19 anything safety-related is far more punitive than 20 something that's not. 21 But, again, daily meetings since the 22 beginning of service, and that was their ability --23 and there's an entire mechanism in there to deal 24 with this. Again, they weren't very good at it at 25 the beginning, yeah.

111

1	EMILY YOUNG: Why do you think they
2	weren't very good at it at the beginning?
3	DUANE DUQUETTE: I think it's because
4	they had a turnover of a couple of contract
5	supervisors within the first couple of months.
6	EMILY YOUNG: And what is the mechanism
7	that you're referring to, to deal with those
8	disputes, it sounds like?
9	DUANE DUQUETTE: Yeah. So, the daily
10	operating meeting, it gets brought to a meeting.
11	The way the PA is set up, we don't the City
12	doesn't dispute things. We can have things
13	amended, because we're the owner, and then they
14	have to dispute it, if they disagree with it.
15	Now, if they disagree with it, then it
16	gets escalated to a weekly meeting. If it can't be
17	agreed upon on a weekly meeting, then it gets
18	escalated to a monthly maintenance meeting. And at
19	every different level, you're dealing with
20	different levels of decision-makers, if you would.
21	EMILY YOUNG: So they it sounds
22	like, based on what you're saying, they thought
23	that the City was perhaps too keen to categorize
24	things as safety issues?
25	DUANE DUQUETTE: They actually don't

1 they don't care about the safety issues. They care 2 about the dollars. They would actually agree to us 3 -- they would agree to things in principle, and 4 then, as soon as they saw the dollar figure, "Oh, 5 So it wasn't the categorization; it's the no." 6 dollar figure that came from it that they don't 7 like. 8 EMILY YOUNG: So they felt that the 9 penalties being imposed were too punitive? 10 I would say yes, but DUANE DUQUETTE: 11 that would be their position. 12 EMILY YOUNG: And do you recall whether 13 there were a lot of penalties being imposed in the 14 first few weeks of service, when I understand 15 things were actually running guite smoothly? 16 DUANE DUQUETTE: There was -- I'd have 17 to take a look. There's definitely penalties being 18 imposed, but you got to remember, though, that --19 and we didn't just buy a train, we bought 13 20 stations; we bought a bunch of other things. So. 21 you know, trains can run all they want, but if 22 there's broken glass and our passengers have to 23 walk over broken glass, that's a safety concern 24 from one of the panels. So, I've heard that 25 argument from them, but I -- that's selective, from

1 my perspective. 2 EMILY YOUNG: And what about the 3 argument that I understand that they might have 4 made that the volume of work orders and the 5 categorization, which requires a certain time б response, has impeded their ability to focus on 7 things that they think are more important from a 8 maintenance perspective? 9 DUANE DUOUETTE: I say they're -- this 10 is opinion-based, but they weren't staffed 11 properly. They seemed to want to make a profit 12 from day one, as opposed to run a system reliably. 13 EMILY YOUNG: So, in your view, at the 14 start of service, they did not have sufficient 15 staff? 16 DUANE DUQUETTE: That is my opinion, 17 yes. 18 And did OC Transpo or the EMILY YOUNG: 19 City communicate those types of concerns to RTM, 20 either in the lead-up to service or at start of 21 service? 22 DUANE DUQUETTE: In the lead-up, it 23 would have been RCP. And like I said, the response 24 we always got was, "Don't worry, we'll be ready for 25 service; don't worry, we'll be ready for service."

1	Since then, we have communicated it
2	several times.
3	EMILY YOUNG: And has their staffing
4	changed over time?
5	DUANE DUQUETTE: It has. We've seen
6	different ebbs and flows, if you would. Usually
7	when something happens, they do seem to staff up
8	for a little bit, but then it seems to fall on the
9	wayside again afterwards.
10	I will give credit, though, after the
11	two derailments, they have seemed to have staffed
12	up and we are trending in a good direction, but
13	that still has to be sustained.
14	EMILY YOUNG: And is that part of the
15	reason that you have TRA monitoring them?
16	DUANE DUQUETTE: Absolutely.
17	EMILY YOUNG: So, what's your view of
18	RTM's maintenance performance in general?
19	DUANE DUQUETTE: Again, I don't believe
20	they were properly staffed.
21	EMILY YOUNG: Do you think that the
22	City or OC Transpo could have done anything more,
23	in terms of oversight or pushing them, that might
24	have helped prevent some of the issues?
25	DUANE DUQUETTE: Well, it's a

1	double-edged sword there, because could we have
2	done more oversight? You know, in hindsight,
3	perhaps. But the the mandate at the time was to
4	try and work cooperatively with them to come to a
5	solution together. And it's ironic, because now
6	we're criticized for not doing that. So it doesn't
7	either/or here but, hindsight, you could say
8	perhaps, but I think we did quite a bit at the time
9	to try and work with them to make this work
10	properly, but we were not given the same level of
11	cooperations from the other side.
12	EMILY YOUNG: Just going back to IMIRS,
13	one more question on that point.
14	Did the OC Transpo staff who were
15	entering information follow any policies when they
16	were doing that, or any kinds of guidelines?
17	DUANE DUQUETTE: I can't again, this
18	would have been at the beginning of my mandate, or,
19	like, when I came into the director's position, but
20	I know they were given feedback from the daily
21	operating meetings. Our contract supervisor at the
22	daily operating meetings would take back feedback
23	from RTG/RTM.
24	Again, a lot of I think a lot of it

²⁵ results from the fact that they had two different

1	contract supervisors during those couple of months.
2	Both of them, I believe, were relieved of duty, and
3	then they brought in somebody that didn't have much
4	contract experience, and yeah, and made it more
5	difficult.
6	EMILY YOUNG: Were there meetings and
7	discussions with RTM in the lead-up to service
8	about how the IMIRS and penalty process was going
9	to work?
10	DUANE DUQUETTE: There was definitely
11	meetings. We were definitely inputting stuff and
12	they what you have to remember is this is their
13	system. This is their system, their design, so
14	when you put stuff in, and it outputted what it
15	outputted, it was their design, and there's
16	definitely meetings because, yes, that feedback was
17	being provided to the control even prior to revenue
18	service.
19	Like I said, at OC Transpo, we
20	overplanned, if you would. So we were definitely
21	doing regular meetings with their contract
22	supervisor, and that feedback was getting back to

24 EMILY YOUNG: So, if they were, I

the controllers.

23

25

think, surprised in any way by the way that the

1	City was inputting information into IMIRS and
2	assessing or bringing their view on penalties to
3	the meetings, sounds like you think they probably
4	shouldn't have been because it was their system
5	that they designed?
6	DUANE DUQUETTE: Correct.
7	EMILY YOUNG: Are you familiar with
8	something called a "Maintenance and Rehabilitation
9	Plan"?
10	DUANE DUQUETTE: Maintenance and
11	Rehabilitation Plan? Yes, I do know the title, but
12	you'd have to give me a bit of context, and then
13	I'd probably remember exactly what it is. But I do
14	definitely know the title.
15	EMILY YOUNG: Yeah. My understanding
16	is that it's a quite-encompassing document that
17	sort of makes sure stations are maintained
18	properly, things like that.
19	DUANE DUQUETTE: Okay, yeah. Yup.
20	That would have been one of the requirements from
21	RTG, absolutely.
22	EMILY YOUNG: And is that what do
23	you mean a "requirement from RTG"?
24	DUANE DUQUETTE: Well, they're supposed
25	to submit their Maintenance and Rehabilitation

1 Plans, whether it be for stations, track, OCS, any 2 of the elements of the system. 3 And then that's actually what our 4 trains and systems department then would go back to 5 see. 6 So -- and, again, I'll oversimplify it, 7 because that's what I'm good at -- but they provide 8 us with what they believe the criteria is, whether 9 it be a cleaning regime, whether it be a track 10 inspection, whether it be an OCS inspection, and 11 then we go back and validate the fact that they're 12 doing what they said they would do. That's an 13 oversimplified version, but that's what it is. 14 And that's what we anticipated our 15 level of required oversight, right from the 16 beginning, would have been that. 17 EMILY YOUNG: Would have been your 18 getting their plans and then your checking to see 19 that they're implementing their plans? 20 DUANE DUQUETTE: Absolutely. We get 21 their plans and then check to see that they're 22 doing what they said they would do. 23 EMILY YOUNG: But it's been -- you've 24 found that you've had to do more than that? Τs 25 that what you're suggesting?

1 Well, like I said, DUANE DUQUETTE: 2 we've gotten to the point where we question their 3 ability to tighten bolts. You know, we've had one 4 derailment for it and another incident with a --5 another incident, like two incidents in the last б year, where bolts weren't tightened properly. We 7 never anticipated having to have that level of 8 oversight, nor should we.

9 EMILY YOUNG: In terms of when the City 10 is checking to see whether they're implementing 11 their maintenance and rehabilitation plan, for 12 example, is it OC Transpo staff who are going out 13 in the field to make sure they're doing that?

DUANE DUQUETTE: It's not always out in the field. A lot of it is documentation review, Recause every type of work in the field -but there is definitely a field element to it.

But a lot of it comes to documentation 18 19 review. They're required to -- like, even if you 20 do a track inspection, the IMIRS system isn't just 21 to implement work orders. It's also to track 22 maintenance and stuff like that. So they have a 23 requirement to input what type of maintenance 24 they're doing and what the results were. And then 25 it would be for us to go back and check to make

1 sure it was inputted properly, what the results 2 were, and then, if there was any outcome of it, if 3 the actions were followed up. 4 And then there would definitely be site 5 visits. 6 EMILY YOUNG: Okay. 7 DUANE DUQUETTE: Depending what you're 8 talking about. Some of them are cleanliness, some 9 of them are track. 10 EMILY YOUNG: Those are OC Transpo 11 staff who were doing those checks? 12 DUANE DUOUETTE: Yes. Part of the 13 trains and systems teams primarily. 14 EMILY YOUNG: Okay. 15 DUANE DUOUETTE: I mean, having said 16 that, I mean, we -- at the City, we can get reports 17 from the public, right? They can call in on the 18 phone saying there's garbage on the platform, 19 washroom isn't clean. 20 EMILY YOUNG: And was that, then, 21 something that you would put into IMIRS to 22 communicate it with RTM? 23 DUANE DUQUETTE: We wouldn't put it in 24 anymore, but, yes, we would relay it to them to be 25 put in, yes.

1 Okay, got it. EMILY YOUNG: 2 So, would you have had involvement in 3 responding to the various issues that have arisen 4 in the system over the past few years? 5 DUANE DUQUETTE: Possibly. If you give 6 me the issues, I can tell you what my involvement 7 was. 8 EMILY YOUNG: The door problems, Sure. 9 in the start of service. 10 DUANE DUQUETTE: Yeah, I definitely 11 would have had input on that. 12 EMILY YOUNG: Can you explain what OC 13 Transpo did to respond to those issues? 14 DUANE DUOUETTE: I don't remember the 15 specifics on that, but -- sorry. 16 Okay, response? One of the things is 17 we actually -- we -- and to this day we still 18 haven't made the doors automated. Per the design, 19 now, they've had -- now, part of that, though, 20 isn't on them entirely because of COVID, so it's 21 been prolonged. The resolution to the door issue 22 came during COVID, where we were not prepared to 23 introduce another touch point. 24 But prior to that, we would have the 25 doors automatically open and close so that they

1	wouldn't have to so that passengers wouldn't
2	have to handle them, because they were defaulting
3	overly sensitive. Now, that's not very that's
4	not the best thing when it comes to Ottawa climate.
5	And that's not part of what our original design
6	was, you know. I mean, 14 doors opening in minus
7	30 weather makes it cold.
8	EMILY YOUNG: Are you still, then,
9	waiting for the ultimate solution to that issue?
10	DUANE DUQUETTE: No. I believe that
11	one I would have to double check, but I believe
12	that issue specifically has been resolved. And
13	like I said, though, the change hasn't been made,
14	though, in the last year, and don't quote me on the
15	date because it's probably been about the last
16	year, but the change hasn't been made to put them
17	back to manual because OPHS, I believe we even I
18	believe we even consulted with them; the
19	introduction of another touch point during COVID
20	was not recommended.
21	EMILY YOUNG: And what about the switch
22	failures?
23	DUANE DUQUETTE: What specifically?
24	There's switch heaters and then switches.
25	EMILY YOUNG: If you could speak about
L	

Т

1	your knowledge of both issues and how they've been
2	resolved.
3	DUANE DUQUETTE: Okay. For the most
4	part, the switch heater issues have been resolved.
5	And here's this thing. Like I had mentioned
6	earlier, any mechanical device, there's going to be
7	a failure rate. That's just any industry. It
8	doesn't matter what, if you're rail or anything
9	else.
10	At the beginning, the switch heaters
11	that they had designed, the electric switch
12	heaters, were not fit for purpose for Ottawa
13	winters.
14	Since then, they've made modifications.
15	In the west, they've added extra duct work to the
16	electric switch heaters and then also had it heat
17	traced, and this has given us better working switch
18	heaters in the west.
19	Now, also, those ones in the west have
20	a certain level of protection from the elements.
21	They're either in the trench, under a bridge, those
22	sort of things, so they're not as exposed.
23	In the east, there are no amount of
24	modifications that you put on the electric switch
25	heaters that would have made them fit for purpose.

So, through back and forth, if you would, we --1 2 they had to put in gas switch heaters, which are 3 industry norms in Canada. 4 EMILY YOUNG: So they've just changed 5 over the type of switch heater? 6 DUANE DUQUETTE: Yeah. And then, 7 originally, they even -- originally, they put them 8 in as propane because they couldn't get the gas 9 lines in from -- I think it's ENMAX, but, anyway, 10 the gas supplier. So, the first year, we put them 11 in as propane, and the next summer, they were 12 switched over to natural gas. 13 EMILY YOUNG: What about the issue that 14 arose with wheel flats? Has that been largely 15 resolved? 16 DUANE DUOUETTE: I believe it's been 17 largely resolved. Again, in the rail industry, 18 wheel flats is part of the industry. That happens. 19 The frequency at which it was happening, no. But, 20 for the most part, that's been resolved. 21 EMILY YOUNG: And what did you 22 understand to be the cause of the overly frequent 23 wheel flats? 24 DUANE DUQUETTE: Again, you'd probably 25 want to reference with the trains and systems

1	department, but, to my knowledge, a lot of it was
2	go back to a computer-based control system, a
3	lot of the adjustments were made in the programming
4	and the profiles that stop the trains from
5	emergency braking to the level at which they were.
6	To put it into context, there were
7	certain areas where it's such a minor margin for
8	error, that as soon as the train profile goes
9	beyond it, it would emergency brake. And this is,
10	again, another one of those engineer's safety
11	mechanisms which, you know, it displays how much
12	what level of safety there was on the system, and
13	it's another one of the ones I was describing. But
14	because the profiles weren't refined enough, they
15	had excessive wheel flats.
16	Having said that, that would be it
17	would be your expectation, in any greenfield
18	operations, to have to refine those profiles within
19	the first couple of years.
20	EMILY YOUNG: And those are speed
21	profiles?
22	DUANE DUQUETTE: Speed profiles,
23	primarily, yes. And braking profiles. I mean,
24	they go hand in hand, right?
25	EMILY YOUNG: Was there any issue in

1	RTM's ability to mitigate that problem, in the
2	sense of, like, lathing or trueing the wheels?
3	DUANE DUQUETTE: Absolutely. I don't
4	even think their, you know, lathe was working for a
5	considerable amount of time. Don't quote me for
6	how long, but their lathe wasn't even working.
7	Plus, I feel like I don't it's a
8	bit subjective, but, again, I don't believe they
9	had the right proper staffing and training on their
10	side to operate the equipment, or to do it
11	properly, or to even assess the profiles.
12	EMILY YOUNG: Is a wheel lathe, would
13	that be considered, like, a fundamental piece of
14	rail maintenance equipment?
15	DUANE DUQUETTE: Absolutely. Like I
16	said, you're going to get wheel flats on any
17	system. You're replacing wheels on a regular
18	basis, but not to this frequency.
19	EMILY YOUNG: And what can you tell me
20	about the issue with cracked wheels or cracking
21	wheels?
22	DUANE DUQUETTE: Again, that was
23	handled more by Brandon, but I can you know, I
24	know what it was. The one bolt was being put in
25	too difficult, it was causing additional stress,

1	and then under, you know, operations or whatever,
2	these wheels were cracking. I know that we worked
3	with them to devise a or to come up with a way
4	to replace them, and I know that they missed
5	regular goals, target dates, to the point where
6	Brandon had to say enough is enough, and these
7	wouldn't be allowed on the system, even with your
8	regular inspections, because they at that point had
9	missed multiple due dates.
10	EMILY YOUNG: So that was Brandon
11	Richards' decision?
12	DUANE DUQUETTE: I believe so.
13	EMILY YOUNG: And it was, sounds like,
14	a decision that was made to try and incent them to
15	move the process along?
16	DUANE DUQUETTE: Yeah. I'd only be
17	guessing, so I don't really I was just going to
18	say it's probably more of a result of missing the
19	dates, which I guess you could theorize that way,
20	but you miss multiple commitments.
21	EMILY YOUNG: What about the issue to
22	deal with track buckling? Do you have knowledge of
23	that?
24	DUANE DUQUETTE: Yup. So, any system
25	again, any railway, that you are going to

1	experience heat and cold contractions. It's metal,
2	right? It's the same I go back how it was
3	explained to me.
4	Whenever you drive over a bridge, and
5	you know how when you're hitting an overpass, you
6	feel that bump when you're coming on and off? They
7	actually have expansion and compression joints so
8	that the bridge can expand and contract during
9	different weather conditions.
10	Well, the same is true with continuous
11	welded rail. It's going to expand and contract in
12	different weather conditions. To that end, that's
13	when you get periods of extreme heat on our
14	railway, and on every railway in Canada, you impose
15	speed restrictions so that people can be more
16	diligent, because that's when it's going to happen.
17	It can happen in cold, too, but it's far more
18	frequent in the heat.
19	What happens more in the cold is you
20	get you don't get the compression, you don't get
21	them compressing in, you get them actually pulling
22	apart. So you get a pull-apart, where a weld is,
23	where the weld will fill and they'll pull apart.
24	Again, expected on any railway, but not to the
25	frequency we have on 12 and a half kilometres.

Ottawa Light Rail Commission Duane Duquette on 5/17/2022

1 EMILY YOUNG: Do you have an 2 understanding of the cause of the overly frequent 3 track issues? 4 DUANE DUQUETTE: Again, well, you 5 probably want to talk to an engineer when it comes 6 to that sort of thing. I have a layman's 7 knowledge, from a railway perspective. 8 Either they were installed incorrectly, 9 either the rail neutral temperature, so they 10 weren't installed at the right temperature, or they 11 were -- or there is an error in the design. But 12 you'd want to talk to an engineer to get to the 13 specifics, and that's what I would expect. 14 EMILY YOUNG: Has that been resolved 15 yet, through mitigation, or is that ongoing? 16 DUANE DUQUETTE: It's -- there's some 17 things have been mitigated. They've developed a 18 better plan for doing it. But even to this date, 19 they're continuing -- they haven't -- it hasn't 20 been finalized, no. They're doing even tests this 21 -- I think in the next two weeks, they're supposed 22 to be going out and doing some more tests on the 23 track, to find out what they believe the rail 24 neutral temperature should be. I think it's 25 scheduled for June.

Ottawa Light Rail Commission Duane Duquette on 5/17/2022

1 EMILY YOUNG: Are there any other 2 issues that come to mind in that vein? I quess 3 they're all kind of somewhat technical issues? 4 DUANE DUQUETTE: There's been various 5 technical issues over the time. I mean, we had 6 issues with the OCS in the beginning. There was 7 the track, and we've had issues with vehicles. 8 EMILY YOUNG: And of those issues, 9 which have been resolved? 10 DUANE DUQUETTE: A great deal of the 11 vehicle -- the issues -- the vehicles are becoming 12 more reliable, definitely. The switch heaters have 13 been improved. The switches, again, we still have 14 some faults, but for the most part, you know, knock 15 on wood, I believe those are resolved. 16 There are still ongoing discussions 17 with the OCS, because we've had further failures 18 just this fall. 19 And then the track, like I mentioned, 20 we are still having ongoing discussions towards the 21 rail neutral temperature, and then the wheel 22 profile, rail-wheel interface, and that sort of 23 stuff. 24 EMILY YOUNG: When those types of 25 issues are arising, who is it on the City's end

131

1	that's writing letters and corresponding with RTM
2	and RTG in trying to resolve them?
3	DUANE DUQUETTE: So, it depends on what
4	the actual issue is. If it's a deficiency from
5	construction, it would be our Rail Construction
6	Program. If it's a deficiency after revenue
7	service, it would be the contracts department
8	through OC Transpo.
9	EMILY YOUNG: Okay. So through OC
10	Transpo, meaning would Mr. Charter or yourself
11	be a person who's writing a letter?
12	DUANE DUQUETTE: Yes. The primary
13	signature is Troy Charter, and then, depending on
14	the nature of the issue, sometimes the Chief Safety
15	Officer signs off on it, that sort of thing, but it
16	would be primarily your three primary people
17	would be Troy, the Chief Safety Officer, and then
18	Michael Morgan from his side.
19	EMILY YOUNG: And do you feel that the
20	approach between the City and RTG/RTM has been
21	collaborative in resolving these issues? What's
22	your sense of that relationship?
23	DUANE DUQUETTE: I believe some work
24	some of it has been definitely collaborative and
25	we've made some good grounds. I mean, we talked

132

1	about the doors, we talked about the switches, we
2	talked about the switch heaters, that type of
3	stuff. So, definitely, some of it has been
4	collaborative and we've made progress.
5	I'm a results-oriented person, and
6	we've already discussed a couple of things I've
7	mentioned that I don't believe have moved forward
8	enough. But, I mean, we still work together with
9	them, to the best of our abilities.
10	EMILY YOUNG: Can you describe your
11	involvement in responding to the August 2021
12	derailment?
13	DUANE DUQUETTE: That would have been
14	the one at that was the first one, right? And
15	the second one was September? Yeah, I was one of
16	the initial responders. I got the call. So, at
17	the time I was Director of Rail Operations,
18	everything any delay over five minutes on the
19	rail line, I always required a phone call for. And
20	so this definitely, I would have got the call from
21	the TOCC, and then I would have escalated to Troy,
22	Troy would have escalated to John; at the same time
23	he's escalating to John, I would have been calling
24	Brandon and making arrangements.
25	Then I believe Troy, Brandon and myself -

_ _

1	and I believe Matt Pieters might have been there as
2	well we all met at Tunney's to take a look at
3	the issue and start investigating.
4	EMILY YOUNG: And once you were there,
5	you met, you saw the scene. What did you do next?
6	DUANE DUQUETTE: We went we
7	discussed with all like, I guess with the RTG
8	counterparts. Don't quote me but I believe it
9	might have been Tom Pate at that time, or it might
10	have been Steve Nadon, but those are two of their
11	primary managers when it comes to this sort of
12	things, discussed what the next steps are. What
13	happened, what the preliminary findings are, and
14	then what the next steps are.
15	EMILY YOUNG: What were the preliminary
16	findings at that point?
17	DUANE DUQUETTE: The belief at that
18	point was it was just a switch derailment, because,
19	due to its location in the rail industry and
20	don't quote me on these as exact, but most I was
21	going to say nine out of ten but I can't give
22	you an exact number, but most derailments and that
23	happen at switches. And it makes sense. That's
24	where your most variables are, that's where your
25	moving parts are.

1 So initial thoughts were it had 2 something to do with the switch, and it wasn't 3 believed to be vehicle-specific. But, again, you 4 don't come to a final conclusion there either. You 5 just take a look at your information and you make 6 your best assessment possible. 7 But one of the priorities is to, you 8 know, remove the vehicle so that you can do a more 9 fulsome deep dive, and then -- on both the track 10 and the vehicle and any other elements of what 11 could have contributed. 12 And has there been a EMILY YOUNG: 13 final determination made for the cause of that 14 derailment? 15 DUANE DUOUETTE: Yes and no. An 16 overheated bearing is what caused it. What caused 17 the overheated bearing is still -- we're still 18 awaiting those answers. 19 EMILY YOUNG: And would the TSB have 20 been notified as well when --21 DUANE DUQUETTE: Absolutely. 22 EMILY YOUNG: Yes. And the TSB was 23 obviously undertaking an investigation. Was the 24 City also doing the same thing concurrently? 25 DUANE DUQUETTE: We would have

1 investigated the situation, yes. 2 EMILY YOUNG: And at what point did you 3 make the decision to shut down service? Was that 4 when you arrived on site after the derailment 5 happened? 6 Like I said, the DUANE DUQUETTE: No. 7 initial assessment was, you know, they didn't know 8 that it was -- it could have been a systemic issue. 9 Like I said, the early indicators is it was right 10 at a switch, it was -- you know what I mean, so... 11 But once they started moving the 12 vehicle and they discovered that it was the 13 bearing, that's when the decision was made to stop, 14 because that's when it was -- this could be a 15 systemic issue. 16 EMILY YOUNG: And what was the process 17 for determining when the line was ready to go back 18 into service? 19 DUANE DUQUETTE: On that one, I'm not 20 as familiar. That one, you'd want to talk to 21 Brandon. I can go back and look. I'm definitely 22 -- I was probably, you know, part of some of the 23 meetings. But off the top of my head, I don't 24 remember that one. I have a lot more knowledge 25 about the second one.

1	EMILY YOUNG: Okay. Well, that's fine.
2	We'll talk about the second one.
3	On the first one, is the reason Brandon
4	would be knowledgeable because it was mainly a
5	determination about whether things were safe to
6	start up again?
7	DUANE DUQUETTE: Absolutely.
8	EMILY YOUNG: And so could you sort of
9	go through the same exercise in respect of the
10	second one? Like, how did you hear about it, what
11	did you do once you went to site?
12	DUANE DUQUETTE: Again, same type
13	situation. I would have been informed by TOCC,
14	made the phone calls. And, again, I'd have to take
15	a look at my logs to see who I called first, but
16	generally it's to Troy first, that's who I escalate
17	to, and then to Brandon. Or it could be vice
18	versa, but, either way, it would have been the two
19	of them.
20	And then made my way to the site, and
21	then at which point met up with Brandon was
22	definitely there, Matt Pieters was there, and I
23	also believe that Rob Johnson from TSB met us there
24	as well at some point during that one.
25	EMILY YOUNG: And what was the

1	assessment of the cause of that derailment?
2	DUANE DUQUETTE: That one required a
3	little well, you can see that there was
4	components laying on the ground. But having said
5	that, there was also some other damage to some of
6	the other infrastructure, to a switch and stuff
7	like that. So it wasn't like and here's the
8	deal. You don't want to make you want to get it
9	right.
10	But, you know, with the two
11	derailments, one after another, there's definitely
12	some sort of an issue that needed to be looked into
13	more in-depth before we continued on.
14	EMILY YOUNG: And when was the decision
15	made to stop service?
16	DUANE DUQUETTE: I don't recall off the
17	top of my head, but it would have been shortly
18	thereafter.
19	EMILY YOUNG: Do you remember what the
20	process was for determining that the system was
21	ready to go back into service?
22	DUANE DUQUETTE: Yeah. That's where we
23	involved TRA as a consultant, if you would, to help
24	us with determining the return-to-service plan, to
25	see if the checks and balances put in place by

1	ourselves and primarily, I guess, by
2	Alstom/RTG/RTM, were adequate to return to service
3	safely. A lot of that had to do with maintenance
4	because that was again, this is where the bolts
5	weren't tightened.
6	EMILY YOUNG: And do you think that the
7	system could have been returned to service any more
8	quickly? Or was all of that time required to be
9	sure that it was good to go?
10	DUANE DUQUETTE: I don't know
11	specifically. I mean, perhaps things could be done
12	quicker, but I don't think RTG was ready. Like,
13	even when we launched, they had only, like, seven
14	trains available. Like, when we relaunched, they
15	only had seven or eight trains. So I don't believe
16	that they were ready. So I would say I mean, if
17	it was a if it was a different maintainer,
18	possibly, but with the maintainer we had, no. They
19	weren't ready.
20	EMILY YOUNG: And after the derailment,
21	was part of the reason for that that you got the
22	sense that there was a need for more maintenance to
23	be done?
24	DUANE DUQUETTE: On the vehicles?
25	EMILY YOUNG: I guess mainly on the

1	vehicles, if these are issues with the vehicles.
2	DUANE DUQUETTE: I don't think it was a
3	matter of more. But to that point, I mean, as part
4	of the mitigation, there is additional inspections.
5	This isn't this wasn't I don't believe it was
6	a result of not enough maintenance on the vehicles.
7	It was a result of not enough checks and balances,
8	or systems in place, or management of the
9	maintenance.
10	EMILY YOUNG: Okay. So you discovered
11	that better management and systems governing the
12	maintenance was required?
13	DUANE DUQUETTE: And, actually,
14	"systems" probably isn't the right word. It's
15	probably more supervision. It's better maintenance
16	practice and supervision of the maintainers. Like,
17	even on the floor, more supervisors.
18	EMILY YOUNG: And is that accounted for
19	in the return-to-service plan?
20	DUANE DUQUETTE: There is yes, there
21	has been part of the return-to-service plan that
22	would for quality checks, if you would, that are
23	required.
24	EMILY YOUNG: Do you think that the
25	operators and controllers were sufficiently trained

1	to respond to the derailments?
2	DUANE DUQUETTE: Yes. I actually have
3	a lot of confidence in our operators and
4	controllers. They've been, like I've said, the
5	unsung heros of this whole three year operations.
6	And we continually do things to improve their skill
7	set.
8	We have oh, back to the SMS, part of
9	our initiatives is actually technical drills. We
10	insist that they all, you know, take part in these
11	technical drills, just for this type of occasions.
12	Technical drills aren't, you know, how
13	do you stop at a platform? It's for these type of
14	occasions, you know, the things that you don't see
15	on a daily basis. So, yes, absolutely, they were
16	trained.
17	EMILY YOUNG: And after the
18	derailments, did you implement any new or different
19	training?
20	DUANE DUQUETTE: I can't recall, I
21	apologize.
22	I mean, any type of thing, we do a
23	debrief afterwards. And if we find there's gaps,
24	like I said, we try to identify gaps and then, you

1 There definitely would have been one on 2 this, but I don't have it in front of me to tell 3 you what was the result. 4 EMILY YOUNG: Did they have to do any 5 additional training before service started up 6 again? 7 DUANE DUQUETTE: I'm trying to think. 8 I can't recall, I apologize. 9 EMILY YOUNG: That's no problem. 10 It wouldn't have been DUANE DUOUETTE: 11 Like, nobody was going through a extensive. 12 three-day course or nothing. If there was 13 something, it would have been, you know, smaller. 14 EMILY YOUNG: Are you aware of any 15 incidents similar to the overheating that caused 16 the first derailment occurring on Alstom trains 17 elsewhere in the world? 18 DUANE DUQUETTE: Yeah, every other rail 19 system in Canada. Like, not transit system, but 20 every freight rail system has hotbox detectors, 21 which are put in place to monitor bearings for 22 overheating, for that specific purpose. And there 23 are rules around those detectors. 24 EMILY YOUNG: But that hasn't been put 25 in place on this system?

Ottawa Light Rail Commission Duane Duquette on 5/17/2022

Т

1	DUANE DUQUETTE: It was RTM/RTG, again,
2	committed to looking into it. But to the best of
3	my knowledge, they have made zero progress on it.
4	We have brought it up on a couple of occasions.
5	EMILY YOUNG: So that's an open
6	question, then, with those?
7	DUANE DUQUETTE: Yes. But to that
8	point, other transit systems don't have them, so
9	maybe it's my background in freight that leads me
10	there.
11	EMILY YOUNG: Do you have any views on
12	what might have caused or contributed to the
13	breakdowns and derailments?
14	DUANE DUQUETTE: Well, the second one
15	was quality; they didn't tighten the bolts.
16	The first one is an overheated bearing,
17	but like I said, we're still waiting on the root
18	cause, as to what caused the bearing to overheat.
19	EMILY YOUNG: You think there were any
20	other broader systemic factors, or just those that
21	you've mentioned?
22	DUANE DUQUETTE: There's a lot of
23	commercial discussion on there, where we hear a
24	lot of commercial discussion. I know there's
25	arguments between Alstom and RTG as to root cause,

1 and I believe that's probably why it's been so long 2 for us to get it, but I would just be guessing. 3 I'm not an engineer, I apologize. 4 EMILY YOUNG: Okay. The Commission has 5 been asked to look into the commercial and 6 technical circumstances leading to the breakdowns 7 and derailments on Stage 1. 8 Are there any areas you think the 9 Commission should be looking into that we haven't 10 discussed this morning? 11 DUANE DUOUETTE: No. I think we 12 covered quite a bit of it. 13 My biggest takeaway is I didn't believe 14 -- well, I don't believe they were properly 15 staffed. 16 And the Commissioner has EMILY YOUNG: 17 also been asked to make recommendations to try and 18 avoid issues like this from happening again. Are 19 there any specific recommendations or areas of 20 recommendations that you suggest should be 21 considered? Perhaps other than increased staffing, 22 which I take it might be one that you would 23 recommend. 24 DUANE DUQUETTE: It's a difficult 25 question. I mean, when you're dealing with

1	projects, P3 projects, it's just a difficult
2	question, because you can't document every possible
3	concern. We already have a document that's umpteen
4	thousand pages. So, yeah, requiring more staffing,
5	that type of stuff, but nothing specific beyond
6	that.
7	EMILY YOUNG: Mr. Imbesi, do you have
8	anything to follow up on or add?
9	ANTHONY IMBESI: No, I don't. Thank
10	you.
11	EMILY YOUNG: Does Mr. Duquette's
12	counsel have any questions?
13	JESSE GARDNER: No, thank you.
14	EMILY YOUNG: Okay. I think we can go
15	off the record.
16	Thank you very much, Mr. Duquette.
17	
18	Concluded at 12:02 p.m.
19	
20	
21	
22	
23	
24	
25	
1	

1	REPORTER'S CERTIFICATE		
2			
3	I, JUDITH M. CAPUTO, RPR, CSR, CRR,		
4	Certified Shorthand Reporter, certify;		
5	That the foregoing proceedings were		
6	taken before me at the time and place therein set		
7	forth; at which time the interviewee was put under		
8	oath by me;		
9	That the statements of the presenters		
10	and all comments made at the time of the meeting		
11	were recorded stenographically by me and		
12	transcribed at my direction;		
13	That the foregoing is a Certified		
14	Transcript of my shorthand notes so taken.		
15			
16	Dated this 18th day of May, 2022.		
17	fudite 4. Capito, Con.		
18			
19	NEESONS, A VERITEXT COMPANY		
20	PER: JUDITH M. CAPUTO, RPR, CSR, CRR		
21			
22			
23			
24			
25			

WORD INDEX	80-plus 83:10	62:12 71:13, 15	agreement 31:4,	apologize 12:13
	-	72:3, 16, 23	18, 22 56:20	21:24 24:4
<1>	< 9 >	73:22	58:23 76:2	30:18,21 36:2
1 3:4 9:12	9 3:4	actions 18:11	ahead 41:14	48:20 49:13
144:7	9:00 1:16 4:1	121:3	Alberta 7:22	50:8 53:19
10 84: <i>11</i>		actor 52:20	Alicia 2:20	58:17 65:12
10:30 6:9	< A >	actual 40:22	allow 82:23	69:20 72:19
10:33 82:3	a.m 1:16 4:1	57:23 72:7	105:5, 6	76:8 87:6
10:47 82:4	82:3, 4	76:16 89:13	allowed 85:23	93:11 96:20
12 85:10 129:25	abilities 133:9	132:4	92:22 128:7	141:21 142:8
12:02 1: <i>16</i>	ability 16:21	adapt 43:9	alluded 33:24	144:3
145:18	23:16 56:11	80:16, 18	Alstom 35:7	apology 48:9
13 100:4	74:6 79:1	adapted 44:18	42:5, 14, 16	appear 3:15
101:23 102:12,	98:16 107:7, 22	add 145:8	45:5 58:10	appended 5:13
16, 19 113:19	111:22 114:6	added 124:15	78:10, 14	applied 13:8
14 86:21 123:6	120:3 127:1	additional 29:24	103:25 110:21	32:13 95:19
15 81:24 84:11	abnormal 61:20	30:16 60:14	142:16 143:25	110:19
100:3 101:24	Absolutely 7:2	82:22 127:25	Alstom/RTG	apply 33:12, 14
102:12	12:19 13:12, 17	140:4 142:5	58:1	62: <i>19</i> , 23 73:8
16 38:21 39:1	17:3, 8 27:24	address 141:25	50.7	110:15
69:18	30:1 41:23	addressed 46:7,	Alstom/RTG/RTM	approach 43:12
17 1:8	44:23 47:1	13	139:2	110:22 132:20
17th 1:15	53:9 55:6	addressing 9:4	altogether 75:11	appropriate
18th 146:16	62:16 72:17	adequate 139:2	Alyth 7:9	82:16
10(11 140.70	93:1 95:5	adjust 95:10	amended 112:13	Approximately
<2>	100:6, 7 115:16	adjustment	Amilcar 15:24	9:24
20 39:16	118:21 119:20	68: <i>14</i>	amount 19:16	area 7:20
2008 8:3	127:3, 15	adjustments	40:20 68:4	areas 126:7
2009 5:15	135:21 137:7	37:18, 20 70:8	88:5 124:23	144:8, 19
2017 8:5 9:15	141:15	126:3	127:5	argument
10:25 27:17	acceptable 30:6	adjusts 14:3	analysis 102:17	113:25 114:3
2019 10:25	57:6	advance 86:6	and/or 29:14	arguments
27:17 108:12, 14	accepted 56:7	advantages 80:9	90:19	111:6 143:25
2021 133: <i>11</i>	accessibility	advised 6:3	answers 135:18	arisen 122:3
2022 1:8, 16	93:7	AFFIRMED 4:4	Anthony 2:4	arising 90:13
146:16	accidents 67:13	afraid 92:3	20:7 82:5, 25	131:25
140.70	68:22	after 5:1 10:2	145:9	arm's 50:6
< 3 >	accompany	15:14, 18 26:15	anticipated	84:11
30 39:17 123:7	60: <i>18</i>	68:24 74:22	119:14 120:7	arose 125:14
33 5:14 6:2	account 28:14	76:6 93:20	anybody 14:2	arrange 50:3
	accounted	94:10 101:3	29:20 35:5, 9	arrangements
< 5 >	140:18	103:9 108:7, 15	44:11 48:10	133:24
5 6:4	accurate 23:18	111:1, 3 115:10	53:21, 25 54:1	arrived 136:4
56 40:5	36:18 94:6	132:6 136:4	55:20 93:14	arriving 32:1
	achieve 69:10	138:11 139:20	95:22	Aside 8:13
< 6 >	88:4, 5	141:17	anymore 121:24	66:17 90:19
6 5:14	achieved 89:14	ago 32:7 74:20	anyway 6:9	asked 5:17
600 17:21	acronyms 22:5	96:21 97:3	125:9	10:22 102:22
	106:23	agree 52:19	anyways 33:4	144:5, 17
<7>	Act 5:15 6:3, 5	102:19 113:2, 3	61:6 64:22	asking 19:18
7 6:2	10:22	agreed 58:4, 5,	75:2, 11 102:15	24:13 65:12, 14
. 0.2	acted 34:10	8 98:24 101:23	111:7	asks 50:1
< 8 >	Acting 10:12	102:2 111:9	apart 129:22, 23	aspect 90:14
80 86:4	action 50:13, 14,	112:17	apologies 13:4	aspects 25:19
	18 51:2 55:9		47:8 48:8 70:23	89:4 100:2
	10 01.2 00.9		17.0 10.0 70.20	00.7 100.2

neesonsreporting.com 416.413.7755

	1			
assess 34:3	availability	50:1 53:8 55:3		Brandon 10:17
107:8, <i>1</i> 8 127: <i>11</i>	99:2 <i>0</i>	66: <i>14</i> 68: <i>6</i> , <i>8</i> ,	87:20 123: <i>4</i>	76:20 127:23
assessed 89:1,	available 94:15	13 73:19 78:8	133:9 135:6	128:6, 10
3	139: <i>14</i>	85:12 86:16	143:2	133:2 <i>4</i> , 25
assessing 52:5	avoid 16:9	127:18 141:15	better 47:21	136:2 <i>1</i> 137: <i>3</i> ,
89:6 98:3 118:2	105:23 144: <i>18</i>	bathrooms	51:3 60:1, 12	17, 21
assessment	avoided 24:12	99:14	68:23 73:11	break 6:7
30:4 70:22	awaiting 135:18	bearing 135: <i>16</i> ,	95:11 124:17	44:13, 15 81:20
87:18 89:18	aware 20:12	17 136:13	130:18 140:11,	91:1
90: <i>1</i> 135:6	27:9, 15 28:5	143:16, 18	15	breakdown
136:7 138: <i>1</i>	30:7 31:17	bearings 142:21	big 17:19 27:7	94:22
assessments	32:21 49:16	becoming	59:11 61:6, 16	breakdowns
63:8 70:18	51:19 57:23	131:11	69:16	44:22 143:13
assist 34:7, 11	63:17,21 64:24	began 30:8	bigger 102:10	144:6
41:9 94:23	65:17 79:4, 13	76:6 110:20	biggest 144:13	breakers 43:25
assisted 11:12	81:9, 11 86:18	beginning	bit 8:23 11:12	breaks 39:23
assume 32:6, 8	96:9 100:10	91:24 109:11	13:19 14:13	82:23
90:20 102:20	103:9 106: <i>1</i>	111:22, 25	18:10 25:15	Bridge 75:24
assurance	142:14	112:2 116:18	30:23 31:9	124:21 129:4, 8
74:10 76:13	awareness 92:8	119:16 124:10	32:7 40:11	brief 4:6
assurances 53:6		131:6	42:21 43:2	bring 30:6 38:7
assured 106:16,	< B >	begins 51:23	59:13 60:15	65:23 85:6
19	back 10:24	behalf 101:14	65:25 74:15, 19	bringing 118:2
ATPM 39:8	13:7 30:19	belief 134:17	79:2 86:6 87:7	brings 29:12
67:20 68:20	32:23 39:24	believe 8:15	98:7 103: <i>18</i> , <i>20</i> ,	66:11, 12
69:1, 19	47:24 52:23	11:23 20:1, 9	24 104:10	British 7:21
attendants	58:18 73:3, 9	22:4, 24 31:10	108:9 115:8	broader 143:20
11: <i>11</i>	81:23 94:24	40:2 46:9	116:8 118:12	broken 113:22,
attended 77:22,	98:19 111:5	48:24 49:8	127:8 144:12	23
25	116:12, 22	55:12 67:18	blah 28:25	brought 15:4
attending 1:15	117:22 119: <i>4</i> ,	68:5, 11 70:3	blood 36:3	34:7 75:11
attrition 85:11	11 120:25	73:16, 18 75:3	blurred 87:10	83:10 85:9
audit 19:6, 7, 9,	123:17 125:1	77:12 78:17	Boisvenue 47:7	112:10 117:3
21 20:1, 8, 15	126:2 129:2	83:14, 18 86:9	bolt 127:24	143: <i>4</i>
21:18 22:13	136: <i>17</i> , 21	87:4, 5, 13 88:9	bolts 9:7 23:7	buckling 128:22
48:19,23 49:17	138:21 141:8	89:17 90:8	55:18 120:3, 6	build 24:24
50:8 68:12	background	91:10 96:2	139:4 143:15	built 105:18
audited 36:13	143:9	97:5 115:19	book 11:9 29:9,	bulletin 28:19,
auditing 36:14	backgrounds	117:2 119:8	15 33:6, 9, 12,	22 29:2 30:14
48:17	47:20	123:10, 11, 17,	21 34:23 44:1	37:21 38:1, 11,
auditor 27:1, 10	bad 56:6 83:15	18 125:16	48:22	12
28:7 63:19	84:3, 7	127:8 128:12	books 32:23	Bulletins 29:1,
audits 18:13, 14,	balances 52:7,	130:23 131:15	34:1 46:20	11 30:11 70:25
22 19:5 49:4	13 88:4, 11	132:23 133:7,	58:18	71:6
66: <i>4</i> 70: <i>18</i>	138:25 140:7	25 134:1, 8	bought 113: <i>19</i> ,	bump 129:6
audit-type 13:25	base 24:25	137:23 139:15	20	bunch 7:13
August 133:11	based 48:13	140:5 144:1, 13,	brake 43:25	41:16 113:20
authority 17:1	103:2 112:22	14	62:13, 19, 20, 21	bus 17:4 20:2
30:24 31:4	basically 15:1	believed 135:3	126:9	25:7, 10, 16
46:5, 10	29:11 54:16	believer 78:20	brakes 61:22	55:12 72:12
automated 44:9	62:14 67:8	beneficial 41:1,	62:23	75:3, 10, 21
122: <i>18</i>	68:1,20 75:12	17 43:5 44:6	braking 126:5,	83:4, 11, 22
automatically	basics 41:12	Berrada 49:23	23	84:9 94:11, 12
122:25	basis 5:6 22:1	best 32:19	branch 13:14	buses 75:25
	29: <i>10</i> 40:2	33:20 34:6		
L				

busy 113:19 CBTC 40:10 Curcumstances 94/22 103:17 company 27:7 buying 44:6 106:14 116:4 106:14 116:4 106:14 116:4 cabinet 30:10 45:14 13:9:15 30:25 comes 29:2 complete 51:1 caligray 72:1 65:8 88:5.6 13:49:3 52:24 53:12 completel 51:5 completel 51:5 completel 51:5 completel 51:5 completel 52:24 53:12 53:24 53:12 s6:16:20 59:16 completel 52:11 comple					
buying44:8centre104:16CITY1.72.9128:3131:2competition< C >30:1045:14139:1530:2635:460:11,12,13calient43:2354:257:563:531:4,1832:8,32:1637:2465:886:1792:3calient43:2340:16114:587:995:5,1971:1397:5completed49:3s3:1384:24106:16114:587:995:5,1971:1397:5completed49:333:16,1220:16114:587:995:5,19109:6120:18completely5:1157:464:21,25146:1109:15.2266:6109:6120:1856:1196:776:2177:12certification114:19115:2251:1660:2514:2249:1076:2177:12certifier121:16132:20command62:2449:1076:2177:1453:4913:52completel13:22completel61:14camcong97:2327:1558:15commencing75:7,1376:7completelcamcad6:583:4210:10110:10110:10110:10110:10110:1012:1612:16camcad6:523:2483:22civil52:20commencing17:2712:12compressing12:12camcad6:514:7782:13146:1012:12commercial138:4 <td>bust 7:15</td> <td>18</td> <td>circumstances</td> <td>94:22 103:17</td> <td>company 27:7</td>	bust 7:15	18	circumstances	94:22 103:17	company 27:7
c C >certain 4:166:25 8:5.7, 12135:4complete 5:1cabinet 43:2354:2 57:5 63:531:4, 18 32:8,52:24 53:12complete 49:3call 11:24 29:980:10 92:2253:24 54:855:16 20 59:1683:17 92:5call 11:24 29:980:10 92:2253:24 54:855:16 20 59:1684:17 92:5call 11:24 20:980:10 92:2272:11 7124:20 126.795:29 96:6109:6 120:18133:16, 19.20Certainly 11:399:19 101:8, 14123:4 130:571:15 85:2227:3 28:16CERTIFICATE109:15, 22complete 1971:16 80:2275:4 64:21, 25146:1112:11, 20:9complance14:22 49:23118:8 137:1554:19118:1 120:9command 62:244:69:2, 19 74:9calling 133:23certified 146:4101:10 110:22commands14:22 49:23calling 133:23certified 146:4101:10 110:22commandscomponentcameras 97:4,certifiy 146:4101:10 110:22commence 4:23componentCanada 6:523:24 83:22classified 22:13classified 22:13commence 12:3computer 61:16, 13:2475:13 129:1445:9 115:4classified 23:14commence 12:34computer 61:16, 13:23computer 61:16, 13:2375:13 129:1445:812:17classified 23:14commence 12:34computer 61:16, 13:2312:15catage 115:1catage 11:19commence 12:34computer 61:16, 13:23computer 61:16, 13:2313:10 11 9:16 120:10catage 11:27catage 11:27catag			-		
$ \begin{array}{c} {\rm C} {\rm S} \\ {\rm calgary} 7.21 \\ {\rm cabine} 43.23 \\ {\rm calgary} 7.21 \\ {\rm c5} 65.8 \ 85.16 \\ {\rm c3} 42.2 \\ {\rm calgary} 7.21 \\ {\rm c5} 65.8 \ 85.6 \\ {\rm c3} 43.5 \\ {\rm calgary} 7.21 \\ {\rm calgary} 7.22 \\ {\rm calgary} 7.22 \\ {\rm calgary} 7.22 \\ {\rm calgary} 7.23 \\ {\rm calgary} 7.24 \\ {\rm calgary} 7.2$	buying 44:8				
cabinet 43.23 54.2 57.5 63.5 63.14, 46 32.16 37.24 62.2 65.7 65.8 88.5, 6 73.49.3 52.20 52.24 53.24 63.21 65.2 83.77 92.5 63.73 84.77 92.5 63.73 84.77 92.5 63.73 84.77 92.5 84.77 92.7 72.6 <td></td> <td></td> <td></td> <td></td> <td></td>					
call 11:24 29:10 92:22 53:24 54:8 58:16, 20 59:16 completiy 83:13 84:24 106:16 114:5 87:9 93:5, 19 75:13 97:5 completiy 133:16, 19, 20 Certainy 11:3 99:19 101:8, 14, 12:4 133:16 132:17 124:20 126:7 95:22 96:6 133:17 133:16, 19, 20 completion completion 27:3 28:18 CERTIFICATE 109:15, 22 coming 17:18 85:21 93:5, 19 129:6 completion completion calling 133:32 Certified 146:4 121:16 132:24 68:17 92:6 completion					62:9 85:15
83:13 84:24 106:16 114:5 87:9 93:5, 19 75:13 97:5 completiey 97:22 121:17 124:20 126:7 95:22 96:6 109:6 120:18 52:11 called 26:18 Certainy 11:3 99:19 101:8, 14 134:11 134:11 96:7 86:11 96:7 46:1 113:11 23 123:42 49:70 complainee 76:21 77:12 certification 114:19 115:22 command 62:24 46:22 46:82, callis 137:14 13 135:24 command 62:24 46:82, 197:47, 13 75:7, 13<		65:8 88: <i>5</i> , 6			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	call 11:24 29:9	89:10 92:22	53:24 54:8	58: <i>16</i> , 20 59: <i>16</i>	84:17 92:5
$\begin{array}{llllllllllllllllllllllllllllllllllll$	83:13 84:24	106: <i>16</i> 114:5	87:9 93:5, 19	75:13 97:5	completely
called 15:10 40:12 23 102:18 134:11 71:15 85:22 27:3 28:18 CERTIFACTE 109:15,22 coming 17:18,8 86:11 96:7 76:21 77:12 certification 114:19 115:22 51:16 60:25 67:21,24 86:11 96:7 calling 133:23 Certified 146:4, 121:16 132:20 command 62:24 67:21,24 68:2, 19 74:9 call 43:3 certifier 26:24 City's 48:1, 3 61:19 commands 61:19 commence 4:23 components camada 6.5 23:24 83:22 civil 5:20 commence 4:23 components 138:4 compressing 129:1 29:1	97:22 121:17	124:20 126:7	95:22 96:6	109:6 120: <i>18</i>	52:11
27:3 28:18 CERTIFICATE 109:75,22 coming 17:18, 86:11 96:7 57:4 64:21,25 146:1 112:11,23 21 28:24 49:10 compliance 76:21 77:12 certification 114:19 115:21 21 28:24 49:10 compliance 118:8 137:14 13 13:16 122:17 13:23 certified 146:4, 121:16 13:220 command 62:24 69:2, 19 74:9 calls 137:14 13 certified 146:4, 101:10 110:22 command 62:24 69:2, 19 74:9 cameras 97:4, certify 146:4 101:10 110:22 commence 4:1 component 28:24 31:3, 19 change 12:2 classified 22:13 146:10 components 138:4 components components components 138:4 components 33:10, 11 142:15 change 12:17 classified 22:13 144:16 39:11 142:17 71:4 change 28:15 121:8 commissioner computer 61:16, 14	133:16, 19, 20	Certainly 11:3	99: <i>19</i> 101: <i>8</i> , <i>14</i> ,	123: <i>4</i> 130:5	completion
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	called 26:18	15: <i>10</i> 40: <i>12</i>	23 102:18	134: <i>11</i>	71:15 85:22
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	27:3 28:18	CERTIFICATE	109: <i>15</i> , 22	coming 17: <i>18</i> ,	86:11 96:7
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	57:4 64:2 <i>1</i> , 25	146: <i>1</i>	112: <i>11</i> , 23	21 28:24 49:10	compliance
calling 133:23 Certified 146:4, 13 121:16 132:20 135:24 command 62:24 commands 4.69:2, 19 74:9 75:7, 13 76:7 calm 43:3 certifier 26:24 135:24 commands 75:7, 13 76:7 camcom 97:23 27:1 59:8 50:21 53:15 commence 4:23 camad 6:5 23:24 83:22 civil 5:20 commence 22:12 components 28:24 31:3, 19 change 12:2 classified 22:13 commercial 138:4 28:24 31:3, 11 48:9 classified 22:13 commercial 129:21 9, 11, 15 52:10 14, 17 123:13, 16 56:8 104:15 143:23, 24 144:10 compression 79:22 129:7 22:77 87:11 cleaning 19:9 1:6 21:4 42:6 commission compute compute 6:14:16 39:11 40:15 144:16 39:11 41:1	76:21 77:12	certification	114: <i>19</i> 115:22	51:16 60:25	14:22 49:23
calls 137:14 13 135:24 commands 75:7, 13 76:7 cam 43:3 certifier 26:24 City's 48:1, 3 commence 4:23 component cameras 97:4, certify 146:4 101:10 110:22 commence 4:23 component 10 98:19 challenges 131:25 commence 4:23 component 22:12 28:24 31:3, 19 change 12:2 classified 22:13 146:10 components 138:4 28:24 31:3, 19 change 12:1 clean 46:14 146:10 components 138:4 28:24 31:3, 16 change 12:1 clean 16:14 commercial 129:21 33:10, 11 48:7 79 change 12:17 121:19 Commercial computer 61:16, 142:19 125:4 cleanliness 144:4, 9 commissioning 126:2 capabilities charer 15:22 climate 123:4 coits 79:6, 15 concent 17:22 concent 17:22 19:12 21:19 70:2 19:22:15 coath 80:5 cores 17:25	118:8 137: <i>15</i>	54:19	118: <i>1</i> 120: <i>9</i>	129:6	67:21, 24 68:2,
calm 43:3 CamCom 97:23 certifier 26:24 27:1 59:8 cameras 97:4, 10 98:19 City's 48:1, 3 50:21 53:15 cameras 97:4, 10:10 110:22 61:19 commence 4:23 commencing 22:12 commencing 22:12 complying 18:14 component 22:12 20 98:19 challenges challenges 131:25 commencing 4:1 components commencing 22:12 22:12 components 28:24 31:3,19 change 12:2 change 12:17 clean 46:14 commencing 129:21 138:4 33:10, 11 48:2 29:7,8,25 30:2, clean 46:14 commercial 129:21 129:21 75:14, 15, 19 changed 12:17 121:19 Commissioner 121:19 commissioner 126:2 compouter 61:16, 39:11 121:8 commissioning 126:2 comcent 17:22 Canad's 7:9 charter 15:22 climate 123:4 26:15 romissioning 126:2 concent 17:22 13 check 48:24 coath 80:5 4:12, 21, 25, 55 concent 17:22 18:25 14:3, 20 129:10 cohort 86:3, 6 committee 29:9, 128:20 146:3; 20 146:3; 20 146:3, 20 129:10 cohort 86:3, 6 143:2 59:17 11:16 13:1 19:18	calling 133:23	Certified 146:4,	121: <i>1</i> 6 132:20	command 62:24	4 69:2, 19 74:9
CamCom 97:23 27:1 59:8 50:21 53:15 commence 4:3 Camaras 97:4, cartify 146:4 101:10 110:22 commence 4:1 Canada 6:5 23:24 83:22 civil 5:20 comments 138:4 28:24 31:3,19 change 12:2 classified 22:13 146:10 components 33:10,11 48:2 29:7,8,25 30:2, clean 46:14 commercial 129:17 9,11,15 52:10 14,17 123:13,16 clean 46:14 compression 79:22 129:7,20 125:3 129:14 15:6 125:4 cleaning 119:9 1:6 21:14:20 computer 61:16, 142:19 125:4 cleaning 129:9 cleaning 19:9 cleaning 128:20 commuter 61:16, 144:4,9 17 62:8 Canadian 7:3 29:17 87:10 clearly 24:6 commissioning 22:20 comc	calls 137:14	13	135:2 <i>4</i>	commands	75:7, 13 76:7
CamCom 97:23 27:1 59:8 50:21 53:15 commence 4:3 Camaras 97:4, certify 146:4 101:10 110:22 commence 4:1 Canada 6:5 23:24 83:22 civil 5:20 comments 138:4 28:24 31:3,19 change 12:2 classified 22:13 146:10 components 33:10,11 148:2 29:7,8,25 30:2, clean 46:4 144:10 compressing 75:14,15,19 changed 12:7 cleaning 19:9 cleaning 142:0 142:0 compression 72:2 12:14 15:4 cleaning 129:9 commence 14:4,9 17 62:8 Canadas 7:9 charge 28:15 clearly 24:6 commissioning 126:2 comcent 17:22 Capacity 45:8 90:19 close 40:6 82:9,11, 18 44:8 concern 17:22 Caputo </td <td>calm 43:3</td> <td>certifier 26:24</td> <td>City's 48:1, 3</td> <td>61:<i>19</i></td> <td></td>	calm 43:3	certifier 26:24	City's 48:1, 3	61: <i>19</i>	
cameras 97:4, 10 certify 146:4 challenges 101:10 110:22 131:25 commencing 4:1 22:12 components Canada 6:5 23:24 83:22 civil 5:20 comments 138:4 Canada 6:5 23:24 83:22 civil 5:20 comments 138:4 28:24 31:3, 19 change 12:2 compressing 129:21 9, 11, 15 52:10 14, 17 123:13, 16 56:8 104:15 143:23, 24 144:5 75:14, 15 51:9 change 12:17 cleaning 119:9 1:6 2:1 44:5 Canadas 7:9 change 28:15 cleaniness 144:16 39:11 40:15 Canadas 7:9 charge 12:15 clearly 24:6 144:16 39:11 40:15 Canadia 132:10, 13 122:25 commissioning 26:15 79:6, 15 concept 23:3 19:12 219:19 70:2 139:21 <	CamCom 97:23	27:1 59:8		commence 4:23	
	cameras 97:4,	certify 146:4	101: <i>10</i> 110:22		
Canada 6:5 23:24 83:22 civil 5:20 comments 138:4 28:24 31:3, 19 change 12:2 clean 46:14 146:10 compressing 33:10, 11 48:2 29:7, 8, 25 30:2, clean 46:14 commercial 129:21 0, 11, 15 52:10 14, 17 123:13, 16 clean 46:14 commercial 129:21 125:3 129:14 45:9 115:4 cleaning 119:9 1:6 2:1 42:0 computer 61:16, 142:19 125:4 cleaning 119:9 1:64:14.4, 9 17 62:8 Canadas 7:9 charge 28:15 121:8 commissioner computer-based Canadian 7:3 29:17 87:11 clearly 24:6 144:16 39:11 40:15 33:9 charge 12:15 clichéd 53:21 commissioning 126:2 comercial 129:21 capabilities Charter 15:22 climate 123:4 Commission's concern 17:22 13 19:12 21:19 70:2 132:10 coating 73:8	10 98:19	challenges	131:25		components
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Canada 6:5		civil 5:20	comments	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	28:24 31:3, 19	change 12:2	classified 22:13	146: <i>10</i>	compressing
75:14, 15, 19 $125:3$ changed 12:17 $45:9$ $121:19$ $125:4$ COMMISSION $1eaning$ $79:22$ $129:7, 20$ $computer 61:16,17142:19125:4Canad's 7:9Canadian 7:333:929:1787:1129:17cleaning119:9cleaniness121:81621:14:42.0144:4,979:22129:7, 20computer 61:16,172anad's 7:9changes28:15charge121:8cleanly 24:6clichéd 53:21climate124:4,926:1579:6279:22129:7, 20computer 61:16,13:1,1233:9capacity45:8, 109:19132:10, 13122:19clearly24:6close 40:6212:25144:16commission's29:11, 1839:1140:1520:25, 123:3120:25, 123:11co-counsel 4:15co-counsel 4:15co-counsel 4:15co-counsel 4:15committed26:1579:6, 1582:9, 11, 1820:20concern 17:22111:16, 113:23111:16, 113:23113:1check 48:24co-counsel 4:15coordern 86:9, 20cohorts 86:3, 6cold 73:15cold 73:15committedcommittedconcerns 21:6concern 21:6, 11, 16, 107:13, 21concern 133:428:2029:1721, 25, 106:9, 12, 114:1910:22, 111:8, 133:410:22, 111:8, 133:4113:5, 114:5, 14:15, 19, 2515:23, 16:2, 16, 133:4109:2, 112:2319, 23, 25, 28:1, 17:17, 21:14concurrentlyconcurrentlyconcurrentlyconcurrentlyconcurrentlyconcurrentlyconcurrentlyconcurrentlyconcurrentlyconditions71:1, 24, 135:16, 17109:774:5, 76:2574:5, 76:25142:9, 16, 43:12$	33:10, 11 48:2,	29:7, 8, 25 30:2,	clean 46:14	commercial	
75:14, 15, 19 $125:3$ changed 12:17 $45:9$ $121:19$ $125:4$ COMMISSION $1eaning$ $79:22$ $129:7, 20$ $computer 61:16,17142:19125:4Canad's 7:9Canadian 7:333:929:1787:1129:17cleaning119:9cleaniness121:81621:14:42.0144:4,979:22129:7, 20computer 61:16,172anad's 7:9changes28:15charge121:8cleanly 24:6clichéd 53:21climate124:4,926:1579:6279:22129:7, 20computer 61:16,13:1,1233:9capacity45:8, 109:19132:10, 13122:19clearly24:6close 40:6212:25144:16commission's29:11, 1839:1140:1520:25, 123:3120:25, 123:11co-counsel 4:15co-counsel 4:15co-counsel 4:15co-counsel 4:15committed26:1579:6, 1582:9, 11, 1820:20concern 17:22111:16, 113:23111:16, 113:23113:1check 48:24co-counsel 4:15coordern 86:9, 20cohorts 86:3, 6cold 73:15cold 73:15committedcommittedconcerns 21:6concern 21:6, 11, 16, 107:13, 21concern 133:428:2029:1721, 25, 106:9, 12, 114:1910:22, 111:8, 133:410:22, 111:8, 133:4113:5, 114:5, 14:15, 19, 2515:23, 16:2, 16, 133:4109:2, 112:2319, 23, 25, 28:1, 17:17, 21:14concurrentlyconcurrentlyconcurrentlyconcurrentlyconcurrentlyconcurrentlyconcurrentlyconcurrentlyconcurrentlyconditions71:1, 24, 135:16, 17109:774:5, 76:2574:5, 76:25142:9, 16, 43:12$	9, 11, 15 52:10	14, 17 123:13, 16	56:8 104: <i>15</i>	143:23, 24 144:5	Compression
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	75:14, 15, 19	changed 12:17	121: <i>19</i>	COMMISSION	79:22 129:7, 20
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	125:3 129: <i>14</i>	45:9 ⁻ 115: <i>4</i>	cleaning 119:9	1:6 2:1 4:20	computer 61:16,
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	142: <i>19</i>	125: <i>4</i>	cleanliness	144: <i>4</i> , 9	17 62:8
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Canada's 7:9	changes 28:15	121:8	Commissioner	computer-based
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Canadian 7:3	29:17 87:11	clearly 24:6	144:16	39:11 40:15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	33:9	charge 12:15	clichéd 53:21	commissioning	126:2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	capabilities	Charter 15:22	climate 123:4	26:15 79:6, 15	concept 23:3
13check $48:24$ coach $80:5$ $4:12, 21, 25, 5:5$ $18:2, 53:22$ Caputo $2:19$ $70:2, 119:21$ coating $73:8, 9$ commitments $146:3, 20$ $120:25, 123:11$ co-counsel $4:15$ commitmentscar $7:18$ checked $92:23$ cohort $86:9$ committedcare $71:23$ checking $89:10$ cohorts $86:3, 6$ $143:2$ concerns $21:6$ $113:1$ $119:18, 120:10$ cold $73:15$ Committee $29:9,$ $21, 25, 106:9, 12,$ cars $84:10$ checks $52:6, 13$ $123:7, 129:1, 17,$ $10, 66:11$ $16, 107:13, 21$ case $53:3$ $88:3, 11, 121:11$ 19 committees $71:1, 4, 8$ $122, 111:8,$ $63:18, 64:4, 19$ $138:25, 140:7, 22$ collaborative $71:1, 4, 8$ $12, 114:19$ $63:18, 64:4, 19$ $18, 23, 12:10$ $133:4$ $28:20, 29:17$ $145:18$ $113:5, 114:5$ $14:15, 19, 25$ Columbia $7:21$ $41:12, 79:1$ $conclusion$ categorize $15:23, 16:2, 16,$ $17:17, 21:14$ $communicated$ $concurrently$ $109:7$ $74:5, 76:25$ $42:9, 16, 43:12$ $communication$ $28:21$ $55:13, 129:9, 12$ $109:7$ $74:5, 76:25$ $42:9, 16, 43:12$ $communication$ $conditions$ $55:13, 129:9, 12$ $11, 24, 135:16$ 17 $53:17, 55:23$ $communication$ $105:7, 107:4$	19: <i>12</i> 21: <i>19</i>	88:18 90:19	Close 40:6	82:9, 11, 18	44:8
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	capacity 45:8,	132:10, 13	122:25	Commission's	concern 17:22
146:3, 20 $120:25$ $123:11$ $co-counsel$ $4:15$ $128:20$ $145:3$ car $7:18$ checked $92:23$ cohort $86:9$ $concerns$ $21:6$ care $71:23$ checking $89:10$ cohorts $86:3, 6$ $143:2$ $59:17$ $91:16, 19,$ $113:1$ $119:18$ $120:10$ cold $73:15$ $Committee$ $29:9,$ $21, 25$ $106:9, 12,$ cars $84:10$ checks $52:6, 13$ $123:7$ $129:1, 17,$ 10 $66:11$ 16 $107:13, 21$ Case $53:3$ $88:3, 11$ $121:11$ 19 $collaborative$ $71:1, 4, 8$ 12 $110:22$ $111:8,$ $63:18$ $64:4, 19$ $138:25$ $140:7, 22$ collaborative $71:1, 4, 8$ 12 $110:22$ $111:8,$ $63:18$ $64:4, 19$ $138:25$ $140:7, 22$ collaborative $71:1, 4, 8$ 12 $114:19$ $63:18$ $64:4, 19$ $138:25$ $140:7, 22$ collaborative $71:1, 4, 8$ 12 $114:19$ $categorization18, 2312:10133:428:2029:17145:18113:5114:514:15, 19, 25Columbia7:2141:1279:1conclusioncategorize15:2316:2, 16,come7:13114:19125:2135:4109:774:576:2542:9, 1643:12communicatedconclusioncaused102:7,1753:17$	13	check 48:24	coach 80:5	4:12, 21, 25 5:5	18:2 53:22
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		70:2 119:2 <i>1</i>	coating 73:8, 9	commitments	111: <i>16</i> 113:23
care $71:23$ $113:1$ checking $89:10$ $119:18$ cohorts $86:3, 6$ $cold$ $143:2$ $Committee$ $59:17$ $91:16, 19,$ $21, 25$ cars $84:10$ $Case$ checks $52:6, 13$ $123:7$ $123:7$ $129:1, 17,$ 10 10 $66:11$ $66:11$ 16 $107:13, 21$ 10 Case $53:3$ $63:18$ $64:4, 19$ $138:25$ $138:25$ $140:7, 22$ $138:25$ $collaborative138:2571:1, 4, 8122110:22111:8,63:1864:4, 19138:25138:25140:7, 22138:25collaborative133:471:1, 4, 828:20122145:18categorization18, 2312:10133:414:15, 19, 2515:23Columbia7:21114:19Concluded145:18113:5114:514:15, 19, 2515:2316:2, 16,109:2Columbia7:23114:19114:19Concluded135:4109:2112:2319, 23, 2528:117:1721:1424:8communicatedcommunicatedconcurrently135:24Concurrently135:24109:7109:774:576:2570:1542:9, 1643:1228:21conditions55:13129:9, 12conduct98:16142:15143:12,chose40:1858:19, 2261:23CommunicationCommunication105:7105:7107:4107:4105:7107:4$	146: <i>3</i> , <i>20</i>	120:25 123: <i>11</i>	co-counsel 4:15	128:20	145:3
113:1 $119:18$ $120:10$ cold $73:15$ Committee $29:9,$ $21, 25$ $106:9, 12,$ cars $84:10$ checks $52:6, 13$ $123:7$ $129:1, 17,$ 10 $66:11$ 16 $107:13, 21$ Case $53:3$ $88:3, 11$ $121:11$ 19 $committees$ $110:22$ $111:8,$ $63:18$ $64:4, 19$ $138:25$ $140:7, 22$ collaborative $71:1, 4, 8$ 12 $114:19$ $63:16$ $109:22$ Chief $10:12, 15,$ $4:14$ $132:21, 24$ $communicate$ $concluded$ $categorization$ $18, 23$ $12:10$ $133:4$ $28:20$ $29:17$ $145:18$ $113:5$ $14:15, 19, 25$ Columbia $7:21$ $41:12$ $79:1$ $conclusion$ $categorize$ $15:23$ $16:2, 16,$ $come$ $7:13$ $114:19$ $121:22$ $135:4$ $109:2$ $112:23$ $19, 23, 25$ $28:1$ $17:17$ $21:14$ $communicated$ $concurrently$ $109:7$ $74:5$ $76:25$ $42:9, 16$ $43:12$ $28:21$ $55:13$ $129:9, 12$ $109:7$ $74:5$ $76:25$ $42:9, 16$ $43:12$ $28:21$ $55:13$ $129:9, 12$ $caused$ $102:7,$ $77:7, 19$ $132:14,$ $46:6$ $51:13$ $28:21$ $55:13$ $129:9, 12$ $11, 24$ $135:16$ 17 $53:17$ $55:23$ $58:19, 22$ $61:23$ $Communications$ $105:7$ $107:4$	car 7:18	checked 92:23	cohort 86:9	committed	concerns 21:6
cars $84:10$ checks $52:6, 13$ $123:7$ $129:1, 17,$ 10 $66:11$ 16 $107:13, 21$ Case $53:3$ $88:3, 11$ $121:11$ 19 committees $71:1, 4, 8$ 122 $110:22$ $111:8,$ $63:18$ $64:4, 19$ $138:25$ $140:7, 22$ collaborative $71:1, 4, 8$ 12 $110:22$ $111:8,$ $85:6$ $109:22$ Chief $10:12, 15,$ $4:14$ $132:21, 24$ communicate $71:1, 4, 8$ 12 $114:19$ $categorization18, 2312:10133:428:2029:17145:18concluded113:514:15, 19, 25Columbia7:2141:1279:1135:4conclusioncategorize15:23162, 16,come7:13114:19121:22135:4109:2112:2319, 23, 2528:117:1721:1428:2029:17135:4109:2112:2319, 23, 2528:117:1721:1428:2029:17135:4109:774:576:2542:9, 1643:12communicatedconcurrently109:774:576:2542:9, 1643:12communication28:2155:13129:9, 1211, 24135:161758:19, 2261:23Communications105:7107:4$			-		59:17 91:16, 19,
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				-	
63:1864:4, 19 85:6138:25140:7, 22 Chiefcollaborative 4:1471:1, 4, 8 communicate12114:19 Concludedategorization 113:518, 2312:10 14:15, 19, 25133:428:2029:17 41:12145:18 conclusion109:2112:23 109:215:2316:2, 16, 15:23Columbia7:21 come41:19 112:22135:4 communicated109:2112:23 109:719, 23, 2528:1 24:817:1721:14 24:8communicated 63:13135:24 conclusion109:7 caused74:576:25 76:2542:9, 1643:12 46:6communication 28:21conditions 55:13129:9, 12 conduct 98:1611, 24135:16 142:1517 143:12,17 chose53:1755:23 58:19, 22Communications 28:21105:7		checks 52:6, 13	123:7 129: <i>1</i> , <i>17</i> ,		16 107:13, 21
85:6109:22 categorizationChief10:12, 15, 18, 234:14132:21, 24 133:4communicate 28:20Concluded113:5114:514:15, 19, 25 15:2316:2, 16, 15:2316:2, 16, 19, 23, 25come7:13 17:17114:19121:22 114:19135:4 conclusion109:2112:23 19, 23, 2519, 23, 2528:1 24:817:1721:14 24:8communicated 63:13135:4 concurrently109:7 109:774:576:25 76:2542:9, 1643:12 46:6communication 28:21135:24 conditions11, 24135:16 17 142:1517 143:12,17 chose53:1755:23 58:19, 22Communications 28:2155:13129:9, 12 conduct			-	committees	· · ·
categorization18, 2312:10133:428:2029:17145:18113:5114:514:15, 19, 25Columbia7:2141:1279:1135:4categorize15:2316:2, 16,come7:13114:19121:22135:4109:2112:2319, 23, 2528:117:1721:14communicatedconcurrently109:774:576:2542:9, 1643:12communication135:24conditions109:774:576:2542:9, 1643:12communication28:2155:13129:9, 1211, 24135:161753:1755:23conduct98:16142:15143:12,chose40:1858:19, 2261:23Communications105:7		-			
113:5114:514:15, 19, 25Columbia7:2141:1279:1conclusioncategorize15:2316:2, 16,come7:13114:19121:22135:4109:2112:2319, 23, 2528:117:1721:14communicated135:4categorizing36:2570:1524:837:1963:13115:1135:24109:774:576:2542:9, 1643:12communicationconditionscaused102:7,77:7, 19132:14,46:651:1328:2155:13129:9, 1211, 24135:161753:1755:23conduct98:16142:15143:12,chose40:1858:19, 2261:23Communications105:7					
categorize15:2316:2, 16, 19, 23, 25come7:13114:19121:22135:4109:2112:2319, 23, 2528:117:1721:14communicated63:13115:1categorizing36:2570:1524:837:1963:13115:1135:24109:774:576:2542:9, 1643:12communication135:24caused102:7,77:7, 19132:14,46:651:1328:2155:13129:9, 1211, 24135:161753:1755:23conduct 98:16105:7107:4142:15143:12,chose40:1858:19, 2261:23Communications105:7107:4	–				
109:2112:2319, 23, 2528:117:1721:14communicatedconcurrentlycategorizing36:2570:1524:837:1963:13115:1135:24109:774:576:2542:9, 1643:12communicationconditionscaused102:7,77:7, 19132:14,46:651:1328:2155:13129:9, 1211, 24135:161753:1755:23conduct 98:16142:15143:12,chose40:1858:19, 2261:23Communications105:7107:4					
categorizing 109:736:2570:15 74:524:837:19 42:9, 1663:13115:1 communication 28:21135:24 conditionscaused102:7, 11, 2477:7, 19132:14, 1746:651:13 53:1728:2155:13129:9, 12 conduct 98:16142:15143:12, chosechose40:1858:19, 2261:23Communications105:7107:4					
109:774:576:2542:9, 1643:12communicationconditionscaused102:7,77:7, 19132:14,46:651:1328:2155:13129:9, 1211, 24135:161753:1755:23conduct98:16142:15143:12,chose40:1858:19, 2261:23Communications105:7107:4					
caused102:7,77:7, 19132:14,46:651:1328:2155:13129:9, 1211, 24135:161753:1755:23conduct98:16142:15143:12,chose40:1858:19, 2261:23Communications105:7107:4					
11, 24135:161753:1755:23conduct98:16142:15143:12,chose40:1858:19, 2261:23Communications105:7107:4			-		
142:15 143:12, chose 40:18 58:19, 22 61:23 Communications 105:7 107:4	,	77:7, 19 132:14,	46:6 51: <i>13</i>	28:21	55:13 129:9, 12
chosen 40:21 71:14 84:13 28:23 conductor 7:3, 4	142: <i>15</i> 143: <i>12</i> ,		-		
		chosen 40:21	71:14 84:13	28:23	conductor 7:3, 4

Confederation	117: <i>1, 4, 21</i>	corrections 5:1,	119:8	deal 17:19
77:8	129:8, 11	4, 12	criticized 116:6	86:2 111:23
confidence	contractions	corrective 18: <i>11</i>	CROR 33:3, 8	112:7 128:22
141:3	129:1	correctly 88:23	crossed 23:6	131:10 138:8
confidential 5:6	contractor 18:8	89:8 108:9	crossing 61:7	dealing 23:13
conjunction	23:1 105:17	correspondence	crossings 61:7,	36:6 41:22
72:23 73:7	contractors	18:7, 9	8	51:20 99:7
consider 54:8	24:24 29:20	corresponding	crowd 17:22	112:19 144:25
70:21	contracts 12:22	132:1	Crown 5:21	deals 74:8
considerable	13:2, 4 109:8	COUNSEL 2:1,	CRR 146:3, 20	death 25:12
127:5	132:7	3, 4 4:17 5:5	crunch 102:13	debrief 95:8
considered	contributed	6:13 145:12	CSR 146:3, 20	141:23
127: <i>1</i> 3 144:2 <i>1</i>	135:11 143:12	counterparts	current 15:24	decide 30:15
consistent 78:1	control 39:11,	134:8	74:8	decides 50:7, 9
consistently	14, 15 40:16	country 31:11	currently 10:15	decision 17:11
107:14	42:15 43:3	couple 12:2	Curriculum 3:4	41:19 83:16
Constable 15:4	45:23, 24, 25	15:2 18:15	9:12 38:19	100:15 102:7
constant 95:11	74:9, 23, 25	42:12 46:3	customer 8:20,	128:11, 14
construction	75:9 76:12	62:5 70:8	25 9:3 67:13	136:3, 13 138:14
15:15, 16 24:16	89:12 104:16	73:13 75:4	customers	decision-makers
26:12, 16 64:20	117:17 126:2	88:18 91:24	94:14	112:20
89:9 98:11	controlled 7:20	93:21 97:22	CV 6:13, 18 9:9	decision-making
101: <i>12</i> 103: <i>1</i> ,	39:24	101:4 105:7		87:16
10 110:1 132:5	controller 46:10	108:7, 15	< D >	decisions 16:17
consultant	54:1	109:13, 20	daily 13:6	declaration 4:12
138:23	controllers	112:4, 5 117:1	109:7 111:10,	deemed 5:16
consultants	11:13, 16 29:18,	126:19 133:6	15, 21 112:9	64:6
34:7 64:14, 18	19 35:5 37:15	143:4	116:20, 22	deep 135:9
consulted	42:20, 22 43:12,	couplers 62:4	141:15	Deer 7:21
100:13 123:18	16, 19 44:25	course 7:18	damage 138:5	default 62:2
contemplated	45:7 55:8	11:4, 9 18:17	dangerous	defaulting 123:2
76:4	78:22 87:24	34:24 38:21	33:14, 15, 16	defaults 61:21
contents 31:18	117:23 140:25	50:13 55:9	dark 43:23	62:11
context 118:12	141:4	62:12 70:25	data 67:9, 12	defects 108:2, 5
126:6	controls 34:18	88:8 111:18	date 21:15	deficiencies
contingency	cooperations	142:12	85:21 86:10	96:6 97:2, 16,
84:24	116: <i>11</i>	courses 69:17	123:15 130:18	20 98:15, 25
continually	cooperatively	covered 144:12	Dated 146:16	deficiency 96:9
141:6	116:4	COVID 74:21	dates 128:5, 9,	98:10, 11 132:4,
continue 17:22	coordinating	85:2 100:24, 25	19	6
57:6 82:6 95:6	42:5	102:3 122:20,	Davis 12:12	definite 30:11
continued	copies 66:16	22 123:19	day 1:15 28:24	definitely 45:8
138:13	correct 5:9	CP 8:2 13:21	80:4 88:20, 22,	46:13 52:1
continuing 22:7	6:20 8:1 9:21	crack 56:9	23 89:22 90:1,	67:4 78:2
84:18 130:19	10:13, 14, 21	cracked 127:20	7, 9, 14 111:14	88:10 113:17
continuous	14:11 16:4	cracking 127:20	114:12 122:17	117:10, 11, 16,
21:23 95:12	20:14, 23 21:4	128:2	146: <i>16</i>	20 118:14
129:10	30:12 31:16	created 65:7	days 86:21	120:17 121:4
continuously	35:14 56:17	76:21	88:18 89:23	122:10 131:12
95:7	57:18 60:5, 9	creating 36:10	90:25 91:1, 3	132:24 133:3,
contract 13:10	71:20 83:3, 7,	credit 115:10	103:20	20 136:21
58:20, 23	11 94:1 101:9	crews 54:18	day's 89:1	137:22 138:11
106:25 111:9	108:1, 16 109:6	criteria 56:10,	day-to-day	142:1
112: <i>4</i> 116:2 <i>1</i>	118:6	19 87:12 91:21	52:16 53:8 55:3	degree 52:10
				delay 133:18
				•

		40.40.57.0		100.4
delayed 37:9	design 23:20	49:19 57:2	dispatched	100:4
102:24	24:1, 19 36:1	64:13 78:4	42:18 45:10	downtown 73:5
delays 79:14,	59:13 60:1	84:2 89:3, 4, 9	104:17	drafting 27:22
17 80:9 103:1	63:7, <i>14</i> 117: <i>13</i> ,	93:18 106:6	display 45:15	drastic 17:6
delegate 47:4	15 122:18	111:8, 17	displays 126:11	draw 85:4
delegated 30:24	123:5 130:11	112:19, 20	disposal 18:4	drew 61:3
31:3	designed 24:9	115:6 116:25	dispute 112: <i>12</i> ,	83:11
deliver 48:14	50:5 59:15	129:9, 12	14	drills 37:12
department	118:5 124:11	139:17 141:18	disputes 112:8	86:13 93:2
11: <i>19</i> , 20 12:2,	designing 32:22	differs 13:21	disruptions	94:4 105:8
4, 22, 23 13:2, 4,	63: <i>12</i>	difficult 17:11	53:3 61:10, 13	141:9, 11, 12
22, 24 14:4	despite 40:10	117:5 127:25	distant 27:12	drive 39:7, 10,
15:5 22:1, 17	detail 37:4	144:2 <i>4</i> 145: <i>1</i>	dive 135:9	22 67:20 69:1,
23:13 27:25	65: <i>16</i>	difficulties	document	19 71:4 129:4
32:2 36:19	detectors	102:7, 10, 12	64:25 65:1	driverless 39:17
49:10 51:16	142:20, 23	diligent 129:16	74:23, 25 75:9	drivers 39:18
54:15 65:21	determination	direct 27:5	95:7 118:16	82:10, 14, 15
66:4, 15 67:22,	135:13 137:5	79:2 100:15	145:2, 3	driving 39:2, 4,
25 70:15 74:8	determine 18:19	directed 50:14	documentation	5 40:3 84:10
75:5, 7, 8 78:8	determined	direction	22:2 50:2, 3, 11,	dry 93:22, 23
80:21, 22	18: <i>12</i>	115:12 146:12	25 51:3, 9, 24,	DUANE 1:7 2:9
102: <i>15</i> 119: <i>4</i>	determining	directions 7:14,	25 76:16	3:4 4:4 6:11,
126: <i>1</i> 132:7	109:2 136: <i>1</i> 7	16	120: <i>15</i> , <i>1</i> 8	15, 17, 20 7:2
departments	138:2 <i>0</i> , 24	directly 15:6, 24	documenting	8:1, 4, 9, 15, 24
14:2 <i>4</i> 15: <i>1</i>	develop 48:13	37:5, 7 41:6	46:21	9:13, 16, 21, 24
departure 10:21	75:5	67:22 107: <i>10</i>	documents 3:9,	10:3, 7, 14, 20
15:20	developed	Director 10:3	14 52:2 79:24	11:3, <i>18</i> , <i>21</i> , <i>23</i>
Depending	42:21 43:15	12: <i>1</i> 7 15: <i>19</i>	103: <i>13</i>	12: <i>6</i> , <i>9</i> , <i>19</i> 13: <i>3</i> ,
37:23 101: <i>10</i> ,	74:16 75:12	74:24 77:21, 22	doing 7:5 14:6	12, 15, 17, 20
11 104:18	130: <i>17</i>	133:17	27:18 33:22	14:11, 16, 19
121:7 132: <i>1</i> 3	developing	director's	35:8 36:12	15: <i>10</i> 16: <i>4</i> , <i>9</i> ,
depends 67:10	35:16 46:24	116: <i>19</i>	43:20 54:10	13, 19 17:3, 8,
71:18 72:6	47:2, 15 62:25	disagree 112: <i>14</i> ,	55:7 58:13, 16	25 18:6, 24
73:25 76:14	87:2	15	76:12 78:16, 18,	19:23 20:9, 14,
132:3	Development	disagreements	<i>24</i> 104: <i>12</i>	23 21:4, 7, 12,
Deputy 10:15	11:25 47:12	47:14 90:13, 16,	108:2 <i>0</i> , 2 <i>1</i>	20 22:19, 24
14: <i>15</i> 15:25	device 94:24	17	109:5 116: <i>6</i> , <i>16</i>	23:17, 22 24:3,
16: <i>16</i> 19: <i>1</i> , 3	124:6	disclose 46:12	117:2 <i>1</i> 119: <i>12</i> ,	14 25:5 26:1, 7,
76:25 77:6	devise 128:3	discovered	22 120:13, 24	13, 19, 23 27:5,
derailment	devised 31:22	136:12 140:10	121: <i>11</i> 130: <i>18</i> ,	11, 23 28:10, 17
120:4 133:12	57:20	discuss 88:23	20, 22 135:24	29:19 30:1, 9,
134:18 135:14	devising 57:23	discussed 8:14	dollar 113:4, 6	18 31:1, 5, 8, 16,
136:4 138:1	72:4	40:17 66:13	dollars 113:2	20, 24 32:15
139:20 142:16	diagnose 61:24	68: <i>1</i> 2 110:7	Donna 74:25	33:25 34:5, 25
derailments	diesel 7:17	133:6 134:7, 12	door 57:13	35:4, 9, 14, 18
101:3 115:11	difference	144:10	122:8, 21	36:17, 22 37:6,
134:22 138:11	53:19 71:24	discussing	doors 57:7, 8, 9	23 38:18, 24
141:1, 18	differences	77:10 97:13	122:18, 25	39:3 40:7, 12
143:13 144:7	52:12	discussion 76:9	123:6 133: <i>1</i>	41:23 42:10
describe 11:1	different 7:14,	143:23, 24	dotted 23:5	43:16 44:23
52:3 88:18	<i>16</i> 11: <i>19</i> 15: <i>15</i>	discussions	double 123:11	45:4 46:2, 19
133: <i>10</i>	17:9 24:20	90:17 104:23	double-edged	47:1, 17 48:3, 7,
describing	25:19 28:19, 20	106:2 111: <i>14</i>	116: <i>1</i>	18 49:5, 12, 18,
23:11 126:13	32:14 38:4	117:7 131:16, 20	downgraded	24 50:19 51:10
	42:12 47:19, 20	l	l	52:6, 22 53:18

neesonsreporting.com 416.413.7755

54:1155:6130:4, 16131:4,1165:2, 10, 19137:7, 12138:2,17, 2411:1556:3, 17, 2110132:3, 12, 2366:8, 2368:1916, 22139:10,2212:4, 7, 757:18, 2158:5,133:13134:6,69:8, 1570:2,24140:2, 13, 2013:1, 10, 13,8, 1559:660:3,17135:15, 21,11, 19, 2371:11,141:2, 20142:7,1814:7, 12,	6 16,
56:3, 17, 2110132:3, 12, 2366:8, 2368:1916, 22139:10,2212:4, 7, 757:18, 2158:5,133:13134:6,69:8, 1570:2,24140:2, 13, 2013:1, 10, 13,	6 16,
57:18, 21 58:5, 133:13 134:6, 69:8, 15 70:2, 24 140:2, 13, 20 13:1, 10, 13,	16,
ער ליוע באר אין	
9, 24 62: 15 25 136:6, 19 18 72:6, 17, 25 10, 18 143:1, 7, 15:7 16:3, 6	
63: <i>4</i> , 20 64:3, 137:7, 12 138:2, 73:25 74:11, 14, 14, 22 144:11, 14, 25 17:5,	
<i>11</i> 65:2, <i>10</i> , <i>19 16</i> , <i>22</i> 139: <i>10</i> , <i>18</i> 76:8, <i>14</i> , <i>23 24</i> 145: <i>16 18:3</i> , <i>21</i> 19	17
66:8, 23 68:19 24 140:2, 13, 20 77:2, 5, 11, 15, Duquette's 20:5, 11, 19	
69: <i>8</i> , <i>1</i> 5 70:2, 141:2, <i>20</i> 142:7, <i>18</i> 78: <i>1</i> 5 79:3, 145: <i>11</i> 21:2, <i>5</i> , <i>10</i> , <i>1</i>	7
11, 19, 23 71:11, 10, 18 143:1, 7, 8, 16, 20, 25 duties 11:2, 4 22:15, 23 2	3:10,
<i>18</i> 72:6, <i>17</i> , <i>25 14</i> , <i>22</i> 144: <i>11</i> , <i>24 80</i> : <i>12</i> , <i>19</i> 81: <i>4</i> , <i>111</i> : <i>7 19</i> , <i>23</i> 24: <i>5</i>	
73:25 74:11, 14, duct 124:15 11, 21, 22, 25 duty 91:5 117:2 25:1, 18 26	3,
18 76:8, 14, 23 due 128:9 82:8, 19 83:1, 7, 11, 17, 21, 25	
77:2, 5, 11, 15, 134:19 14, 24 84:18 < E> 27:9, 16 28	
18 78:15 79:3, DUQUETTE 1:7 85:20 86:1, 20, earlier 24:1, 11 13 29:16, 23	
8, 16, 20, 25 2:9 3:4 4:4, 6 24 87:4, 13, 20, 61:10 109:25 30:7, 13, 22	,
80:12, 19 81:4, 6:11, 12, 15, 17, 25 88:15, 21 124:6 31:2, 6, 14, 15, 22	7
83:7, 14, 24 15, 24 9:13, 16, 16, 22, 24 91:8, 73:17 136:9 34:2, 21 35	
84:18 85:20 21, 23, 24 10:3, 18, 23 92:3, 7, easier 22:8 12, 15 36:9,	
86:1, 20, 24 7, 14, 20 11:3, 10, 19, 25 94:1, east 124:23 37:2, 19 38	
87:4, 13, 20, 25 18, 21, 23 12:6, 19 95:5, 18 ebbs 115:6 23 39:1 40	6, 8
88:15, 21 89:5, 9, 19 13:3, 12, 96:2, 8, 14, 19 edit 67:5 41:20 42:3	
23 90:4, 8, 16, 15, 17, 20 14:11, 97:12, 18 98:6, education 8:11 43:11 44:20	
22, 24 91:8, 18, 16, 19 15:10 18 99:2, 9, 21 effect 29:12 45:21 46:17	7,23
23 92:3, 7, 10, 16:4, 9, 13, 19 100:6, 9, 14, 23 74:21 95:25 47:13, 24 4	3: <i>5</i> ,
19, 25 94:1, 19 17:3, 8, 25 18:6, 101:9, 18, 25 96:4 16 49:1, 11,	15,
95:5, 18 96:2, 8, 24 19:23 20:9, 102:9, 20, 25 effecting 29:1, 2 21 50:17 5	1:8
14, 19 97:12, 18 14, 23 21:4, 7, 103:7, 15 104:3, efficient 79:2 52:1, 19 53	14
98:6, 18 99:2, 9, 12, 20 22:19, 24 8, 14, 21, 25 effort 57:25 54:2 55:1, 2	5
21 100:6, 9, 14, 23:17, 22 24:3, 105:11, 15, 25 either/or 116:7 56:13, 18 5	7:15,
23 101:9, 18, 25 14 25:5 26:1, 7, 106:5, 11, 15, 20 electric 124:11, 19 58:2, 7, 9	
102:9, 20, 25 13, 19, 23 27:5, 107:6, 10, 20, 24 16, 24 59:2, 25 60	
103:7, 15 104:3, 11, 23 28:10, 17 108:4, 13, 19, 23 element 17:15 19 62:13, 25	
8, 14, 21, 25 29:19 30:1, 9, 109:5, 12, 17, 24 27:24 35:20 63:17 64:1,	
105:11, 15, 25 18 31:1, 5, 8, 16, 110:13, 24 36:6, 8 37:1 24 65:5, 13,	
106:5, 11, 15, 20 20, 24 32:15 111:3, 13 112:3, 53:7 55:14 66:19 68:10	
107:6, 10, 20, 24 33:25 34:5, 25 9, 25 113:10, 16 92:12 120:17 69:7, 11 70	
108:4, 13, 19, 23 35:4, 9, 14, 18 114:9, 16, 22 elements 32:9 13, 20 71:9,	
109:5, 12, 17, 24 36:17, 22 37:6, 115:5, 16, 19, 25 66:14 71:3 72:3, 14, 21	10
110:13, 24 23 38:18, 24 116:17 117:10 119:2 124:20 73:21 74:7,	12
111:3, 13 112:3, 39:3 40:7, 12 118:6, 10, 19, 24 135:10 15 76:3, 11,	
9, 25 113:10, 16 41:23 42:10 119:20 120:1, elevators 110:5 24 77:3, 8, 144:0 10 02	
114:9, 16, 22 43:16 44:23 14 121:7, 12, 15, eliminating 16 78:13, 25	
115:5, 16, 19, 25 45:4 46:2, 19 23 122:5, 10, 14 59:16 79:4, 13, 18,	
116:17 117:10 47:1, 17 48:3, 7, 123:10, 23 else's 53:16 80:10, 17 8	
118:6, 10, 19, 24 18 49:5, 12, 18, 124:3 125:6, 16, emergency 41:4 8, 19, 24 82	1, 6
119:20 120:1, 24 50:19 51:10 24 126:22 62:13, 17, 20, 21 83:1, 12, 20	
14 121:7, 12, 15, 52:6, 22 53:18 127:3, 15, 22 93:13 110:3 84:16 85:13	
23 122:5, 10, 14 54:11 55:6 128:12, 16, 24 126:5, 9 86:17, 22 8	7:1,
123:10, 23 56:3, 17, 21 130:4, 16 131:4, Emily 2:3 4:5 11, 17, 22 8	B: <i>13</i> ,
124:3 125:6, <i>16</i> , 57: <i>18</i> , <i>21</i> 58:5, <i>10</i> 132:3, <i>12</i> , <i>23</i> 6: <i>12</i> , <i>16</i> , <i>18</i> , <i>22 16</i> 89:2, <i>20</i> ,	25
24 126:22 8, 15 59:6 60:3, 133:13 134:6, 7:23 8:2, 6, 10, 90:5, 12, 18,	23
127:3, 15, 22 9, 24 62:15 17 135:15, 21, 22 9:8, 14, 18, 91:6, 15, 19	
128: <i>12, 16, 24</i> 63: <i>4, 20</i> 64: <i>3,</i> 25 136:6 <i>, 19</i> 22 10: <i>1, 5, 11,</i> 92: <i>1, 4, 8, 1</i>	7, 21

93:24 94:17	16:22 55: <i>15</i> , 22	established	18 83:5 84:3	65:13 85:13
95: <i>1, 14, 24</i>	EMS 93:13	46:16, 18 56:10	105: <i>13</i> 117: <i>4</i>	101:2 <i>1</i>
96:5, 11, 16	encountered	98:24	129: <i>1</i>	fairly 45:16
97:9, 15, 25	23:23 45:22	establishing	expert 101:20	50:20 94:3
98:14, 23 99:4,	105:2 <i>4</i>	11:6	expertise 24:23	fall 62:10 77:7
<i>18</i> 100: <i>1</i> , <i>8</i> , <i>1</i> 2,	ended 84:22	e-tels 110:2	59:22	115:8 131:18
20 101:7, 15, 21	ends 84:20	eventually 74:2	experts 34:11	falls 60:16
102:6, <i>17</i> , 23	engage 82:17	Everybody 29:3	explain 8:22	familiar 7:11
103:2, <i>12</i> , <i>21</i>	engaging 25:23	30:16 35:24	13:18 21:19	26:19 33:4, 5, 7
104:6, 9, 19, 22	engineer 26:8	48:12 53:12	58:12 66:21	39:9 48:1, 16
105:9, 12, 21	60: <i>1</i> 90: <i>10</i>	54:24 55:14	68:17 100:20	96:5 97:22
106:1, 8, 12, 18	91: <i>12</i> 130: <i>5</i> , <i>12</i>	62:22 91:8	122:12	99:18, 22, 24
107:3, 7, 17, 21,	144:3	everybody's	explained 24:6	118:7 136:20
25 108:12, 17,	engineered	52:23	129:3	familiarity 37:16
21, 25 109: <i>10</i> ,	53: <i>1</i> , <i>4</i> 59: <i>17</i>	evidence 4:11,	explaining 69:6	93: <i>16</i>
<i>15</i> , <i>21</i> , 110: <i>10</i> , <i>15</i> , <i>21</i> , 110: <i>10</i> , <i>15</i> , <i>21</i> , 110: <i>10</i> , <i>15</i> ,	60: <i>11</i> 61:2, <i>12</i>	21 5:2, 7, 11, 23	exposed 86:15	familiarization
21 111: <i>1</i> , <i>11</i>	64:5	6:1, 5	124:22	93:4
112:1, 6, 21	engineering	evolution 42:11	exposure 80:3,	faults 43:25
113:8, <i>12</i> 114:2,	13:22 27:4 53:5	44:25	7, 23 81: <i>1</i>	45:14 131:14
13, 18 115:3, 14,		evolved 42:19	94: <i>13</i> , <i>15</i> 105:6	favourite 60:14
	engineers 105: <i>18</i>			
<i>17, 21</i> 116: <i>12</i> 117:6, 24 118:7,		exact 14: <i>1</i> 39: <i>14</i> 55:22	exposures 94:7 extensive 11:9	features 93:8, 9 fed 89:11, 17
	engineer's 126: <i>10</i>	72:20 74:19	22:21 33:11	-
15, 22 119:17,	ENMAX 125:9			Federal 32:14
23 120:9 121:6,		85:21 134:20, 22	34:12, 16, 18	33:8, 23 75:25
10, 14, 20 122:1,	ensure 14:5	exactly 12:1	66:25 79:9	76:1 Federally, 22:20
8, 12 123:8, 21,	18: <i>14</i> 20: <i>17</i>	15: <i>1</i> 3 118: <i>1</i> 3	142: <i>11</i>	Federally 32:20
25 125: <i>4</i> , 13, 21	23:4 55:7 59:3	exam 88:3, 9	extensively	feed 14:25
126:20, 25	82: <i>15</i>	example 29:18	25: <i>14</i>	feedback 37:17
127:12, 19	ensuring 52:20	57:7 109:3	extent 98:3	116:20, 22
128:10, 13, 21	66: <i>1</i>	120: <i>12</i>	external 93:3	117: <i>16</i> , 22
130: <i>1</i> , <i>14</i> 131: <i>1</i> ,	enter 4:20	examples 65:11	94:7	feel 83:15
8, 24 132:9, 19	entered 5:1, 6,	69: <i>13</i>	extra 28:25 80:24 81:1	87:17 95:15, 18,
133: <i>10</i> 134: <i>4</i> ,	11 59:4 96:7 99: <i>19</i>	exams 88:2		<i>19</i> 127:7 129:6
15 135:12, 19,		exceeding 46:5	82:23 124:15	132: <i>19</i>
22 136:2, 16	entering 116:15	excessive	extreme 74:4	feet 46:6
137:1, 8, 25	entire 29:3	126: <i>15</i>	129:13	fell 12:12
138: <i>14</i> , <i>19</i>	111:23	exercise 137:9	extremely 73:7	felt 76:5 80:17,
139:6, 20, 25	entirely 122:20	exercises 37:12		22 113:8
140:10, 18, 24	entry-level 7:7	exhibit 9:11, 12	< F >	Field 7:21 45:9
141: <i>1</i> 7 142: <i>4</i> , 9,	equipment	EXHIBITS 3:1	facilitate 110:17	120:13, 15, 16, 17
14, 24 143:5, 11,	127:10, 14	existed 63:22	fact 47:1 60:25	figure 113:4, 6
19 144:4, 16	error 67:4	existing 84:7	61:2 71:25	fill 129:23
145:7, <i>11</i> , <i>14</i>	126:8 130: <i>11</i>	expand 129:8,	82:19 83:21	fills 65:25
employ 10:15	errors 5:10	11	103:9 116:25	final 88:9 90:6,
18: <i>13</i> 34: <i>19</i>	escalate 16:23	expansion 129:7	119: <i>11</i>	9, 11 95:25
employed 18:7	137: <i>16</i>	expect 44:17	factors 143:20	135: <i>4</i> , <i>13</i>
40:21	escalated	51:1 57:16	fail 90:15	finalized 130:20
employee 67:14	112:16, 18	130: <i>13</i>	fails 91:24	find 32:1 83:20
employees	133:2 <i>1</i> , 22	expectation	failure 124:7	96:25 97:1
16:22 54:16	escalating	126:17	failures 80:4	130:23 141:23
55:10, 18 75:4	133:23	expected 129:24	92:2 123:22	findings 134: <i>13</i> ,
77:25 78:3	escalators 110:5	experience 6:25	131: <i>17</i>	16
empower 55:9	escape 69:21	8:7, 11, 14, 16,	Fair 6:22 19:17	fine 24:5 65:17
empowered	essential 67:19	17, 20 9:1, 6, 20	32:11 55:1	137: <i>1</i>
	establish 5:19	13:21 34:12, 16,		finish 95:20

neesonsreporting.com 416.413.7755

Fire 93:13	frequency	give 4:6, 7	42:7 44:21	heard 26:17
94:20 110: <i>4</i>	125:19 127:18	30:15 44:5	51:2 <i>4</i> 54:3	104:25 106:5, 6
firm 78:20	129:25	50:17 64:1	59:24 60:1	113:24
fit 124:12, 25	frequent 125:22	65:16 76:10	65:11 78:10	hearing 93:5
fits 25:24	129:18 130:2	115:10 118:12	81:8 83:13	Hearings 4:13,
fix 42:8 53:23	front 19:24	122:5 134:2 <i>1</i>	97: <i>19</i> 108:6	21, 22, 23
110: <i>18</i>	22:8 35:5	given 5:8, 21	128:19 131:2	heat 51:5, 6
fixed 53:23	38:19 68:3	20:17 36:9	134:7 139: <i>1</i> , 25	124:16 129:1,
57:16	86:10 101:5	69:14 75:10	guessing 49:14	13, 18
flats 125:14, 18,	142:2	83:17 89:12, 13	128:17 144:2	heater 124:4
23 126:15	f-tels 110:4	116:10, 20	guidance 43:19	125:5
127:16	fulfil 50:13, 15	124:17	guide 42:17, 23	heaters 123:24
flip 44:2	fulfill 23:14	gives 41:6	43:3	124:10, 12, 16,
flips 40:4	fulfilled 98:4	giving 6:1 94:7	guidelines	18, 25 125:2
floor 140:17	fulfillment 98:7	glass 113:22, 23	62:10 116:16	131:12 133:2
floors 56:8	full 43:1 85:7	glossed 42:2		Held 1:14
flowed 93:20	full-time 47:11	GM 15:24	< H >	77:14 98:9
flows 115:6	fully 44:8	goals 128:5	habit 25:12	help 24:24
focus 41:24	fulsome 135:9	Good 6:11	habits 84:3, 8	42:17 50:3
114:6	function 13:25	41:19 42:1	half 10:8 19:2	105:23 106:4
focusing 68:10	39:13, 18 63:21	81:20, 22, 25	88:25 129:25	138:23
folks 36:10	fundamental	87:18 95:12	halt 62:22	helped 33:5
follow 35:10	127:13	96:20 105:19	hammer 109:9	115:24
71:15 116:15	future 95:11	111:24 112:2	hand 65:5	helpful 23:25
145:8		115:12 119:7	126:24	helps 84:14
followed 3:10	< G >	132:25 139:9	handed 98:11	hero 43:8
121:3	gained 9:1	goods 33:14, 16	handing 45:25	heros 141:5
following 3:9,	80:22, 23	governing	handle 102: <i>14</i> ,	high 7:17 11:4
15 88:22	gamut 71:22	140: <i>11</i>	16 123:2	27:12 36:7
follow-up 4:17	75:21, 25	Government	handled 127:23	61:2 63:22, 23
82:7	gaps 141:23, 24,	75:23, 25	handover 57:12	64:2, 7
foolish 39:21	25	great 16:1 86:2	108: <i>11</i> , <i>18</i>	highly 22:11
forefront 33:18	garage 55:19	131: <i>10</i>	happen 129: <i>16</i> ,	35:22 61:16
97:6, 10	garbage 121:18	greenfield 70:7	17 134:23	Hill 47:6
foregoing 146:5,	Gardner 2:11	84:6 126:17	happened 12:24	hindsight 107:3,
13	145:13	Greg 12: <i>12</i>	21:13 30:8	6 116:2, 7
form 46:22	gas 125:2, <i>8</i> , <i>10</i> ,	grinding 62:22	32:5, 6, 7 55:11,	hired 7:3 9:16,
forth 125:1	12	ground 5:17	12 56:4 134:13	<i>19</i> 15: <i>11</i> 33: <i>4</i>
146:7	Gatineau 75:24	138:4	136:5	hiring 11:9
forths 13:7	Gaul 34:10, 16	grounds 132:25	happening	83:2, 4
forward 9:4	91:9	groundwork 7:5	125:19 144:18	hitting 129:5
66:11, 12 78:11	general 28:23	group 93:15	happens 7:13	hold 41:3
133:7	89:25 106:12	103:11 110:1	57:3 115:7	Holder 91:9
found 39:19	115:18	groups 37:10	125:18 129:19	Holder's 103:11
40:9, 24 41:5,	generally 7:20	63:6 89:8, 16	Hat 7:22	holding 84:12
16 42:3, 24	19:4 46:2	93:10 94:8	hazard 59:19	holds 106:24
43:4 61:1	72:18 137:16	105:7	63:7	honest 18:24
119:24	gentleman 47:7	grown 22:2 <i>0</i> , 22,	head 30:20	19:23 81: <i>1</i> 2
framework	78:4	23	36:18 65:3, 20	honestly 17:10
30:24 47:25	gentleman's	growth 44:7	72:22 96:24	43:9 46:21
freight 34:14	20:10	Gruenberger	136:23 138:17	50:20
60:25 61:6	gentlemen 34:10	2:11	health 66:10	hope 69:6
105:17 142:20	get-go 84:14	guess 12:9	71:1, 3, 7 77:12	hopeful 79:3
143:9	GIDS 61:9	13:11 21:8	hear 27:7	hopefully 6:9
	gift 52:8	24:7 26:13	137:10 143:23	16:7

Hopkins 12:11	73:23 119:19	125:3, 17, 18	integration 25:3,	76:12
20:10 28:2, 11	120: <i>10</i>	134: <i>19</i>	16, 19 26:5	ironic 116:5
34:12, 17 36:18	implements	information 4:7	intelligent 61:17	l's 23:5
37:2	34:23	18: <i>11</i> 19:24	intended 59:15	isolated 57:10
horrible 61:8	implications	28:24 32:3	intends 4:20	isolation 89:18
hosting 77:20	79:19, 21	89:11, 12, 14	interacted 45:1	issue 18:20
hotbox 142:20	important 75:2	107:11 109:16	interaction	24:12 28:18
hour 40:3	114:7	116:15 118:1	46:15 51:17	30:14 41:14
67:20 88:25	impose 129:14	135:5	interested 20:5	45:12 46:12
hours 38:21	imposed 113:9,	informed 137:13	interface 104:10	56:15 82:12
39:1 69:18	13, 18	infractions 46:4	131:22	97:11 99:7
88:5, 24	improve 67:15	infrastructure	interfaces 45:22	104:18 109:3
Hurdman 73:16	95:7, 9 141:6	138:6	103:22 104:1, 4	122:2 <i>1</i> 123:9,
hypothesizing	improved	in-house 24:23	internal 20:1	12 125:13
38:9 49:13	131:13	initial 41:21	94:8	126:25 127:20
00.0 10.70	improvement	133:16 135:1	internally 72:5	128:2 <i>1</i> 132: <i>4</i> ,
< >	95:12	136:7	interpretations	<i>14</i> 134:3 136: <i>8</i> ,
icy 73:15	incent 128:14	initially 108:22	111:10	15 138:12
identified 19:22	incident 46:9	initiated 19:4	intervene 4:15	issued 30:11
21:6, <i>11</i> 22:25	71:19 85:3	78:9	interview 4:8,	issues 9:4
49:17 56:16	95:8 120: <i>4</i> , 5	initiatives 67:2,	10, 14, 18, 19 6:7	16:23 19:22
63:6, 9, 15 73:17	incidents 61:8	8, 18 68:15, 18,	interviewee	23:24 24:8
identifies 62:8	71:11 72:1	25 69:3, 8, 14,	146:7	25:25 26:4, 5
identify 63:2	92:22 120:5	17, 19 141:9	introduce	41:22 42:6, 15
141:24	142:15	injured 73:13	122:23	45:2, 19, 22
ideology 53:19	included 44:12	injuries 67:13,	introduction 4:6	46:8 49:16
imagine 48:12	46:25	14 68:22	123:19	79:23, 24 83:23
64: <i>19</i> 78:25	including 20:24	input 24:10, 18,	invaluable 8:21	103:12 104:12
Imbesi 2:4	incorporate	20 89:7 96:15,	investigated	105:23 104:72
4:15 20:7 82:5,	37:21	17 109:16	71: <i>12</i> 136: <i>1</i>	108:2 109:9, 23
25 145:7, 9	incorporated	120:23 122:11	investigating	112:24 113: <i>1</i>
IMIRS 108:1, 5	70:5	inputted 110:16	70:14 72:7	115:24 122:3, 6,
109:16 110:11,	incorporating	121:1	134:3	13 124:1, 4
17, 23 116:12	37:22	inputting 109:6	investigation	130:3 131:2, 3,
117:8 118:1	incorrectly	110:22 117: <i>11</i>	135:23	5, 6, 7, 8, 11, 25
120:20 121:21	21:25 50:9	118:1	investigations	132:21 140:1
I-M-I-R-S 108:2	130:8	Inquiries 5:15	71:10	144:18
immediate	increase 70:6	inquiry 5:15, 22	involve 48:6	issuing 37:21
28:18 29:6, 8	increased 70:1,	insist 141:10	involved 24:1	item 50:18
38:11	3, 10 144:21	inspecting 76:18	27:13 37:1	51:2 73:22
immediately	incredibly 39:20	inspection	52:16 58:13, 15	items 3:10
37:25 38:3, 12	incriminate 5:18	119:10 120:20	64:14 78:14, 19	50:13, 14 71:14,
57:11	independent	inspections	81:5 87:2	15 72:3, 16, 23
impaired 93:5	27:1, 10 28:6	50:25 51:4	92:11, 14 93:3	98:3
impart 35:24	49:25 50:6	128:8 140:4	98:2 100:16, 18	
impeded 98:16	52:15 59:8	installed 130: <i>8</i> ,	101:12, 13, 16	< J >
114:6	63:19	10	103:23 138:23	James 78:7
implement	in-depth 138:13	instance 5:20	involvement	January 10:7, 10
120:21 141:18	INDEX 3:1, 12	30:14	23:20 26:12	Jesse 2:11
implementation	indicators 136:9	instruction	27:10 28:11	145:13
34:22	individual 50:7	60:17	79:5 81:3, 5	Jim 12:11 28:2,
implemented	industry 7:12	instructions	87:8 103:5	11 34:12, 17
72:23	9:7 35:22, 23	95:4	122:2, 6 133:11	36:18 37:2
implementing	44:12 124:7	integrated 29:15	involves 35:20	59:20
20:21 72:5				Joanna 15:18
20.21 12.0				

job 6:21 52:4	label 101:18, 19	44:17, 21 52:13	18 67:10 68:13,	115: <i>18</i> 118: <i>8</i> ,
59:10	labelled 24:17	54:23 61:1	21 71:2, 4	10, 25 120:11,
Joe 34:9	labour 83:13, 19	63:22, 23 64:2,	78:18 80:10, 22,	22, 23 127:14
Joel 38:25	lack 73:11	7 74:1, 5	23, 24 93: 1, 3, 6	139:3, 22 140:6,
John 12:8, 10	lacking 67:3	112:19 116:10	94:2, 3, 4 97:7	9, 12, 15
133:22, 23	laptop 45:18	119:15 120:7	100:17 113:13	making 54:9
-				
Johnson 137:23	large 28:3, 12	124:20 126:5, 12	116:24 120:15,	55:3 86:14
joined 8:4	34:9 36:7, 19	levels 17:9	18 126:1, 3	133:24
joining 8:7	37:1 51:23	112:20	136:24 139:3	manage 78:16
joint 46:10	53:10 68:7	Lévesque 72:19	141:3 143:22, 24	managed 15:1
57:25 66:10	73:4 75:20	liability 5:20	lot's 45:9	33:3 81:5
77:12	largely 125: <i>14</i> ,	liaison 50:12	lower 44:21	management
joints 129:7	17	licensing 75:22	LRT 7:1 20:6	8:17 13:11
Joseph 34: <i>15</i>	largest 7:10	LIGHT 1:6 44:2	LRV 57:8	21:3 39:6
Judith 2:19	Larry 34:10, 15	limits 53:15	luckily 16: <i>11</i>	58: <i>10</i> , <i>1</i> 2 59: <i>1</i>
146:3, 20	91:9	lines 87:9 90:2	Lynn 75: <i>1</i>	66:3 140: <i>8</i> , <i>11</i>
June 130:25	lasted 8:3	125:9		manager 7:7, 9
junior 80:5	late 60:6	listed 8:15	< M >	9:1, 17, 23
	lathe 127:4, 6,	lists 50:22, 23	madam 9:10	10:25 12:13, 14
< K >	12	98:10	made 5:1, 4, 12	15:11 27:18
keen 112:23	lathing 127:2	Litigation 2:3, 4	24:8 28:15	61:5 72:20
keys 98:12	launch 12:25	living 95:6	37:18 77:1	78:1 79:10
kilometres	21:8 22:20	LLP 2:12	87:12 94:14	81:15 96:22
129:25	40:13 74:23	location 134:19	103:9 114:4	managers 111:9
kind 14:10	102:4 106:17	log 108:2, 5	117:4 122:18	134: <i>11</i>
38:14 41:9, 21	108:6 109:19	logs 137:15	123:13, 16	Manconi 12:8,
42:1, 2 43:8	launched 10:9	long 9:22 10:5	124:14, 25	10 90:20
51:17 54:8	23:3 100:16	91:2 127:6	126:3 128:14	mandate 14: <i>14</i> ,
58:4 66:20	108:13, 15	144:1	132:25 133:4	17 29:5 64:23
74:22 89:18	139:13	longer 80:2	135:13 136:13	72:8 83:17
90:6 92:22	Lauren 2:11	103:20 105:22	137:14, 20	87:5, 8 92:13
	Laurent 99:14	looked 6:21	138:15 143:3	
95:1, 3 96:17	layer 41:21	22:6 33:25	146:10	96:22 116: <i>3</i> , <i>18</i> manual 39:8, 22
99:23 105:1, 13				
107:17 131:3	laying 138:4	97:8 138: <i>1</i> 2	main 97:1	40:3 123:17
kinds 18:22	layman's 26:9	looking 12:20	98: <i>10</i>	manuals 42:21
79:24 116:16	130:6	14:8 20:3, 21,	maintain 107:19	43:14
knock 131: <i>14</i>	leading 107:9	24, 25 22:17	maintained	margin 126:7
knowledge	144:6	27:2, 21 28:7	44:14 73:20	master 7:8, 9, 23
24:15, 25 27:5	leads 143:9	33:23 34:2	118: <i>17</i>	material 47:3
64:17 79:8	lead-up 103:6,	36:14 37:4	maintainer	Matt 47:6, 7
87:2, 21 92:5, 7,	14 109:1	51:8 67: <i>11</i>	23:13 53:25	56:21 91:11
12, 15 99:25	114:20, 22 117:7	68:23 76:15	139: <i>17</i> , <i>18</i>	134: <i>1</i> 137:22
100:2, <i>1</i> 7	learnt 35:23	94:4 103:5	maintainers	matter 16:22
104:22 110:8	leave 85:5	109:23 143:2	104:17 140:16	34:10 44:13
124: <i>1</i> 126: <i>1</i>	left 17:17	144:9	maintaining	59:21 60:10
128:22 130:7	legal 32:8	looks 6:18	14:9	65: <i>11</i> 101:20
136:24 143:3	Lemieux 38:25	51:2 <i>1</i>	maintenance	124:8 140:3
knowledgeable	length 50:6	lost 23:15	19: <i>11</i> 21: <i>18</i> , 24	meaning 132:10
137:4	lens 52:15	lot 9:2 34:7	22:9, 14, 17	mechanical
known 100:5	Lethbridge 7:22	43:10,21 46:20	35:8 42:5, 9	44:13 124:6
104:2 <i>4</i>	letter 132:11	47:3 53:1, 8	45:1,2 51:22	mechanism
knows 55:15	letters 74:1	59:7, 13, 14	54:6, 10, 18	62:3 107:18
	132:1	60:2 <i>0</i> , 22, 25	58:10 104:11	111:23 112:6
<l></l>	level 7:17 11:4	61:7, 11, 14, 17	107:4, 8, 22	
	27:12 30:6	63:4, 9 64:13,	112:18 114:8	
L		- , ,		

		1	1	
mechanisms	minutes 17: <i>18</i> ,	moving 36:7	noticed 25:25	73:4
53:2, <i>4</i> 64:6	<i>20</i> 40:5 81:24	41: <i>14</i> 134:25	notified 135:20	offered 59:21
126: <i>11</i>	133: <i>18</i>	136: <i>11</i>	November	office 76:17
Medicine 7:22	minutia 52:16	MSF 54:17	108:8, 12, 14	Officer 10:12,
meet 91:20	55:21	multiple 17:9	109: <i>19</i> 111:5	15, 18 12:11
meeting 77:13	mirror 54:16	24:19 128:9, 20	number 68:3	14:15, 20, 25
88:22 109:7	mispronouncing	municipal 31:15	82:14, 16 134:22	15:23 16:2, 16,
112:10, 16, 17,	16: <i>10</i>	33:1 34:1, 17	NUMBER/DESCR	20, 24, 25 28:2
18 146:10	missed 128:4, 9	76:2 105:16	IPTION 3:3	36:25 49:23
meetings 46:21,	missing 95:3	Murray 47:6	numbers 69:4	74:5 76:25
22, 23 50:23, 24	128:18	,	102:13	77:1, 19 132:15,
64:16 66:9	misspoke 21:22	< N >	nuts 9:7	17
74:2 77:9, 17	mitigate 60:7	Nadon 134:10		Officer's 70:15
90:6, 13, 19, 20	97:21 99:10	natural 125:12	< 0 >	OFS 93:11
110:7 111:10,	127:1	nature 71:19	object 6:4	94:22
15, 21 116:21,	mitigated 24:12	101:10 111:11	objected 5:16	okayed 78:10
22 117:6, 11, 16,	63:2, <i>15</i> 130: <i>17</i>	132:14	obligations	OLRT-C 25:23
21 118:3 136:23	mitigating 60:23	necessarily	23:15 48:2	omitted 33:17
meets 29:10	mitigation	49: <i>16</i>	observe 68:1	onboarded 86:6
49:25	60: <i>16</i> 98:20, 21,		obstacle 98:15	onboarding
49.25 melds 74:22	23 99:13, 15, 16	necessary 31:7 65:9	obtain 4:11	11: <i>13</i> , <i>15</i>
	130:15 140:4	needed 22:25	obvious 91:25	ones 7:15
Member 2:3, 4				
memory 99:23	mitigations 30:5	82:20 138:12	OC 12:5 16:22	19:13 33:16
mentioned	mobility 94:23	needing 85:7	23:12 24:1, 15	51:19 69:14, 16
13:14 21:17	mode 39:8, 22,	needs 9:3	25:11, 14, 23	78:16 93:2
27:17 33:22	24	NEESONS	45:23 47:14	99:24 100:17,
40:8 58:9 59:8,	modifications	146: <i>19</i>	55:14 58:11, 13	21, 23 101:5
25 61:10 67:19	124:14, 24	negativity 41:25	59:3 64:9	111:17 124:19
79:9 94:17	moment 69:21	negotiated	65:25 66:6, 12	126: <i>13</i>
101:17 109:25	monitor 20:16	31:23 58:3	79:5 82:12	ongoing 19:10
124:5 131: <i>19</i>	49:22 50:7	101:8	87:1, 7 91:16	20:13 38:14
133:7 143:2 <i>1</i>	75:12 142:21	Negotiation 58:6	92:5 101: <i>14</i>	84:19 130:15
mesh 8:25	monitoring	negotiations	103: <i>13</i> , 24	131: <i>16</i> , 20
messaging 71:6	21: <i>15</i> 115: <i>15</i>	83: <i>19</i> 100: <i>10</i>	106: <i>4</i> , 8 107:25	online 43: <i>13</i>
Messel 78:7	month 15:3, 13	101: <i>16</i> 102:2 <i>1</i>	109:2 114: <i>18</i>	Ontario 75:23
met 134:2, 5	19:3 40:3	negotiator	115:22 116: <i>14</i>	open 122:25
137:2 <i>1</i> , 23	monthly 40:1	101: <i>19</i>	117:19 120:12	143:5
metal 129: <i>1</i>	66: <i>10</i> , <i>1</i> 3 68:5	nervous 43:2	121:10 122:12	opened 73:6
metrics 66:12,	77:15, 16 112:18	neutral 130: <i>9</i> ,	132:8, 9	opening 93:23
13 67:9 69:10	months 12:24	24 131:2 <i>1</i>	occasionally	104:2 <i>4</i> 105: <i>1</i> ,
Michael 15:11	15:2 19: <i>1</i> , 2	new 7:15 10:22	64:16	14 123:6
103: <i>11</i> 132: <i>18</i>	73:2 77:20	74:13 83:21	occasions	operate 64:6
mild 52:10	108: <i>7</i> , <i>15</i>	141: <i>18</i>	86:25 141: <i>11</i> ,	98:2 <i>1</i> 99: <i>5</i> , <i>10</i> ,
miles 40:20	109:20 112:5	news 42: <i>1</i>	14 143:4	17 127:10
mimic 32:17, 19	117: <i>1</i>		occurred 79:14	operated 55:4
33:20	Morgan 15:11	nonconformance	88:14	66:1,7 98:20
mind 97:5	103:11 132:18	74:3	occurring	operates 66:22
131:2	morning 57:13	non-	142:16	operating 27:19
mine 6:23	144:10	typographical	OCS 14: <i>4</i> , 9	28:8, 14 33:9
Minimum 56:23	motion 62:18	5:12	51:21 119:1, 10	34:13 56:23
57:4	move 43:11	norms 125:3	131:6, 17	57:4 60:8, 21
minor 96:6, 9	128:15	North 34:9, 15	OC's 55:18	63:1 81:16
97:16 98:25	moved 10:11	noted 3:14	odd 31:9 35:18	86:7 112:10
126:7	12:17 45:7	notes 146:14	Oddly 8:19	116:21, 22
minus 123:6	133:7			
	100.7			

		1	1	
operation 64:25	opinion-based	overseen 12:8,	participant	Perfect 16:13
70:7	114: <i>10</i>	10	86:17	perform 82:10
operational	opportunity 5:8	oversight 21:23	participants	performance
12:2 <i>1</i> 29: <i>4</i>	37:13	22:16 23:1	1:15 2:7 5:5, 11	87:23 115:18
87:19 99:16	opposed 84:7	52:14 69:23, 24	particular 58:21	performed 20:8
operations 7:19	114: <i>12</i>	75:16 76:7	75:13 83:22	period 15:14
9: <i>1</i> 7 10: <i>4</i> 11: <i>1</i>	OPS 93:11	115:23 116:2	parties 64:14	104:24 105:22
12: <i>18</i> 14: <i>8</i>	94:2 <i>1</i>	119: <i>15</i> 120:8	partner 47:11	periods 129:13
15:19 17:10	options 90:3	oversimplified	53:11 72:10	perjury 6:1
28:9 29:3 42:1	order 4:23	119: <i>13</i>	partners 18:18	permits 4:16
43:7 46:16	76:22 110:17	oversimplify	66:9 93:3	person 5:21
48:14 51:13	orders 77:1	7:14 58:24	partnership	42:6, 9 58:17
64:13, 22 65:8	110:23 114: <i>4</i>	119:6	54:12	68:5 72:18
67:19,24 74:24	120:21	oversimplifying	partnerships 8:8	75:9 132:11
75:9 77:21	organization	44:5	parts 26:6	133:5
79:6, 11 80:22	22:11 54:3, 4	owned 33:10	134:25	personal 60:13
81:15 84:6	organizations	owner 112: <i>13</i>	party 19:7	personally
85:17 89:13	95:13	_	26:18	101:15
93:25 98:12, 15,	original 123:5	< P >	pass 90:14	personnel 11:14
16 103:23	originally 125:7	p.m 1: <i>16</i>	91:20	perspective
106: <i>3</i> , <i>10</i> 109: <i>1</i>	OTTAWA 1:6, 7	145:18	passed 78:5	17:12 20:25
126:18 128:1	2:9 7:1 31:13	P3 13:24 145:1	passenger	23:2, 12 26:9
133:17 141:5	34:4 73:14	PA 56:25 75:16	33:17 94:23	37:8 50:21
operations-type	93:12, 15, 19	112: <i>11</i>	passengers	56:2, 4 75:16
11:14	94:20 123:4	Pacific 7:3	25:22 38:6	77:6 80:8 84:1
operator 16:24	124:12	pages 3:15	41:10, 13 43:1,	85:18 94:2
24:2 38:21	outcome 121:2	145:4	13, 17, 18 53:10	101:10 105:6
39:7 40:2 41:5	outlined 65:8	paid 105:20	113:22 123:1	114:1, 8_130:7
43:20 45:11	outputted	pandemic 17: <i>19</i> ,	pass-fail-repeat	perspectives
54:1 63:18	117:14, 15	20 18:1	90:2	41:17
64:4 80:11	overall 25:3	panels 113:24	Pate 47:5 78:5	phase 24:1
83:11 92:11, 15	overflowed	paper 22:8	91: <i>10</i> 134:9	34:22 63:7, 14
106:3	93:20	para 17:4	Paul 15:25	86:22 92: <i>18</i>
operators 11:6,	overhaul 67:1	parameters 4:8	peak 100:3	phases 23:21
10, 16 26:14	overhauling	87:3	101:24	phone 121:18
29:18, 19 35:4	68:13	pardon 25:11	penalties 13:8	133:19 137:14
37:14 39:12	overheat 143:18	part 18:17	110:12, 14, 15,	physical 51:17
40:9 41:1 42: <i>4</i> ,	overheated	22:19 27:14	19 113:9, 13, 17	physically
23 43:17 44:25	135:16, 17	28:12 36:19	118:2	13:23 45:17
45:19 53:9	143: <i>16</i>	39:5, 12 40:18	penalty 117:8	picture 44:6
55:7 61:25	overheating	47:23 49:25	people 14:4	piece 127:13
68:2 78:22	142:15, 22	50:5 53:11, 12	17:13, 16, 21	pieces 36:7
79:12 80:5	overlook 52:17	67:22 69:17	36:11, 12 37:3,	95:4
81:6 82:10, 17,	overly 123:3	75:17 76:9	15 40:21 41:3	Pieters 134: <i>1</i>
20, 22, 23 83:2,	125:22 130:2	87:15 98:7, 9	47:19 53:8	137:22
3, 10, 21 84:17,	overnight 57:17	100:13 101:13	58:18 73:13	place 5:25
23, 25 85:4, 5, 9,	overpass 129:5	102:21 110:8	74:23, 25 75:10	7:25 28:9 36:4
18 86:13 87:24	overplanned	115:14 121:12	78:3, 16, 18, 23	38:12, 13 43:14
88:14 94:11, 12	117:20	122:19 123:5	80:3 84:10	69:3, 9 78:11
104:10, 15	oversee 13:6	124:4 125:18,	85:6 89:3, 10	81:3, 10 101:2
140:25 141:3	14:2	20 131:14	103:19 129:15	109:10 138:25
OPHS 123:17	overseeing 7:24	136:22 139:21	132: <i>16</i>	140:8 142:2 <i>1</i> ,
opinion 26:7	11:17 12:21	140:3, <i>21</i> 141: <i>8</i> ,	people'ish 91:14	25 146:6
114: <i>1</i> 6	14:20 37:3 54:9	10	people's 81:17	places 73:13
	•	•	•	•

plan 20: <i>12</i> , <i>20</i> ,	possibility	67:2 121: <i>1</i> 3	21 107:23	120:6 121: <i>1</i>
22 25:13, 14	104:23 106:2	126:23 132: <i>16</i>	110: <i>1</i> 2 117:8	127:11 144:14
118: <i>9</i> , <i>11</i>	possible 72:14	139: <i>1</i>	128:15 136:16	prosecution
120:11 130:18	81:14 89:21	primary 11:4	138:20	5:25
138:24 140:19,	135:6 145:2	47:8 59:9, 10	procurement	protection
21 141:25	Possibly 122:5	63:14, 21, 25	23:20	124:20
planned 25:11	139:18	67:6 132:12, 16	produced 3:10,	provide 37:17
104:5	post 96:1	134: <i>11</i>	14	43:19 50:2, 11,
planning 25:2,	posted 4:24	principle 113:3	producing 61:13	12 54:18, 19
12 89:13 102:15	post-incident	prior 6:25 8:16	profile 126:8	79:11 82:10, 13,
Plans 119:1, 18,	71:10	10:20 12:24	131:22	14 100:7 119:7
19, 21	potentially 56:14	17:20 31:25	profiles 126:4,	provided 6:13
plate 73:14, 16	pounds 14:3	40:13 49:9	14, 18, 21, 22, 23	22:3 26:14
platform 40:22	power 16:20	51:16 63:5, 6, 9	127:11	29:24 42:22
57:13 121:18	powers 16:17	64:13 77:20	profit 114:11	63:19 75:4
141:13	practice 35:3	85:21 86:7	program 9:17,	81:6 87:18
play 34:20	85:24 95:2	88:14 94:9	23 10:25 12:14	89:7 93:6
53:10, 12 75:20	140:16	99:3, 25 100:19	15:10, 17 24:16	96:15 103:6
played 28:2	practices 22:9	105:2 108:6	27:18 64:21	117:17
34:9	32:19 33:20	109:18 110:12	75:11 79:10	provides 52:15
playing 98:7	34:6	117:17 122:24	81:15 89:9	provides 52.75
	preferable 59:18	priorities 135:7	101:12 103:11	66:16 96:18
plays 27:23			110:1 132:6	
53:11 75:17	preliminary	private 103:17		Provincial 76:1
plenty 52:2	134: <i>13</i> , <i>15</i>	privy 107:11	programmed 62: <i>11</i>	Public 4:12, 21,
plug 45:18	preparation	proactive 70:17,	-	25 5:15 8:24
61:23	103:22 104:1	21 71:2, 5	programming	121:17
Plus 127:7	prepare 44:16	problem 24:12	126:3	public-private
point 6:7 23:6	prepared 8:13	30:22 42:8	programs 19:7	8:8
42:19 45:5	44:21 50:21	64:8 84:9 97:9	progress 20:17	pull 32:2
53:3 86:12	64:9 96:13	127:1 142:9	21:15 133:4	129:23
95:17,21 97:19	122:22	problems 43:6,	143:3	pull-apart
110:14 111:13	preparing 60:20	10 122:8	progressed 7:6	129:22
116:13 120:2	PRESENT 2:17	procedural 4:22	97:19	pulling 41:4
122:23 123:19	77:17	29:2	project 7:1	129:21
128:5, 8 134:16,	presented 83:22	procedure 36:5	13:24 23:21	punitive 111: <i>19</i>
18 136:2	presenters	38:3 60:8, 12,	37:9 56:20	113:9
137:21, 24	146:9	17 63:16 64:6	58:23 60:6	purpose 4:10
140:3 143:8	presently 38:25	procedures	61:4 67:23	39:17 50:5
points 23:8	pre-service 96:1	11:6 27:19	76:2 95:20	92:18 124:12,
Police 93:12	pressure 95: <i>16</i> ,	28:8, 14 29:13,	102:24 105:16	25 142:22
policies 116:15	19	14 32:23 36:20	projects 105:14	Pursuant 5:14
pool 83:11	presumably	46:20, 22, 24	108:10 145:1	purview 92:13
84:24	35: <i>13</i>	47:10, 16 60:21	prolonged	pushing 115:23
portfolio 12:12	pretrial 92:9, 18	63:1 88:7	122:21	put 6:13 23:2
portion 51:23	pretty 64:7	proceeded	pronouncing	28:9 38:11, 13
68:7 75:20	73:15 93:14	86: <i>19</i>	16:7	40:21 56:14
position 7:7	104:15	proceedings	propane 125:8,	62:21 69:3, 9
10:16, 21 12:18,	prevent 115:24	5:20, 24 146:5	11	73:9, 19 77:6
21 15:21 18:25	previous 9:19	process 26:12,	proper 25:13	82:22 98:25
19: <i>16</i> 29: <i>4</i> , 6	67:10 89:1	16 46:24 51:25	26:22 127:9	110:11 117:14
41:1, 6, 9, 18	previously 83:4	79:6, 15, 23	properly 36:15	121:21, 23, 25
42:20 59:10	primarily 19:13	84:17 86:23	69:6 99:14	123:16 124:24
61:5 113: <i>11</i>	21:7 30:3	87:16, 18 88:17	114: <i>11</i> 115:20	125:2, 7, 10
116: <i>19</i>	39:13 51:12	91:2 92:9	116: <i>10</i> 118: <i>18</i>	126:6 127:24
	54:13 59:20	95:11 104:19,	1	1

]
138:25 142:2 <i>1</i> ,	55:11 60:25	42:25 49:14	reduced 43:5	Rehabilitation
24 146:7	64:20 72:1, 11	73:23 81:9, 11	100:24	118:8, 11, 25
puts 61:21	74:24 77:21	83:24 84:22	refer 13:5	120:11
putting 33:21	79:10 81:15	101:25 105:25	22:10 32:18	reissue 29:14
35:3	89:9 101: <i>12</i>	128:17	58:19	re-issue 29:14
	103: <i>10</i> 105: <i>14</i> ,	reason 28:4	reference	reiterating 18:1
< Q >	16 110:1 124:8	36:3 39:23	125:25	relate 49:21
quality 74:9	125:17 127:14	48:21, 22 51:5	referred 37:11	related 8:12
76:12, 15, 16	129: <i>11</i> 130: <i>9</i> ,	57:9 61:18	73:18 74:3	87:23
140:22 143:15	23 131:21	78:21 108:17	referring 30:12,	relating 103:13
question 5:17	132:5 133:17,	115:15 137:3	13 54:21	relation 7:1
6:4 24:7 31:9	19 134:19	139:2 <i>1</i>	100:21 101:6	21:6
35:19 55:2	142:18, 20	reasons 36:23	112:7	relationship
81:9 82:7	rail-related	83:13 85:5	refine 126:18	132:22
85:16 116:13	47:20 71:21	111:4	refined 126:14	relatively 74:12
120:2 143:6	Railway 7:4	reassuring	reflecting 36:16	relaunched
144:25 145:2	8:25 11:7	106: <i>19</i>	reframe 54:4	139: <i>14</i>
questions 4:16,	29:21 33:9, 10	rebuild 7:15	85: <i>16</i>	relay 121:24
17 65:12, 15	34:15, 19 35:6,	recall 56:24	Refresh 56:21	releases 41:4
145:12	10 36:2 48:4	60: <i>19</i> , 25 63: <i>1</i> 2	refreshed 85:8	relevant 20:2
	61:6 128:25	70:9 72:22, 25	refresher 38:20	Reliability 11:25
quicker 80:25 103: <i>18</i> 139: <i>12</i>		83:8 84:16	69: <i>16</i>	14:21 70:12
	129: <i>14</i> , 24 130:7			
quickly 15:14	railways 32:20	87:11, 14 88:23	refreshers	102: <i>11</i>
32:3 43:9	33:1 34:1, 17	89:8 90:13	38:16, 19 84:21	reliable 22:11
93:12 97:3	rail-wheel	102:10 103:15	refusals 55:13	23:14 40:25
139:8	131:22	104:5 107:24	refuse 56:11, 13	131:12
quite 6:19	raised 107:13	108:8 110:6	refused 56:5	reliably 114:12
18:10, 24 23:9	rarely 80:6	113:12 138:16	refusing 56:19	relieved 117:2
25:15 26:2	rate 124:7	141:20 142:8	regard 25:25	rely 17: <i>13</i>
32:3, 7 42:21	ratio 40:20	receivable 5:23	regardless	remember 12: <i>1</i> ,
48:12 53:5	RCP 64: <i>15</i> , <i>18</i> ,	receiving 79:23	12:14	13 17:13 45:6
59:12 65:25	20 87:7 89:9	RECESS 82:3	regards 18:10	47:5, 13, 18, 22
78:6 81:12	98:9 101: <i>12</i>	recognize 61: <i>19</i> ,	regime 119:9	51:5 58:20
86:6, 8 93:18	103:8 106:22,	20 62:24	region 46:10	64:12 81:13
113: <i>15</i> 116:8	24, 25 107:13	recognizes	regular 22:1	85:20 87:24
144: <i>12</i>	109:25 114:23	53:21 62:7, 8	24:18 29:10	89:2 <i>1</i> 91: <i>6</i> , <i>9</i> ,
quite-	RCP's 64:23	recollect 97:3	50: <i>1</i> 62:2 66:9	10, 13, 15 93:17
encompassing	read 29:21	recollection	73:19 74:2	113: <i>18</i> 117: <i>1</i> 2
118: <i>16</i>	readiness 87:19	89:5 96:17	78:7 85:12	118: <i>1</i> 3 122: <i>14</i>
quote 123:14	106: <i>9</i> , <i>1</i> 3 107:8	recommend	86:16 117:21	136:24 138: <i>19</i>
127:5 134: <i>8</i> , 20	readjustment	144:23	127:17 128:5, 8	remembering
	67:1	recommendation	regularly 73:20	96:2 <i>1</i>
< R >	ready 57:1	s 144: <i>17</i> , <i>19</i> , 20	regulated 32:20	reminded 52:17
radio 42:16	85:17, 18, 25	recommended	35:22	remotely 1:15
44:3	91:22 92:6	123:2 <i>0</i>	regulations	remove 41:10
RAIL 1:6 6:24	106: <i>1</i> 7 107: <i>1</i> , <i>2</i> ,	record 82:2	31:22 32:13, 14,	97:13, 15, 16
7:12 8:14 9:6,	<i>4</i> , <i>15</i> , <i>1</i> 9 114:2 <i>4</i> ,	90: <i>10</i> 145: <i>15</i>	18 34:24 75:22	135:8
<i>17</i> , <i>20</i> 10:3	25 136:17	recorded 146:11	76:1	removed 46:10
11: <i>1, 5, 10, 13</i>	138:2 <i>1</i> 139: <i>1</i> 2,	recruiting 11:5	regulatory	57:11 97:20
12: <i>18</i> , 20 15: <i>16</i> ,	16, 19	rectification	14:2 <i>1</i> , 24 31:3	Renée 15:24
19 17:4 24:16	real 64:17	111: <i>18</i>	32:2 47:25	replace 128:4
25:10, 16, 19	reality 18:17	rectify 45:18	48:20, 24 49:22	replacing 127:17
26:6 31: <i>15</i>	really 19:24	Red 7:21	52:14 65:21	report 15:6, 25
33:1,9 35:22	26:1 27:14	reduce 69:4, 9	74:9 75:6, 14	38:23, 24 48:13
41:25 44:11	39:14 41:17		76:7	53:23 104:16

14

reported 15:12,	resolved 123:12	110: <i>15</i> , <i>19</i>	RTG/RTM 46:25	safest 55:9
19, 21, 23 36:25	124:2, <i>4</i> 125: <i>15</i> ,	117:17 132:6	47:3 50:15	62:11
38:22 61:7	17, 20 130:14	review 5:9	66:11 72:15, 24	Safety 10:12, 15,
71:12, 17, 20	131: <i>9</i> , <i>15</i>	20:11 37:22	116:23 132:20	<i>1</i> 8 11:25 12: <i>10</i>
reporter 9:10	resolving 132:21	38:10 59:13, 19	RTG's 47:10	14: <i>15, 20, 21, 24</i> ,
146:4	resources 23:9	68:8 120:15, 19	77:24	25 15:5, 23
REPORTER'S	respect 56:5	reviewed 96:12	RTM 14:5	16:2, 16, 18, 19,
146: <i>1</i>	84:15 88:19	reviewing 20:20	20:21 25:22	23, 24, 25 17:12,
reporting 15:8	137:9	reviews 24:19	35:7 42:4 54:7	14, 22 18:23, 25
48:1, 3 70:14	respond 122:13	Reynolds 2:12	58:10 73:7,23	20:25 21:2
reports 20:17	141:1	Richard 91:9	103:14, 25	26:2 <i>0</i> , 23, 25
104:17 121:16	responders	103: <i>11</i>	104: <i>17</i> 107: <i>4</i> ,	27:1, 3, 10, 22,
representatives	133:16	Richards 10:18	18 114:19	23, 25 28:2, 7
47:11	responding	76:21 128:11	117:7 121:22	30:24 32:9
represented	42:7 45:2	ridership 18:2	132: <i>1</i>	35:16, 19, 21
98:15	104:11 122:3	102:4, 16	RTM/RTG 13:4	36:6, 8, 11, 12,
request 18:10	133:11	riding 109:23	143:1	18, 24, 25 37:1
78:13	response 42:5	risk 30:4, 6	RTM's 21: <i>18</i>	39:6, 13, 18
requested 78:9	56:1 92:2	41:3 60:2, 7	45:24 58:14	48:14 49:10
requests 50:3	111:17 114:6,	risks 59:15	115:18 127:1	51:14, 15 52:21,
require 99:12,	23 122:16	60:22 63:2, 15	rule 11:9 29:9,	24 53:1, 4, 5, 7,
15 111:17	responsibilities	RMCO 49:24	14 32:23 33:6,	9, 10, 13, 15, 20,
required 6:2	11:2	Rob 137:23	9, 21 34:23	22 54:5, 6, 14,
14:6 23:9 29:4,	responsibility	role 8:12, 13	36:5 46:20 60:8	24 56:2, 4
21 30:2 35:10	52:23 53:17, 22	9:15, 23 10:1, 6,	rules 11:7	58:10, 11, 25
37:17, 20, 25	responsible	12, 18, 25 11:2	27:19 28:8	59:8, 14, 16
38:3, 20 39:23	52:20 54:5, 7,	12:17 14:18	29:1, 13 30:12,	60:2, 22 61:12
41:10 43:25	24 55:21 89:4	18:23, 25 24:2	15 32:17 33:9,	62:3 63:2, 18,
48:18 51:3	rest 69:21	27:17 28:3	12, 23 34:1	19 64: <i>4</i> , 5 65:9
53:12 58:23, 25	restaurant 9:2	34:9 49:18, 21,	35:11, 17 36:2,	66:2, 10, 12, 13,
68:1 71:12	restaurants 8:18	22 54:9 63:25	11, 16, 19 46:4	15 67:22 70:14,
72:10 73:8, 18	restrictions	65:25 82:9	48:22 68:2	15, 17, 22, 25
79:11 82:18	65:1,8 129:15	103:3	88:7 142:23	71:1, 3, 5, 6, 7,
85:11 99:16	result 26:5	roles 15:9	run 54: <i>13</i> , 17	22 72:20 74:5
119:15 120:19	83:12, 19	Ron 20:10	84:23 92:23	75: <i>4</i> , 6 76:22,
133: <i>19</i> 138:2	128:18 140:6, 7	room 42:15	93:23 104: <i>1</i>	25 77:1, 8, 13,
139:8 140:12,23	142:3	43:23 89:6	113:2 <i>1</i> 114: <i>1</i> 2	19 78:1, 8
requirement	results 19:21	root 143:17, 25	running 86: <i>18</i> ,	111:16 112:24
39:7 40:1	68:24 81:9, 12	RPR 146:3, 20	21 87:3, 12, 18	113: <i>1</i> , 23
48:17, 23 97:17	89:1,21 116:25	RSA 103:6	88:1, 10, 14, 17	126: <i>10</i> , <i>1</i> 2
100:3 118:23	120:24 121: <i>1</i>	RTC 15: <i>15</i>	91: <i>17</i> 92: <i>9</i> , <i>18</i> ,	132: <i>14</i> , <i>1</i> 7
120:23	results-oriented	RTG 14:5	24 93:21, 22, 25	safety-critical
requirements	133:5	47:15 50:12, 24	94:10 95:2, 15,	109:4
27:22 37:5, 24	RESUMING 82:4	51: <i>12</i> , <i>21</i> 66: <i>9</i>	25 96:1 105:19	safety-related
50: <i>16</i> 110: <i>9</i>	retired 75:1	73:22 78:10	107:17 109:25	36:16 111:19
118:20	return 19:9	96:6 99: <i>19</i>	110:9 113: <i>15</i>	Sam 49:23
requires 114:5	20:12, 16, 20	101:8, 14 103:6		sat 86:24
requiring 145:4	101:3 139:2	106:2 <i>1</i> , 22, 2 <i>4</i> ,	< S >	88:17 90:25
research 65:22	returned 139:7	25 107:14	safe 55:8 59:4	satisfaction
reset 61:25	return-to-service	108:4 109:13	64:6 67:19	73:24
62:1, 3	138:2 <i>4</i> 140: <i>19</i> ,	110: <i>17</i> , <i>21</i>	137:5	satisfied 92:6
resets 45:15	21	118:2 <i>1</i> , 23	safely 54:10	satisfying 9:3
resolution	revenue 95:16	132:2 134:7	55:4 66:1,7	SCADA 25:8
122:2 <i>1</i>	99:20 103:14	139: <i>1</i> 2 143:25	98:22 139:3	scenarios 92:22
resolve 132:2	107: <i>15</i> , <i>16</i>	l	l	scene 134:5

scheduled	136: <i>3</i> , <i>18</i>	similar 34:13	46: <i>4</i> 71:23	91:3 106:2 <i>1</i>
80: <i>14</i> 130:25	138: <i>15</i> , 21	40:15, 19 48:12	76:10 117:3	123:25
schedules	139:2, 7 142:5	94:3 142:15	somewhat 131:3	speaking 80:20,
103:6, 7	Services 93:12,	simple 53:24	soon 38:12	21
scheduling	13 94:21	62:1	62:6 97:8	Special 15:4
80:13	set 24:9 39:21,	simplify 14:23	113: <i>4</i> 126:8	33:1 <i>4</i> , 16
score 89:4	25 56:19 73:22	61: <i>15</i>	sophisticated	specific 25:8
scored 88:1	86: <i>14</i> 104:20	simplifying 52:8	45:16	28:1 35:19
scoring 87:23	112: <i>11</i> 141:7	Sims 2:20	SOPs 11:8	62: <i>10</i> 104: <i>4</i>
screen 6:14	146:6	simulated 94:21	47:2 60:23	142:22 144:19
SCU 15:4	setting 67:15, 17	Singleton 2:12	63:3 78:23	145:5
searched 10:22	severe 18:4	singling 31:13	94:5, 18, 20	specifically
searching 81:17	shadow 106:3	site 32:25	95:2, 6	24:15 25:6
Section 5:14	share 19:20	33:22 40:13	Sorry 10:9	31:24 38:22
6:2, <i>4</i>	shared 5:4, 10	50:4 51:10, 11	14:2 <i>1</i> 16:5	40: <i>14</i> 45:6
sector 103:17	53:8	121:4 136:4	17:24 22:5	63:10 66:18
security 39:13,	sheet 99:19	137: <i>11</i> , 20	48:7, 9 81: <i>18</i>	83:8 97:6
18	101: <i>11</i>	sitting 19:18	97:15 102:22	98:18 109:18
selective 113:25	sheets 101:16	situation 41:8	105: <i>10</i> 106:22	123: <i>12</i> , 23
self-regulated	shift 23:9	62: <i>6</i> , 7, 8 136: <i>1</i>	122:15	139: <i>11</i>
31:11	shops 7:18	137: <i>13</i>	sort 11:11 13:9	specifics 31:20
SEMP 26:18	short 7:4 15:13	situations 43:1	18: <i>12</i> , 20 19: <i>1</i> 2	32:15 57:24
send 7:15	17:6 19: <i>1</i> 6	size 93: <i>19</i>	23:11, 15 31:14	79:16 87:14
senior 80:4	Shorthand	skill 39:21, 25	34:21 41: <i>4</i> , 11	96: <i>9</i> , <i>19</i> 97: <i>4</i>
sense 45:8	146: <i>4</i> , <i>14</i>	86: <i>14</i> 141:6	45:25 48:17	102:5 122:15
50:17 69:11	shortly 41:15	Slade 91:11	50: <i>4</i> 51:22	130: <i>13</i>
101:22 127:2	86: <i>11</i> 111: <i>1</i> , 3	slash 14:5	52:24 53:15	speculating
132:22 134:23	138: <i>17</i>	slightest 61:21	54:20 55:2	21: <i>13</i>
139:22	show 65:3	slippery 73:7, 10	58:2 59:22	speed 85:9
sensible 24:10	shows 16: <i>12</i>	slipping 73:14	63:7, 8 67:14	126:2 <i>0</i> , 22
sensitive 123:3	shut 17: <i>1</i> , <i>16</i>	slips 71:23, 25	68: <i>10</i> 70: <i>17</i> , 21	129: <i>15</i>
separation	49:7 74:6 136:3	small 43:23	71:6 74:16	speeds 36:7
54:2 <i>1</i> , 23	shutting 17:6,	smaller 142:13	88:16 94:16	spelling 16:12
September	10, 15 18:5	smoothly 104:2	109:22 118: <i>1</i> 7	spent 7:4
133: <i>15</i>	side 15: <i>15</i>	113: <i>15</i>	124:22 130:6	spheres 54:2
service 8:20	47:15 55:12	SMS 21: <i>1</i> , 6	131:22 132: <i>15</i>	spikes 14:3
9: <i>1</i> 17:2, 7	64: <i>15</i> , <i>1</i> 8 77:23,	39:6 48: <i>19</i> , 23	134: <i>11</i> 137:8	spotters 97:23
19:9 20: <i>12</i> , <i>16</i> ,	24 80:1,2	49:5 54:15	138: <i>12</i>	squad 91:5
20 21:9 22:18	82:13 91:11	58: <i>14</i> , <i>16</i> 66: <i>16</i> ,	sought 33:20	SRTD 11:24
23:12 30:8	116: <i>11</i> 127: <i>10</i>	19 67:3, 23	sound 56:6	St 99:14
33:17 43:15	132:18	68:7 141:8	sounds 9:18	staff 40:18
56:15 57:2, 3, 6	sides 70:17	soft 93:23	16:4 23:10	45:2 83:3
59:4 60:21	sign 29:4	104:23 105:1, 13	26:19 36:10	104: <i>11</i> 109: <i>13</i> ,
65:7 76:5, 6	signals 88:6	software 28:15	55:4 66:20	22 114:15
95:16 98:5	signature	solemn 4:11	81:25 98:2	115:7 116:14
99:20 100:3, 24	132:13	solution 59:17	103:4 104:7	120:12 121:11
101:3, 23, 24	signed 105:19	61: <i>12</i> 116:5	112:8, 21 118:3	staffed 114:10
102:3, 8, 19	significant	123:9	128:13	115:11, 20
103:14 107:5,	47:14, 17, 22	solutions 61:2	speak 14:14	144:15
15, 16 110:16,	significantly	solve 43:10	30:23 34:22	staffing 40:19
20, 23, 25	49:19	solved 45:12	37:7 40:11	100:7 115:3
111:22 113:14	sign-off 90:11	56: <i>15</i>	43:13, 17, 18	127:9 144:21
114:14, 20, 21,	signs 35:1	somebody 41:6,	49:14 55:10	145:4
25 117:7, 18	105:17 132:15	8 42:17 44:3	74:15, 18 90:24	stage 24:11
122:9 132:7	1	1	1	1

144:7	stopped 62:18,	supervision	126:2, 12	141:9, 11, 12
stages 24:20	23	140: <i>15</i> , <i>16</i>	127:17 128:7,	141.9, 77, 72
stakeholders	stops 53:20		24 138:20	Technician 2:20
		supervisor 53:25 55:19		45:17 61:23
93: <i>4</i> , <i>18</i> standard 27: <i>18</i>	story 42:1	116:21 117:22	139:7 142: <i>19</i> , 20, 25	
	straightforward 81: <i>14</i>			techs 45:1, 10
28:8 60:7, 20 63:1	stranded 17:17	supervisors 11: <i>10</i> 67:25	systemic 46:14	telephones 110:4
Standards	stress 127:25	112:5 117:1	136:8, 15 143:20	
	strict 75:15	140:17	systems 12:23 13: <i>15</i> , 24 21:25	temperature
56:23 57:5		-		130:9, 10, 24
70:14	strictly 12:20	supervisor's 7:6	22:17 26:8	131:21
Standby 41:13	72:11 93:10	supplier 125:10	27:3 31:11	tend 5: <i>18</i> , <i>19</i> 12:2
start 4:5 6:12	stuff 20:24	suppose 16:20	34:18 58:1	
23:11 65:7	24:24 27:8	22:13 85:24	59:14 61:14, 17	term 14:1
74:1 76:4	28:25 32:17	supposed 54:16	88:12 89:10	21:25 25:11, 13
93:25 102:7	44:1 47:10	108:20 111:6	119:4 121:13	26:22 50:8
103:23 106:3	51:4, 22 52:17	118:24 130:21	125:25 140:8,	56:6 62:21
109:1, 15	60:11 66:16	surprise 28:10	11, 14 143:8	93:23 99:19
110:23, 24	67:18 68:23, 25	surprised		101:11, 16
114:14, 20	69:25 70:25	117:25	<t></t>	104:25 105:3
122:9 134:3	78:23 82:24	sustained	Table 37:11	106:6, 7
137:6	89:10, 15 93:2,	115:13	78:11	termed 20:15
started 8:3	9 94:16, 25	sweep 38:4, 5	tack 73:19	terminal 7:8, 23
9:14 20:19	96:21 101:3	switch 44:4	takeaway 144:13	terminology
22:18 43:15	105:8 110:2, 3	123:21, 24	takes 22:1	22:9
104:20 136:11	117:11, 14	124:4, 10, 11, 16,	29:11 33:12	terms 66:6
142:5	120:22 131:23	17, 24 125:2, 5	103:20	70:13 89:25
state 74:17	133:3 138:6	131:12 133:2	talk 94:14	115:23 120:9
statements	145:5	134:18 135:2	104:9 130:5, 12	test 69:19
146:9	STV 20:10 22:4	136: <i>10</i> 138:6	136:20 137:2	testing 26:14
station 11:10	34:9	switched 125:12	talked 47:2	69:2 79:5, <i>14</i> ,
17:21 93:9	subject 34:10	switches	59:5 65:25	23 81:3, 10
94:24	59:21 101:20	123:24 131:13	66:2, 3 77:3	82:9, 11, 17
stationed 42:14	subjective 127:8	133: <i>1</i> 134:23	103:24 132:25	88: <i>13</i> 110:2
stations 17:17	submit 118:25	sword 116:1	133: <i>1</i> , 2	tests 38:16
25:22 93:7	substantial 30:2	system 8:20	talking 22:16	67:21, 24 68:4
113:20 118:17	85:22 86:11	21:1, 3 25:3, 6,	25:6, 8 47:25	88:6, 7, 8
119: <i>1</i>	96:7	7, 10, 16, 20	61:17 69:1	130:20, 22
steel 36:7	successful	26:2, 4, 6 34:13	82:8 121:8	theirs 40:22
73:14, 16	44: <i>19</i>	37:16 39:6, 14,	talks 32:7	66:15 98:12
steering 84:12	successive 15:8	15 40:10, 15, 16	Tammy 72:18	theorize 128:19
stems 56:25	sufficient 25:2 82:14, 15 104:1	43:8 44:9 45:17 52:21,25	tape 73:19 target 128:5	theorizing 32:10 thing 11:11
Stenographer/Tra	114:14			
nscriptionist 2:19	sufficiently	55:3 58:11, 12 59:1, 3 60:2	targets 67:1, 7, 15, 17 68:14, 17,	13:9 14: <i>10</i> 18:20 19: <i>1</i> 2
	-			
stenographically 146: <i>11</i>	140:25	61: <i>1</i> , <i>9</i> , <i>24</i> 64: <i>5</i> , <i>22</i> 65: <i>9</i> 66: <i>1</i> , <i>3</i> ,	20, 21 69:10	26:14 31:14
	suggest 144:20		taught 9:2, 6	41:4, 11 50:4,
step 42:24 43:4	suggested 23:24	7 69:23 70:12 72:13 79:7	team 58:1 74:8,	24 52:24 54:20
steps 95:25	suggesting 119:25	84:24 91:20	13, 16 76:4 87:9	55:8 59:22
134: <i>12, 14</i> Stove 134:10		92:6 104:15	teams 109:8 121: <i>13</i>	63:7, 8 64: <i>12</i> 68: <i>10</i> 70:6
Steve 134:10	suits 6:9 81:21			
stop 16:21	summer 81:7 125: <i>11</i>	107:12 108:2, 5	tech 42:14, 16	71:6 73:4, 12
53:16 55:15		109:3, 16	45:5	123:4 124:5
61:21 62:12	superintendents	114:12 117:13	technical 13:16	130:6 132:15
126:4 136:13	67:25	118:4 119:2	86:13 93:2	135:2 <i>4</i> 141:22
138:15 141:13		120:20 122:4	94:4 131:3, 5	

things 17:5, 15,	45:10 49:20	22:5, 7 115:15	transcribed	107:17 109:25
16 18:12 22:25	63:2 <i>1</i> , 25 66:2 <i>1</i>	138:23	4:19 146:12	110:9
27:7, 19, 22	67:20 69:1, 19	traced 124:17	transcript 4:20,	Trillium 33:2, 13
28:7, 16, 20	71:13 74:22	track 14:9	24 5:3, 9, 10, 13	49:6 75: <i>19</i>
34:22 35:13, 23	76:24 80:11, 24	25:21 50:25	16:12 146:14	83:6, 9
36:1 38:17	81:1, 13, 20	51: <i>4</i> , 21 69:25	transfer 103:13	trivial 56:8
39:3, 4 42:12	82:21 84:20	76:18 80:11	transit 8:19, 25	trouble 43:6
44:13, 14, 15, 16	85:24 86:8, 13	119: <i>1</i> , <i>9</i> 120: <i>20</i> ,	31:10 77:22	troubleshoot
48:21 51:7	95:8, 15 96:12	21 121:9	142:19 143:8	42:8
52:8, 17 53:1	98:25 99:3	128:22 130:3,	transition 10:2	troubleshooting
57:2, 5 60:11	100: <i>14</i> 106:5	23 131:7, 19	transitioned	41:7, 21 42:21
		135:9		
61:3, 6 62:5	107:9 109:21		12:20 15: <i>14</i>	43:14, 21
63:5 67:6, 14	111:2 114:5	train 7:8, 9, 23	translated	Troy 15:21
71:4, 19, 21	115:4 116:3, 8	17:18 38:4, 6	110: <i>11</i>	38:25 59:21
72:4,8 74:6	127:5 131:5	39:2, 4, 5, 7, 11,	Transpo 12:5	77:22 86:24
80:6 84:7	133: <i>17</i> , <i>22</i>	20, 23 40:9	16:22 23:12	90:25 132: <i>13</i> ,
86:15 97:23	134:9 139:8	41: <i>3, 6, 11, 14</i> ,	24:1, 15 25:11,	17 133:21, 22,
99: <i>12</i> 103: <i>18</i>	146: <i>6</i> , 7, 10	18 42:7, 15	14, 23 47:14	25 137:16
106: <i>16</i> 112: <i>12</i> ,	timelines 74:19	43: <i>1</i> 45: <i>14</i>	55:14 58:13	true 129:10
24 113:3, <i>15</i> , 20	times 26:4	57:8, 10 58:1	59:3 64:10	trueing 127:2
114:7 118: <i>18</i>	42:13 50:12	61: <i>15</i> 62:7	65:25 66:6, 12	trust 23:16
122:16 124:22	61: <i>11</i> 69:24	80:3 84:5, 6, 19	87:2, 7 91:16	trying 16:9
130: <i>1</i> 7 133:6	78:4 82:18	85:12 94:24	92:5 101: <i>14</i>	18: <i>16</i> 21:2 <i>1</i>
134: <i>12</i> 137:5	89:15 93:16	113: <i>19</i> 126:8	103: <i>13</i> , 25	30:9 44:2, 5
139: <i>11</i> 141:6, <i>14</i>	94:3 109: <i>14</i>	trained 35:12	106: <i>4</i> , 8 107:25	50:19 53:20
thinking 25:18	111: <i>18</i> 115:2	82:16 85:19	109:2 114:18	55:2 58:22
48:8 90:2	title 12:1 72:20	86: <i>4</i> , 8 140:25	115:22 116:14	70:24 81:14
thinks 62:22	118: <i>11, 14</i>	141:16	117:19 120:12	86: <i>14</i> 91: <i>10</i>
third 19:7 26:17	Titles 27:8	training 8:11	121:10 122:13	95:7 132:2
third-party 19:21	64:17	11:17, 18, 21, 25	132:8, 10	142:7
thought 48:7	TOCC 45:6	14:22, 24 19:7,	Transport 33:10,	T's 23:5
73:22 99:2	133:21 137:13	21 20:2 28:14	15 48:8, 11, 15	TSB 48:8
102:25 105: <i>1</i>	today 4:5, 10	29:24 30:16	52:9 75:14, 15,	71:17, 20, 22
106:14 112:22	19: <i>19</i>	35:16, 20 36:12,	19	75:17 135:19,
thoughts 135:1	toggle 43:24	15, 22, 24 37:4	transportation	22 137:23
thousand 145:4	44: <i>4</i>	38:15 42:22	17:14 31:3, 19	tunnel 73:5
thousand-plus	told 46:5 96:22	51:15 54:19	48:2	94:22
94: <i>12</i>	103:3	60: <i>14</i> , <i>15</i> 80:2 <i>1</i>	Transpo's 45:23	Tunney's 134:2
three-day	Tom 47:5 78:4	82:15 83:23, 25	58:11 79:5	turned 41:19
142: <i>1</i> 2	91:10 134:9	84:17, 20 85:8,	82:13	109:13
three-year 68:12	tons 64:15	14 88:11 127:9	TRA's 22:12	turnover 77:24
-			travel 75:23	78:2 112:4
tighten 120:3	tools 18:4, 6	141: <i>19</i> 142:5		
143:15	top 30:20 34:6	trains 7:13	traveled 40:20	turns 55:18
tightened 120:6	65:2, 19 72:22	12:22 13:15, 24	Treboutat 15:25	type 14:1 19:8
139:5	96:24 136:23	14:9 21:25	16:3	22:15 27:24
tightening 23:7	138:17	22:16 28:15	trench 124:21	52:13 71:4
tile 71:23 73:3	tops 37:11	39:10 40:23, 24	trending 22:10	93:2 94:24
tiles 72:1 73:5	totally 65:13	45:23, 24 69:23	115:12	120:16, 23
time 4:16 7:4	touch 122:23	82:23 100:3	trial 5:24 86:18,	125:5 133:2
10: <i>12</i> 11:23	123:19	101:24 102:19	20 87:3, 12, 18,	137: <i>12</i> 141: <i>11</i> ,
12:8, 11, 22	touched 59:7, 23	105:19 113:21	25 88:10, 14, 17	13, 22 145:5
14:25 15: <i>14</i> , <i>1</i> 6	tours 93:6	119:4 121:13	91:16 92:23	types 44:21
18:7 19: <i>16</i>	TRA 19:8	125:25 126:4	93:21, 25 94:10	77:9 114:19
22:21 23:15	20:11 21:11, 16	139: <i>14</i> , <i>15</i>	95:15, 25 96:1	131:2 <i>4</i>
24:17 27:12, 14	I	142: <i>1</i> 6	I	I

· · · · · · · · · · · · · · · · · · ·				
typical 31:15	validating 94:5,	visits 33:1, 22	126: <i>15</i> 127: <i>12</i> ,	63:6 67:7
105: <i>13</i>	6, 18	40:13 50:4	<i>16</i> 131:2 <i>1</i>	72:15 83:2
typos 5:9	valuable 39:20	51: <i>11</i> 121:5	wheels 127:2,	99: <i>14</i> 108: <i>10</i>
	40: <i>11</i>	visually 93:5	17, 20, 21 128:2	124: <i>1</i> 7 127: <i>4</i> , 6
< U >	value 78:17, 18	Vitae 3:4 9:12	whichever 13:5	workplace
U/T 3: <i>14</i>	Vancouver	VMOS 56:22	whistleblowers	66:10 71:1, 3, 7
Uhm-hmm 31:5	34:13 39:16	57: <i>4</i> , 19	97:24	works 26:2
ultimate 16:20	40: <i>14</i> 41:2	Vogel 2:12	windshield 56:9	32:4 35:5 40:4
123:9	variables 44:15	voice 43:3	winter 73:15	42:11, 24 66:15
ultimately 54:22	134:24	106:2 <i>1</i> 107: <i>1</i>	81:3, 7, 10	world 105:17
55:20 74:4	varied 41:17	voices 34:20	winters 124:13	142:17
80:2 <i>0</i>	77:18	volume 114:4	wish 22:7	worry 16:14
umpteen 145:3	variety 62:5		witness 5:15,	44:9 114:24, 25
understand	various 34:1, 20	< W >	19, 22	worse 41:8
6:23 28:6	63:6 78:3 86:3	wait 38:10	wondering	write 48:20
29:21, 22 45:24	88:3 89:7	waiting 123:9	21:21	writing 11:8
63:18 68:16	111:8 122:3	143:17	wood 131:15	132:1, 11
76:20 113:14	131:4	walk 113:23	word 36:13, 14	written 36:3
114:3 125:22	vehicle 56:14,	walks 69:25	53:5 58:6	38:13 48:22
understanding	19, 23 57:4	walk-through	140:14	58:18, 21
9:3 24:22 31:2	131: <i>11</i> 135:8,	38:5	work 7:24 8:11	wrong 16:7
32:12 49:2	10 136:12	wanted 80:15	13:3, 7, 23 14:6	60:5 108: <i>1</i>
52:4 59:9 60:4	vehicles 25:21	111:4	18:19 22:12	110: <i>18</i>
62:9 63:23, 24	56:5, 7, 11 57:1	wants 50:7, 9	23:24 25:4	110.70
64:2 65:6	93:8 102:11	washroom	26:4, 10 27:2,	< Y >
70:16 92:21	131:7, <i>11</i>	121:19	14, 18, 21, 24, 25	yard 7:10, 24
118:15 130:2	139:24 140:1, 6	wave 51:6	28:1 33:6	38:7 39:25
undertaken 3:9	vehicle-specific	ways 28:19, 20	34:24 42:4	45:25 54:14
18:23	135:3	29:16 33:19	47:9 50:15	yeah 22:22
undertaking	vein 131:2	84:2 95:9	53:15 54:6	24:14 26:16
135:23	Venditti 15:18	wayside 97:4,	55:13 58:13, 16	28:12 33:25
UNDERTAKINGS	verbiage 58:21	10 98:19 115:9	60:17 63:4	38:18 40:7
3:12		weather 123:7	69:4 72:18	45:4 46:7 48:4,
unfortunate	146:19	129: <i>9</i> , <i>1</i> 2	76:12, 16, 17, 18	18 49:13 50:19
41:2 <i>4</i>	versa 137:18	website 4:25		56:22 60:18
Units 15:5	version 52:9	week 23:4 51:6	78: <i>17, 19, 24</i> 81: <i>18</i> 83:22	64:3, 22 66:23
unsafe 55:13	119:13	85:8	95:2 104:12	69: <i>11</i> 71:5
62:6			110:17, 23	74:11 75:8, 12
	versus 54:5	weekdays 91:4		,
unsung 43:8	102:12	weekend 91:1, 5	114:4 116:4, 9	77:11 78:17, 21
141:5	vet 36:1 103:19	weekly 112: <i>16</i> , <i>17</i>	117:9 120:16,	79:9 80:7, 13 81:13 83:18
update 28:13	vetted 37:9		21 124:15	
updated 6:23	102: <i>15</i>	weeks 85:7	132:23 133:8	84:3 86:1, 12,
21:8 39:15	vetting-in 104:24	93:22 94:9, 11	Workaround	22 88:21 89:11 90:4 91:8
57:22, 25 66:23		105:2, 4 113:14	18:20	
updates 20:18	vice 137:17	130:21	worked 8:2	92:25 99:3
58:3 66:24 67:7	Videoconferenci	weld 129:22, 23	35:9 44:11	103:16 104:6, 8
up-to-date 6:19	ng 1:14	welded 129:11	47:4 66:20	106:24 107:1
urgent 109:4	view 25:1 26:3	well-thought-out	83:5 128:2	108: <i>13</i> 111: <i>3</i> , <i>8</i> ,
Urquhart 2:12	101:22 114:13	25:17	working 6:25	25 112:9 117:4
uses 35:1,2	115:17 118:2	west 124:15, 18,	8:7, 19 9:20	118:15, 19
108: <i>1</i> , <i>4</i>	views 102:23	19	25:22 26:2	122:10 125:6
	143:11	wet 73:6	29:20 35:15, 25	128:16 133:15
< V >	Virtual 2:20	wheel 84:12	36:1 37:10	138:22 142:18
Vaguely 99:21		125: <i>14</i> , <i>18</i> , 23	38:15 39:16	145:4
validate 119:11	1	1	47:15 57:14	1

year 10:8, 10	54:2 55:1, 25	128:10, 13, 21		
29:11 38:20	56:13, 18 57:15,	130:1, 14 131:1,		
48:13 66:24, 25	19 58:2, 7, 9	8, 24 132:9, 19		
67:9, 16 68:24	59:2, 25 60:4,	133: <i>10</i> 134: <i>4</i> ,		
74:20 120:6	19 62:13, 25	15 135:12, 19,		
123:14, 16	63:17 64:1, 8,	22 136:2, 16		
125:10 141:5	24 65:5, 13, 24	137:1, 8, 25		
year-end 37:22	66:19 68:16	138: <i>14</i> , <i>19</i>		
yearly 38:10	69: <i>7</i> , <i>11</i> 70: <i>1</i> , <i>9</i> ,	139: <i>6</i> , <i>20</i> , <i>25</i>		
68:8, 13	13, 20 71:9, 16	140: <i>10, 18, 24</i>		
years 6:21	72:3, 14, 21	141: <i>1</i> 7 142: <i>4</i> , <i>9</i> ,		
9:25 10:9 11:5	73:21 74:7, 12,	14, 24 143:5, 11,		
12:3 15:20	15 76:3, 11, 20,	<i>19</i> 144: <i>4</i> , 16		
30:20 39:17	24 77:3, 8, 14,	145:7, 11, 14		
48:25 70:8	16 78:13, 25	yup 60:9 70:19		
73:9 74:20	79:4, 13, 18, 22	76:23 107:20		
84:11 86:7	80: <i>10</i> , <i>1</i> 7 81:2,	109: <i>12</i> 118: <i>19</i>		
96:21 97:3	8, 19, 24 82:1	128:24		
102:1 122:4	83:1, 12, 20			
126:19	84:16 85:13, 23	<z></z>		
years'ish 10:8	86:17, 22 87:1,	zero 143:3		
Young 2:3 4:5	11, 17, 22 88:13,	Zoom 1:14		
6:12, 16, 18, 22	16 89:2, 20, 25			
7:23 8:2, 6, 10,	90:5, 12, 18, 23			
22 9:8, 14, 18,	91:6, 15, 19			
22 10:1, 5, 11,	92:1, 4, 8, 17, 21			
17, 24 11:15, 20,	93:24 94:17			
22 12:4, 7, 16 13:1, 10, 13, 16,	95: <i>1, 14, 24</i> 96: <i>5, 11, 16</i>			
18 14:7, 12, 18	97:9, 15, 25			
15:7 16:3, 6, 11,	98:14, 23 99:4,			
14, 25 17:5, 24	18 100:1, 8, 12,			
18:3, 21 19:17	20 101:7, 15, 21			
20:5, 11, 19	102:6, <i>17</i> , 23			
21:2, 5, 10, 17	103:2, 12, 21			
22:15, 23 23:10,	104:6, 9, 19, 22			
19, 23 24:5	105:9, 12, 21			
25:1, 18 26:3,	106:1, 8, 12, 18			
11, 17, 21, 25	107:3, 7, 17, 21,			
27:9, 16 28:4,	25 108:12, 17,			
13 29:16, 23	21, 25 109: <i>10</i> ,			
30:7, 13, 22	<i>15, 21</i> 110: <i>10</i> ,			
31:2, 6, 14, 17,	21 111:1, 11			
21 32:11 33:19	112: <i>1</i> , <i>6</i> , <i>21</i>			
34:2, 21 35:2, 7,	113: <i>8</i> , <i>1</i> 2 114:2,			
12, 15 36:9, 21	<i>13, 18</i> 115: <i>3, 14</i> ,			
37:2, 19 38:14,	17, 21 116:12			
23 39:1 40:6, 8	117:6, 24 118:7,			
41:20 42:3	15, 22 119:17,			
43:11 44:20, 24	23 120:9 121:6,			
45:21 46:17, 23	10, 14, 20 122:1,			
47:13, 24 48:5,	8, 12 123:8, 21,			
16 49:1, 11, 15,	25 125:4, 13, 21			
21 50:17 51:8	126:20, 25			
52:1, 19 53:14	127:12, 19	1	1	1