



DECISION

Fair Work Act 2009
s.739—Dispute resolution

Toll Transport Pty Ltd T/A Toll Shipping

v

Transport Workers' Union of Australia (C2018/3232)

DEPUTY PRESIDENT CLANCY

MELBOURNE, 20 JUNE 2018

Dispute about a matter arising under an enterprise agreement.

Background

[1] On 13 April 2017, Toll Transport Pty Ltd (Toll) filed an application under s.739 of the *Fair Work Act 2009* (the Act) for the Fair Work Commission (Commission) to deal with a dispute.

[2] Toll initially made application under clause 15 – *Dispute resolution procedure* of the *Toll Group – TWU Enterprise Agreement 2013-2017* (the 2013 Agreement). The 2013 Agreement was approved by the Commission on 5 November 2013 and commenced operation on 12 November 2013. The nominal expiry date was 30 June 2017.

[3] On 8 December 2017, the Commission approved the *Toll – TWU Enterprise Agreement 2017-2020* (the Agreement) which commenced operating from 15 December 2017. At a hearing before me on 9 February 2018, I indicated to the parties that I would require them to address me on how the dispute might be progressed, given this development. Toll subsequently filed an application pursuant to clause 15 – *Dispute resolution procedure* of the Agreement and the parties were broadly in agreement as to how the dispute might be progressed. The parties have agreed to direct referral of the dispute to the Commission (clause 15(b) of the Agreement) and pursuant to s.589(1) of the Act, I will order that for the purpose of clause 15(d)(i) and (iv) of the Agreement, the evidence and submissions given in relation to the application made under the 2013 Agreement (C2017/1983) is taken to be evidence and submissions put before the Commission pursuant to the application filed pursuant to clause 15 of the Agreement. Further, I will order the agreed question for arbitration submitted to the Commission on 30 May 2017 is taken to be before the Commission and is the agreed question as part of the hearing of this matter.

[4] The dispute relates to whether Toll has a right to further implement Guardian technology in its Toll Liquids (Liquids) and Toll Linehaul & Fleet Services (Linehaul) and DVR Cameras in its Liquids business. Toll describes the Guardian as an in-cab, real time, fatigue alerting and distraction monitoring system and the DVR Cameras as inward and outward facing vehicle cameras which record footage of the driver and the road. The

Guardian technology relies on infrared technology to track driver eye behaviour with audio and seat vibration alarms which sound immediately to alert the driver of fatigue events. Toll is notified of the event in real time. The Guardian technology and DVR Cameras are currently in use in a number of locations across the Liquids business.

[5] The dispute was the subject of an initial conference on 20 April 2017, however the matter did not resolve and parties were advised to notify my chambers when a telephone mention was required. On 10 May 2017, Ms Katrina Anderson, legal representative for Toll, advised the matter remained unresolved and a directions hearing was sought. Following the directions hearing on 17 May 2017, I caused directions to be sent to the parties for the filing of material ahead of the hearing. The matter was initially set down for hearing for 15 August to 17 August 2017, however, to allow for amendments to the programming of material, the hearing was later re-listed for 12 to 13 October 2017.

[6] Following completion of the hearing on 13 October 2017, directions were issued for the filing of final written submissions. The final material was received on 8 November 2017.

[7] At the hearing, I granted permission for both parties to be represented by a lawyer, having had regard to the complexity of the issues raised in the proceedings. Mr Andrew Denton of counsel appeared for Toll and Mr Mark Gibian of counsel appeared for the Transport Workers' Union of Australia (TWU).

[8] Witnesses giving oral testimony for Toll included Mr Sean Hepburn, Mr Paul Felsovary and Dr Stephen Dain. Doctor Dain gave his evidence via telephone from the United States.

[9] Witnesses giving oral testimony for the TWU included Mr Stephen Gibbs, Mr Dean Clifford, Mr Grant Hosking, Mr Bradley Osland, Mr Kevin Markham and Mr Colin Markham.

[10] All witnesses were the subject of cross-examination.

[11] As outlined above, there was a subsequent hearing on 9 February 2018, a conciliation conference took place on 13 March 2018 and final oral submissions were heard on 20 March 2018. My consideration of the issues raised by the application and my ultimate conclusion commences at paragraph [328] below.

Question to be determined

[12] On 30 May 2017, Ms Anderson notified the Commission that the parties agreed on the following question for arbitration:

“Does Toll have a right to further implement an infrared driver fatigue / distraction monitoring system, and an upgraded digital video recorder (with both an inward and outward facing camera monitoring system), having regard to the following concerns of TWU members:

Digital Video Recorder

1. The digital video recorder is unreasonably intrusive including but not limited to recording non-driving activities;
2. The capacity for footage or data captured by the digital video recorder to be used for a purpose other than to ensure safe driving;

Infrared Driver Fatigue / Distraction Monitoring System (“System”)

3. The infrared light emitted from the System may cause health problems including but not limited to damage to a driver’s eyes;
4. The lack of definitive proof that the infrared light emitted from the System is safe;
5. The lack of definitive studies into the effect of the infrared light emitted from the System during prolonged night driving;
6. The lack of definitive studies into the effect of the infrared light emitted from the System on sight;
7. The capacity for data captured by the System to be used for a purpose other than to ensure safe driving.”

Relevant clauses in the Agreement

[13] Clause 15 of the Agreement provides:

“15. Dispute resolution procedure

- (a) In the event that a Dispute arises, and subject to clause 15(b), the Parties will attempt to resolve the Dispute through consultation at the area within Toll's business at which the Dispute arises.
- (b) Clause 15(a) will not prevent a Dispute being referred directly to the FWC under clause 15(c) where the nature of the Dispute requires the FWC's immediate involvement.
- (c) If the Dispute is unable to be resolved through consultation under clause 15(a), or clause 15(b) applies, the Dispute may be submitted to the FWC for conciliation. For this purpose, the action the FWC may take includes:
 - (i) arranging conferences of the parties or their representatives at which the FWC is present; and
 - (ii) arranging for the parties or their representatives to confer among themselves at conferences at which the FWC is not present.
- (d) If the Dispute is not resolved in conciliation conducted by the FWC, the FWC will proceed to arbitrate the Dispute and/or otherwise determine the rights and/or obligations of the parties to the Dispute. In relation to such an arbitration:

(i) The FWC may give all such directions and do all such things as are necessary for the just resolution of the Dispute. The FWC may exercise powers of conciliation, arbitration and declaratory relief in relation to the Dispute, including all related procedural powers such as those in relation to hearings, witnesses, evidence and submissions.

(ii) The FWC should apply the rules of evidence that would ordinarily apply to a hearing before the FWC under the Act.

(iii) Before making a determination, the FWC will give the parties an opportunity to be heard formally on the matter(s) in dispute.

(iv) In making its determination, the FWC will only have regard to the materials, including witness evidence, and submissions put before it at the hearing and will disregard any admissions, concessions, offers or claims made in conciliation.

(e) The decision of the FWC will be binding on the Parties subject to the following:

(i) There will be a right of appeal to a Full Bench of the FWC against the decision, which must be exercised within 21 days of the decision being issued or within such further time as the Full Bench may allow.

(ii) The appeal will be conducted in accordance with the legal principles applying to an appeal in the strict sense.

(iii) The Full Bench, or a single member on delegation, will have the power to stay the decision pending the hearing and determination of the appeal.

(iv) The decision of the Full Bench in the appeal will be binding upon the parties.

(f) Until the Dispute is resolved by agreement, conciliation or arbitration, the status quo before the Dispute arose will be maintained and work will continue without disruption. No party is to be prejudiced as to the final settlement by the continuance of work in accordance with this procedure.

(g) For the purposes of the procedure outlined in this clause, a Transport Worker may appoint a representative of their choice, which may include the Union. Toll will recognise any representative appointed by a Transport Worker”

[14] Clause 40 of the Agreement provides:

“40. Safe system of work

Toll and the Transport Workers will take all reasonable steps to ensure that all work performed by Transport Workers is performed in accordance with a safe system of work which must include, where appropriate but not necessarily limited to the following:

(a) Ensuring that all transport work is performed in accordance with documented safe scheduling plans and shift rosters that take account of the following:

- (i) the trip to be undertaken by a driver;
- (ii) the actual time required to perform the freight task safely;
- (iii) the actual distance travelled to perform the freight task safely including any urban driving observance of any detour or road block;
- (iv) fatigue-related safety concerns;
- (v) the number and types of loads transported by the driver each trip and the time reasonably required to load and unload taking into account loading and unloading schedules and practices, delays and queuing times; and
- (vi) the period and frequency and likelihood of mechanical interruptions.

(b) Ensuring, where appropriate, that all transport work is performed in accordance with documented systems which manage the risk of driver fatigue including, but not limited to:

- (i) methods for assessing the suitability of drivers;
- (ii) systems for keeping accurate records of the start and finish times of each shift or freight task performed by a heavy vehicle driver and the relevant dates over which a shift or freight task occurs and the total number of waking hours for each driver (regardless of whether or not those hours were paid or unpaid);
- (iii) systems for reporting hazards and incidents;
- (iv) systems for monitoring driver's health and safety;
- (v) training and information about fatigue that is provided to drivers;
- (vi) systems for managing loading and unloading schedules and practices, including queuing practices;
- (vii) systems for reporting accidents, near misses, possible hazards or mechanical failures and contingencies to manage the risk of driver fatigue; and
- (viii) safe driving plans and a drug and alcohol policy consistent with applicable legislation and industrial instruments.”

Submissions of Toll

[15] It was submitted on behalf of Toll that the question for the Commission to determine is “whether Toll has a right and whether that right is to further implement certain technology

and then having regard to those seven expressed concerns that have been submitted.”¹ As to the question referring to whether Toll has a right to further implement these relevant technologies, this is because both of these technologies are currently in use within Toll.²

[16] Toll submitted that clause 40 of the Agreement places an obligation on Toll and employees to take all reasonable steps to ensure that all work is performed in accordance with a safe system of work. It says its initiatives fall squarely within clause 40 of the Agreement and the dispute can be resolved in Toll’s favour.

[17] Toll submitted that its initiatives represent an exercise of management prerogative, a principle enshrined in the jurisprudence of the Commission and its predecessors for decades. It said the Commission should not interfere with the right of Toll to manage its business, unless it is seeking something from its employees which is plainly unjust or unreasonable. Toll said this includes any decision about upgrading vehicle monitoring systems in the manner sought. Toll submitted the reasons the proposed upgrades to the vehicle monitoring system are not plainly unjust or unreasonable are:

- The proposed upgrades are aimed at reducing risk, noting that the road transport industry is an inherently risky industry and fatigue is a significant risk factor for Toll;
- The upgrades will be effective as the Guardian system can lead to a 95% reduction in safety incidents arising from fatigue and the upgrades ensure Liquids and Linehaul remain at the forefront of industry safety practices;
- The technology is already widespread, with the DVR Cameras and Guardian technology being used in a number of locations across the Liquids business and other parts of the Toll Group companies. Further, Liquids is subject to a number of commercial contracts which require use of the Guardian technology and a number of industries and direct competitors already use the Guardian technology;
- There are no barriers to implementation as there are no contractual or statutory barriers to the exercise of management prerogative Toll proposes. Further, the Agreement does not restrict Toll’s ability to implement the Guardian technology or the DVR Cameras, with the technology designed to address key requirements of employees’ jobs;
- Employees’ rights are protected as there are various procedures which set out precisely how Liquids will collect, store and use any data obtained through the technology, with Linehaul proposing to adopt procedures which largely mirror those existing in Liquids. Also, employees will be notified prior to the technology being activated in their vehicles; and
- Guardian is safe and Toll has provided the TWU with three reports regarding the technology, all of which confirm there are no health risks associated with the use of the technology. Further, international testing has been undertaken regarding the precise Guardian technology which Toll is seeking to implement which confirms the infrared light emitted from the Guardian system is safe for the human eye and there is no risk associated with it.

[18] Toll submitted the proposal to further implement the Guardian technology in its Liquids and Linehaul businesses and DVR Cameras in its Liquids business is contemplated

¹ Transcript PN 32.

² Transcript PN 54.

by the Agreement; and is in any event not plainly unjust or unreasonable. Accordingly, it submitted the Commission should not interfere with its decision to further implement the technology.

[19] Toll's closing submissions are considered further below, commencing at [194].

Evidence for Toll

Doctor Stephen Dain

[20] On instructions by Toll's legal representative to provide an independent expert report in respect of the proceedings, Dr Dain filed a statement and report prior to the hearing. Doctor Dain outlined his professional qualifications, being a registered optometrist currently in the position of Emeritus Professor, School of Optometry and Vision Science at the University of New South Wales. Doctor Dain said a proportion of his research publications address occupational and environmental optometry, which deals with the interaction of eyes and vision with the environment. He also advised he chairs the Standards Australia committee on eye and face protection.

[21] Doctor Dain was provided with the following reports regarding Guardian technology ahead of providing his own report:

- a) Report of Dr Sergio Leon-Saval and Dr Maryanne Large (both of whom are Physicists at the University of Sydney) dated 20 September 2013;
- b) Report of Dr David Sliney (Consulting Medical Physicist, Optical Radiation Hazard Analysis) dated 10 November 2013;
- c) Further report of Dr Sliney dated 19 July 2015; and
- d) An Intertek Test Report dated 29 July 2015.

[22] Doctor Dain noted that Dr Sergio Leon-Saval and Dr Maryanne Large are not known to him, though their report contains all the elements he would expect to see in such a report. Regarding Dr David Sliney, Dr Dain said he was very well known to him and that "[h]e is one of the foremost authorities in the world on optical radiation safety and protection."³ Doctor Dain said he was confident in relying on the aforementioned reports.⁴

[23] Of Intertek Testing Services Hong Kong Ltd (Intertek), a testing laboratory well-known to Dr Dain, he said they are ISO 17025 accredited for many of their testing activities, and while not accredited for these measurements (the measurement of the light emitted by the relevant devices⁵), "their accreditation in other areas means that their accreditation authority will pay attention to their work in this area and exercise some quality control of it as is required."⁶ Doctor Dain stated in cross-examination that while he would have a higher level of confidence if Intertek was accredited for these particular measurements,⁷ "the fact they're accredited in other areas gives them some credence about their measurements in this area."⁸

³ Exhibit A5 [Report] at [50].

⁴ Exhibit A5 [Report] at [48].

⁵ Transcript PN 1256.

⁶ Exhibit A5 [Report] at [50].

⁷ Transcript PN 1258.

⁸ Transcript PN 1257.

[24] Doctor Dain said the mechanism of damage relevant to this matter ‘is thermal’ and “[i]n the occupational environment, it is mainly lasers that pose a thermal risk to the eye.”⁹ Doctor Dain said of the applicable standards to lasers, Class 1 lasers are the equivalent of the “Exempt” category¹⁰ and “can be viewed without any risk of damage whatsoever. On the other hand, Class 3 and Class 4 lasers are, at least in theory, hazardous to eyes and controls and personal protection are required.”¹¹ Doctor Dain submitted that the levels from IREDs are “substantially less than the levels of Class 2, 3 and 4 lasers. In addition, IREDs have been used in eye movement recorders for at least 40 years.” Doctor Dain asserted he “would not expect such a system as the Guardian as being anything other than exempt.”¹²

[25] Of the question, ‘does the Guardian meet the Australian Standard, Photobiological safety of lamps and lamp systems,’ Dr Dain said “the thermal hazards to the crystalline lens and retina are the appropriate concerns.”¹³ On reviewing the relevant data, Dr Dain concluded the “Guardian meets the Exempt category (No-Risk) of AS/NZS IEC 62471:2011 by a substantial margin.”¹⁴ Doctor Dain also said “the Guardian, as described, is suitable for continuous use without risk to health”¹⁵ and he knows “of no reason to be concerned, even at the most remote level, about any affects, adverse or advantageous, from the levels of infrared from the Guardian”¹⁶ irrespective of whether prolonged driving is taking place by day or by night.¹⁷ Doctor Dain reiterated that there “is no possibility for the infrared radiation, which is emitted from the Guardian, to have any adverse effects on a driver’s sight.”¹⁸

[26] In light of the responses Dr Dain provided above, he was asked in his report if any of his responses would vary, considering he has not tested any vehicles which are equipped with the Guardian in the Liquids and Linehaul businesses. Doctor Dain said he “cannot imagine any basis upon which [his] responses... would vary... .”¹⁹

[27] Of concerns raised by the TWU in its evidence, Dr Dain was asked questions regarding a number of additional matters for inclusion in his report, including that Guardian technology has not been tested in the discrete circumstances which relate to the manner and way in which work is performed at Toll. Of this, Dr Dain said “[t]he significant relationship is the distance between the sources and the eye, the rest of the environment is irrelevant. The sources have been shown to represent no risk to the eyes and vision at 20 cm distance, where the typical use is said to be between 80 and 120 cm. If the characteristics of the vehicle mean that the Guardian is placed within 20 cm of the eye, then a further analysis will need to be done to illustrate that the Guardian is, as I would expect, still in the exempt category.”²⁰

⁹ Exhibit A5 [Report] at [13].

¹⁰ Ibid.

¹¹ Ibid.

¹² Exhibit A5 [Report] at [14].

¹³ Exhibit A5 [Report] at [16].

¹⁴ Exhibit A5 [Report] at [28].

¹⁵ Exhibit A5 [Report] at [29].

¹⁶ Exhibit A5 [Report] at [38].

¹⁷ Exhibit A5 [Report] at [41] and [43].

¹⁸ Exhibit A5 [Report] at [46].

¹⁹ Exhibit A5 [Report] at [47].

²⁰ Exhibit A5 [Report] at [52[i]].

Doctor Dain further outlined that “[f]or these thermal hazards, the safety issues beyond the longest time limit set do not increase... [w]hat is safe at 1000s or 10s (as applicable to the crystalline lens or retina respectively) is safe for ever.”²¹ Of the need for specific testing in the Toll vehicles for Dr Dain to be satisfied that Guardian technology is safe for continuous use, Dr Dain said “[s]ince the hazard analyses provided indicate substantial margins of safety and the only influence on the exposure of the eye are the distance between the unit and the eyes of the driver and I cannot envisage any other factors that might increase the exposures so much as to compromise safety. ... [t]here is, therefore, no need to conduct specific testing and, to put it stronger, no point in additional testing.”²²

[28] In response to a question pertaining to average hours of work, which may be up to 14 hours in some circumstances, and Dr Dain’s opinion regarding safety of the Guardian technology, Dr Dain said “[e]ven if the change from 8 to 14 hours were significant, this could be compensated for by halving the permitted values so that instead of a 1/500 safety margin for the crystalline lens, you would be left with a 1/284th safety margin. Still suitable for the Exempt classification.”²³

[29] Doctor Dain also addressed in his report the TWU’s contention that the relevant Australian Standard is presently under review, which could conceivably result in the removal of the Guardian technology’s Exempt classification. Doctor Dain said the provisions are consistent with the highest authority, the International Commission on Non-Ionizing Radiation Protection and the “limit values for no-risk (used for the Exempt category...) have remained unchanged for decades... .”²⁴ Doctor Dain went on to say “[t]he values of maximum permissible exposure have remained the same over that time and for all authorities and I have absolutely no reason to assume that they will change now.”²⁵ Doctor Dain concluded “I do not consider that there is any meaningful prospect of the Standard being reviewed such that the Guardian technology no longer falls within the Exempt classification.”²⁶

[30] During cross-examination, Dr Dain conceded he had not personally conducted testing of the relevant device.²⁷ He said he had done testing on LEDs but not in infrared emitting diodes.²⁸ In response to being asked whether the opinion expressed is based upon the theory of the way in which the eye works, but not an empirical study of the use of this kind of device over a long period, Dr Dain said “where the infrared comes from, the device that it comes from, is not relevant. It’s simply...the amount of the radiation that’s being absorbed in the structure, is what’s important. What kind of device it’s generated from...makes no difference.”²⁹

²¹ Exhibit A5 [Report] at [52[ii]].

²² Exhibit A5 [Report] at [54]-[55].

²³ Exhibit A5 [Report] at [57[ii]].

²⁴ Exhibit A5 [Report] at [59].

²⁵ Ibid.

²⁶ Ibid.

²⁷ Transcript PN 1266.

²⁸ Ibid.

²⁹ Transcript PN 1303.

[31] Doctor Dain acknowledged that drivers instinctively have some concern in relation to the device,³⁰ though was “happy to explain why this is not a problem, and to allay their concerns.”³¹ He said one matter he would explain to drivers is that “it is not like a biochemical hazard where a bit of a dose today could compound with a bit of a dose tomorrow...and there is a certain amount of additivity there. ...With this hazard, which is a thermal hazard, that simply doesn’t happen. So that really whether the worker...drives an eight-hour shift or a 14-hour shift, is absolutely irrelevant. And its only if anything has not happened by the 1,000 or 10 seconds, then you would – if it hasn’t [a]risen in that time, then you could be exposed to it for 100 years, and nothing would happen, because the temperature hasn’t risen sufficiently.”³²

[32] In response to being asked about whether he was aware of any empirical studies examining persons who have been exposed to the device over an extended period of time, Dr Dain said he was not and that he would not expect to see such reports “because there is no effect anticipated. ...[when there is] a predictable null outcome.”³³ Doctor Dain acknowledged that further testing or study of the device could be done, though said “it’s an exercise in futility. It’s an exercise in the predictable. ...I am 100 per cent confident in the results that you would come to at the end.”³⁴

[33] In the course of cross-examination, it was put to Dr Dain that some literature had been provided by the drivers which indicated different considerations may arise for persons with photosensitive eyes and there is a potential for devices which do not cause adverse effects for most people, to raise concerns for people with photosensitivity. Doctor Dain said “photosensitivity is related to the photochemical effects”³⁵ and that photochemicals “have absolutely no influence on the thermal hazards so these are not relevant to the hazards that we’re talking about here.”³⁶ Doctor Dain went on to say he was not aware of any studies that suggested eye irritation from use of devices of the relevant nature³⁷ and that furthermore, he “would not associate dry eyes with the use of such an instrument.”³⁸ Doctor Dain suggested he would be looking at a lower blink rate as being the primary cause of dry eyes, as for long distance drivers, their blink rates would likely be down quite substantially due to their concentration levels.³⁹

[34] In response to drivers seeing a red light being emitted from the device, Dr Dain said “in terms of effects on the eye, I don’t see any consequence of this.”⁴⁰ It was also put to Dr Dain that some of the vehicles, in addition to the Guardian, have other cameras with LED lights in them as well, situated in relatively close proximity to the face. Doctor Dain said he “did a calculation as to how many LEDs you would need there to reach something that was hazardous. ...it’s a number that is just impractically large, so yes, the other devices in there

³⁰ Transcript PN 1279-1280.

³¹ Transcript PN 1283.

³² Transcript PN 1301.

³³ Transcript PN 1284.

³⁴ Transcript PN 1296.

³⁵ Transcript PN 1332.

³⁶ Ibid.

³⁷ Transcript PN 1345.

³⁸ Transcript PN 1346.

³⁹ Ibid.

⁴⁰ Transcript PN 1342.

will add in but there is so much of a margin of safety in this that it's still a high margin of safety.”⁴¹

Mr Sean Hepburn

[35] Mr Hepburn, National Safety Manager for Liquids, said its operations involve the provision of national bulk road tanker services, specialising in the transport of dangerous goods. Freight types which are transported by Liquids include fuel, bulk chemicals and industrial gases. Mr Hepburn said the freight is transported in large, heavy vehicles, including semitrailers, B-doubles and three and four trailer road trains, with approximately 600 Tanker Drivers employed by Liquids to transport the goods. Mr Hepburn said drivers typically perform short distance driving work in metropolitan areas.

[36] Mr Hepburn said Liquids is proposing to upgrade its existing In-Vehicle Monitoring System (IVMS), which involves the following pieces of technology:

- a) Guardian – a real time in-cab fatigue monitoring and alerting system;
- b) MTData – a driver support, GPS and vehicle monitoring system;
- c) DriveCam – inward and outward facing cameras in vehicles which record 12 seconds of footage of the driver and the road in the event of a high G-force event (footage of which is transmitted to the manufacturer in real time and made available quickly to Toll⁴²); and
- d) DVR Cameras – inward and outward facing cameras in vehicles which record footage of the driver and the road at all times while a vehicle's engine is turned on (including when the key is in the ignition and turned on to the accessories⁴³).

[37] Mr Hepburn said Liquids is proposing to further implement the Guardian technology across its business and replace DriveCam with DVR Cameras. During cross-examination, Mr Hepburn said having the inward and outward facing cameras is required under certain contracts with customers.⁴⁴

[38] Mr Hepburn provided a description of the Guardian system as “a real time in-cab fatigue monitoring and alerting system which monitors the driver to reduce the incidence of micro sleeps (fatigue events) and to monitor for any major distractions to their concentration (distraction events).”⁴⁵ He said it uses face and eye tracking algorithms and where movements exceed certain parameters, an alert is activated. Mr Hepburn's evidence of the parameters of movements which would activate alerts were as follows:

- “(a) Fatigue events: Eye closure for greater than 1.5 seconds, when a driver is travelling faster than 6.4 kilometres per hour;
- (b) Distraction events: Glances away from the road for more than 4.5 seconds, in circumstances where the driver is travelling faster than 16 kilometres per hour; and

⁴¹ Transcript PN 1366.

⁴² Transcript PN 203-204.

⁴³ Transcript PN 210.

⁴⁴ Transcript PN 221, PN 223.

⁴⁵ Exhibit A1 at [28].

(c) Field of view events: When the camera is unable to adequately see a driver's face for 10 minutes or more, in order to monitor fatigue and distraction events."⁴⁶

[39] Mr Hepburn said the Guardian relies on a console mounted infrared camera to track the above events, with the camera on the dashboard. A computer unit and seat vibration unit are under the seat. When a fatigue event occurs, an alert in the form of an audible alarm and a vibration of the seat takes place. Mr Hepburn said in the case of a distraction or field of view event, the driver is not alerted at the time, but the footage is still reviewed. Liquids is notified of any fatigue or distraction event in close to real time, following a permitted two minute review period by the manufacturer in America. In the case of a genuine event, Toll would be contacted via telephone and the footage sent via email.

[40] Of MTData, Mr Hepburn outlined this is used for driver support and vehicle monitoring, through monitoring location and direction, distance and speed, fatigue break times, driver behaviour and G-force. This is not a camera system.

[41] Mr Hepburn described DriveCam as capturing vision of the driver and the road, while also recording audio. He said it is a two-way camera system which allows Toll to capture footage before and after any events, such as accidents, though it only records footage where there is an event that triggers the G-force sensor threshold. Where this occurs, the camera records for a period of 12 seconds – eight seconds before and four seconds after the event. Mr Hepburn said Standard Operating Procedure 1 (SOP-1) details how footage obtained through DriveCam can be accessed and how it is stored.

[42] Mr Hepburn said DVR Cameras are similar to the DriveCam Cameras, however, they record on a continuous loop while the vehicle is turned on and the footage is stored for approximately two weeks. Mr Hepburn said there is currently no remote access to any footage obtained through the new system and it cannot be viewed online, rather it must be physically retrieved from the memory card and viewed using specific inscription software. Mr Hepburn said the DVR Camera technology is preferred by Liquids because:

“(a) Given the dangerous nature of the goods which are transported by Toll Liquids, our customer base requires that all electricals (other than the engine) be turned off prior to entering a customer's terminal. A number of issues have been experienced in turning the DriveCam technology on and off, making it not particularly suitable for Toll Liquids' requirements;

(b) Toll Liquids has struggled to support the DriveCam technology from a technical perspective, and as a result, monitor and fix issues with the technology in a timely manner. This is because the DriveCam technology is being phased out of the broader TRGL line of business, which is responsible for monitoring and servicing the technology for Toll Liquids;

(c) In a number of cases, Toll Liquids has found that the footage obtained from the DriveCam system has not been enough to obtain a thorough understanding of the circumstances leading up to an accident or incident. In these cases, the eight seconds of footage that is recorded has been insufficient to properly understand events leading up to the incident; and

⁴⁶ Exhibit A1 at [30].

(d) Accidents or incidents have occurred without DriveCam recording any footage, because the event does not register as a G-force event. This is a result of the size of the vehicles which are used in the Toll Liquids fleet. Toll Liquids' vehicles are so heavy that they may not feel or register an impact to the same degree that a smaller vehicle would in the same or similar circumstances.⁴⁷

[43] Mr Hepburn said the DVR and Guardian technology is now installed and operational in approximately 225 vehicles in the Liquids business in:

- Newcastle;
- Wagga Wagga;
- Western Australia;
- Northern Territory;
- Tasmania;
- Brisbane Fuel;
- Brisbane BOC;
- Sydney Fuel;
- Port Kembla; and
- half of its Adelaide vehicles.⁴⁸

[44] As for Victoria, Mr Hepburn said the DVR and Guardian technology is installed in its approximately 60 Altona/Newport and Dandenong vehicles, but the Guardian technology is not operational.⁴⁹

[45] Mr Hepburn said as part of the most recent safety scorecard for the Liquids business, fatigue is within the top five safety risks, along with motor vehicle accidents, spills, fires and vehicle and pedestrian accidents. Mr Hepburn outlined various events, dating back to 2011, which have led to the decision to implement Guardian technology. Three examples given by Mr Hepburn were incidents where fatigue and a micro-sleep were identified as causes of the serious incidents. Another example was where a third party driver had caused a serious accident which resulted in a prolonged police investigation which Mr Hepburn submitted could have been avoided if there was an in-cab and forward facing cameras.

[46] Mr Hepburn said it appears the TWU is also acutely aware of the safety risks faced by workers in the road transportation industry. He attached to his statement an article published by the TWU to its website on 12 February 2017⁵⁰ which notes that Melbourne sleep researchers are developing a roadside test for fatigue which police could use. Mr Hepburn drew the Commission's attention to the following paragraphs in that article:

“Until recently, all that could be done was to advise sleepy drivers to take a power nap, as there was no way to scientifically determine whether a motorist was too tired to drive.

⁴⁷ Exhibit A1 at [45].

⁴⁸ Transcript PN 102-107.

⁴⁹ Transcript PN 108-110.

⁵⁰ Exhibit A1 – Attachment SH-8.

But by tracking eye movements, including the duration of blinks and how eyes scan the road, driver fatigue levels can now be measured.”⁵¹

[47] Mr Hepburn submitted the Guardian technology “is a proactive safety tool” which has the capacity to reduce safety incidents related to fatigue by 95%.⁵² Mr Hepburn attached a report from Monash University’s Accident Research Centre which, in conjunction with the manufacturer, he said involved research into the effectiveness of the Guardian technology. The report details that “[r]elative to no feedback being provided to drivers when fatigue events were detected, in-cab warnings resulted in a 66% reduction in fatigue events, with a 95% reduction achieved by the real-time provision of direct feedback in addition to in-cab warnings.”⁵³

[48] Mr Hepburn said, based on his own research, he is aware that Guardian technology is currently being used by a number of Toll’s competitors, including Linfox, K & S, Kalari, Ron Finemore Transport and Wettenhalls.

[49] In cross-examination, of the Guardian system, Mr Hepburn said there are two IR pods, each with three light emitting diodes which do not direct light into the driver’s eyes, but rather across the upper part of their body.⁵⁴ He then said it detects eye closure for greater than 1.5 seconds, as the light is directed to the face, including the eyes (though it is not active).⁵⁵ Mr Hepburn said if a fatigue event is detected, an in cab alarm will sound and the seat will vibrate; if there is a distraction event or a field of view event, there is no alarm or seat vibration but the footage would be sent to the manufacturer and Toll alerted.⁵⁶

[50] Also in cross-examination, Mr Hepburn said he was not sure whether Toll had sought approval or authorisation from the manufacturers of the vehicles as to whether it is appropriate to install the various elements of the Guardian system.⁵⁷ Mr Hepburn said he was aware there are standards and guidelines involved in making any alterations to the seat or internal aspects of the vehicles, though was not personally aware that Toll has ascertained from the manufacturer whether this is appropriate.⁵⁸

[51] In relation to the DVR Camera technology, Mr Hepburn said this provides more extensive camera footage, with greater capacity to track events leading to an incident which may in turn decrease investigation times and ensure drivers are not subjected to unnecessarily lengthy investigations. Mr Hepburn said the DVR Camera technology can also be used in the training and coaching of drivers.

[52] Mr Hepburn also addressed use of the video footage obtained through the upgraded IVMS and attached the Standard Operating Procedure for Vehicle Camera Safety Systems (SOP-1).⁵⁹ The procedure outlines that the Branch Manager or Most Senior Manager at Site

⁵¹ Ibid.

⁵² Exhibit A1 at [63(a)].

⁵³ Exhibit A1 – Attachment SH-9.

⁵⁴ Transcript PN 288, PN 291.

⁵⁵ Transcript PN 294, PN 298-299.

⁵⁶ Transcript PN 302-310.

⁵⁷ Transcript PN 420-421.

⁵⁸ Transcript PN 422-425.

⁵⁹ Exhibit A1 – Attachment SH-5.

is responsible for ensuring the use of the footage is managed according to Toll Privacy Policy, that only authorised persons have access to the footage and that it is collected and used for the purposes for which it was recorded, amongst other responsibilities. It is noted in the procedure that inappropriate use or circulation of footage beyond authorised personnel shall be subject to disciplinary action, up to and including termination of employment. Acceptable Use is outlined in the procedure and outlines that “[d]rivers shall be made aware that the vehicle they are driving is fitted with camera(s)...” and that footage will be collected and used for:

- Monitoring fatigue, distractions and field of view events, as identified using a Guardian system
- Investigating driving incidents, accidents and events
- Investigating any other incident involving the driver of the vehicle e.g. complaint by a member of the public or external authority

[53] In his statement, Mr Hepburn added the following points regarding use of the video footage:

- To coach drivers in order to improve safety outcomes, driver skills and behaviours
- To help exonerate drivers involved in an incident, and to recognise driver skill and performance
- When deemed appropriate, as evidence to discipline drivers (for example, where poor behaviour and safety issues are identified, or applicable road safety laws or Toll policies and procedures have been breached). But in practice, that the vast majority of disciplinary matters which might arise would be related to safety breaches.

[54] In cross-examination, Mr Hepburn said of investigating events, it is predominantly safety events which would be the subject of investigation, though he conceded the technology would be used by Toll to investigate any event it thinks is appropriate to investigate.⁶⁰ Mr Hepburn said in terms of the intent of the SOP, it is that there must actually be a reason why Toll would go to the DVR Camera recording and the Guardian system would give that reason because there is an event.⁶¹

[55] The procedure also details how video footage is to be accessed, including viewing taking place in a closed office or room, preferably with no one else present other than those who are authorised to view the footage, that discussions regarding the footage take place in the closed office or room, that footage should never be shown, forwarded or discussed with anyone other than the subject of the surveillance or other authorised persons and that footage must not be downloaded by, copied or distributed to anyone not authorised to view the footage. In cross-examination, Mr Hepburn affirmed the procedure can be reviewed at any time and can be changed as Toll thinks appropriate.⁶²

[56] In re-examination, Mr Hepburn said SOP-1 is a new policy, drafted out of experience gained in Western Australia where it has been in use for some time.⁶³ Mr Hepburn said he

⁶⁰ Transcript PN 265-269.

⁶¹ Transcript PN 279.

⁶² Transcript PN 286-287.

⁶³ Transcript PN 447.

was involved in the consultation when the policy was being formulated, together with the HR manager, project manager, general manager, HSC committees, drivers and the TWU.⁶⁴ Mr Hepburn said SOP-1 was not amended following the consultation process.⁶⁵

[57] Mr Hepburn said in addition to SOP-1, Liquids has two further procedures, “The Toll Liquids – Guardian Fatigue & Distraction Procedure” (SOP-2) and “The Toll Liquids – Guardian Fatigue & Distraction Driver Procedure” (SOP-3). Mr Hepburn said each procedure is intended to ensure that employees’ rights are subject to appropriate protections with respect to the Guardian technology and the DVR Cameras. Mr Hepburn said SOP-2, following consultation, was amended regarding notification of fatigue events after hours.⁶⁶

[58] Mr Hepburn said that Seeing Machines, the manufacturer of the Guardian technology, provided Liquids with a report entitled “Test report – IEC 62471 – Photobiological safety of lamps and lamp systems” (Intertek Report).⁶⁷ Mr Hepburn submitted that Seeing Machines has confirmed that Guardian technology is the precise technology that Liquids is seeking to further implement. He said the Intertek Report confirms the technology is compliant with the international standard, which is identical to the Australian standard and based on his review of the Intertek Report, the technology has been classified as being in the Exempt Group (i.e. has no risk associated with it).

[59] When it was put to Mr Hepburn that Intertek is not accredited to do the relevant type of testing, he said he was not aware of this.⁶⁸

[60] In his supplementary witness statement,⁶⁹ Mr Hepburn addressed concerns raised in witness statements filed by the TWU.

[61] First, in response to concerns raised in the statements of Mr Steve Gibbs⁷⁰ and Mr Dean Clifford⁷¹ about workers being exposed to the infrared emissions from the Guardian for periods of 10 to 12 hours, Mr Hepburn said Liquids Tanker Drivers would not be continuously exposed to the Guardian for a period of 10 to 12 hours per shift. Based on a 12 hour shift, Mr Hepburn submitted he would not expect a Liquids driver who performs work in a metropolitan area to be exposed to the Guardian for more than 5 hours per shift. This was based on the prescribed rest breaks and also that Tanker Drivers are required to load and unload the goods, which respectively take approximately one hour, during which the vehicle’s engine is turned off (meaning the Guardian is also turned off) and the Tanker Driver is outside the vehicle performing work.

[62] Mr Hepburn said he caused a report to be generated to verify the amount of driving work performed during a 12 hour shift in metropolitan Melbourne. From August 2016 to July 2017, the report shows the ignitions in the tanker fleet were on for an average of less than four hours.

⁶⁴ Transcript PN 448-449.

⁶⁵ Transcript PN 450.

⁶⁶ Transcript PN 453.

⁶⁷ Exhibit A1 – Attachment SH-10.

⁶⁸ Transcript PN 384-385.

⁶⁹ Exhibit A2.

⁷⁰ Exhibit R1 at [3]-[11] and [19].

⁷¹ Exhibit R2 at [3]-[7], [13]-[14] and [26].

[63] Mr Hepburn acknowledged that drivers performing regional deliveries or linehaul work would be performing driving work for around nine to 10 hours of a 12 hour shift, though would not be continuously exposed to the Guardian for that time in light of prescribed work and rest breaks.

[64] In cross-examination, Mr Hepburn acknowledged the concern of drivers about the long-term effects of the technology which is directed at their face and eyes.⁷² He said Toll had provided the driver committee with the Wirriga Report, authored by Dr Leon-Saval and Dr Large and prepared for BHP Billiton in relation to a truck which operated at a mine site. When it was put to Mr Hepburn that a number of witnesses for the TWU had spoken to the authors of the report who had cautioned against relying on the report in a context outside the subject of that study, Mr Hepburn said he had not personally made any enquiries with Dr Leon-Saval or Dr Large about their report and he was unsure if Toll had.⁷³ Mr Hepburn confirmed that Toll would not commission any study in relation to Toll's particular vehicles⁷⁴ and has not considered having a specific eye exam form part of the annual medical testing its drivers undertake, although he said eyesight testing was already part of that program.⁷⁵

[65] Second, Mr Hepburn addressed Mr Clifford's contention⁷⁶ that there are no clear policies which stipulate what action will be taken if a Tanker Driver has three fatigue events, nor any obligation on Toll to ascertain the reason for the fatigue events or to manage the issue. Mr Hepburn said SOP-2 sets out what will occur and places an obligation on Toll and the Tanker Driver to manage the issue, including discussing fatigue management training which has been undertaken and any matters believed to be impacting on the driver's fitness for duty.

[66] In cross-examination, Mr Hepburn acknowledged none of the policies, which he annexed as relevant to his statement, provide guidelines or processes to be followed in the event there is a referral for medical assessment or disciplinary action.⁷⁷

[67] Third, as to the TWU's contention there are no clear policies regarding false alarm warnings from the Guardian, Mr Hepburn said that the footage would be filed by the manufacturer and no further action would be taken. He said the only way Liquids would be aware of false alarms is through wider data reporting or if they are reported by the Tanker Driver. Mr Hepburn said the reporting is relied upon so corrective action may be taken to minimise the number of false reports, for example by adjusting the camera position. As no further action is taken against employees, Mr Hepburn said there was no need for Liquids' procedures to deal with this.

[68] In cross-examination, Mr Hepburn said if a fatigue event is detected, the manufacturer in the United States will review the footage and determine, through a set of criteria, whether they believe there has been a genuine fatigue event or not.⁷⁸ Mr Hepburn acknowledged that

⁷² Transcript PN 342-343.

⁷³ Transcript PN 370-371.

⁷⁴ Transcript PN 374-377.

⁷⁵ Transcript PN 398-403.

⁷⁶ Exhibit R2 at [30].

⁷⁷ Transcript PN 415-416.

⁷⁸ Transcript PN 326.

despite what may subsequently be determined to be a false fatigue event, the driver would be alerted that the system has recorded an event as the alarm would sound and their seat would vibrate.⁷⁹ Mr Hepburn said it was Toll's policy that the driver would then immediately pull over and contact their supervisor, though if the manufacturer determines the event to be false, Toll is not contacted.⁸⁰ Mr Hepburn said the nature of the conversation between the driver and supervisor might be "there's been no report through, must have been a false alarm. How are you feeling? etc."⁸¹

[69] Fourth, Mr Hepburn addressed concerns of Mr Kevin Markham,⁸² Mr Grant Hosking⁸³ and Mr Gibbs⁸⁴ regarding the possibility of improper use of the Guardian by Toll. He said the Guardian is primarily aimed at enhancing safety and while he could not rule out the prospect Toll would discipline a Tanker Driver as a result of footage obtained, its scope to do so would be very limited as there would need to be a genuine fatigue or distraction event for Toll to receive any footage from the Guardian and further, the footage Liquids receives is very limited. Mr Hepburn said he was not aware of any misuse of DriveCam and has not been advised of any concern held by Tanker Drivers. Mr Hepburn noted that in the event a Tanker Driver held concerns about misuse of the Guardian, they could raise an internal complaint or escalate a dispute in accordance with the Agreement.

[70] Fifth, Mr Hepburn responded to reports contained in the statements of Mr Kevin Markham,⁸⁵ Mr Brad Osland,⁸⁶ Mr Hosking⁸⁷ and Mr Clifford⁸⁸ of drivers becoming distracted and anxious as a result of the vibration of a driver's seat which occurs when there is a fatigue event. Mr Hepburn said Guardian technology has been in a range of Liquids vehicles for some time now and he is not aware of any concerns raised by Tanker Drivers regarding the alarms making them anxious. He said he has heard complaints about drivers being annoyed when the alarm sounds and the vibration occurs in circumstances of a non-genuine event. Mr Hepburn considered it unlikely the alarm would cause an "almighty shock" or cause a Tanker Driver to be distracted, as the vibration is small with a high frequency.

[71] Sixth, Mr Hepburn addressed the TWU's contention there is no pressing need for Toll to implement further fatigue management systems, because it already has in place a strong system. Mr Hepburn said it is accepted there are a range of measures in place designed to address fatigue management, though fatigue continues to be one of the top five safety risks facing the business. He said from 1 April 2016 to roughly the end of February 2017, the Guardian system has intervened in respect of 88 genuine fatigue events. In tendering his witness statement at the hearing on 12 October 2017, Mr Hepburn said as the technology has been installed in more vehicles, they have seen an average of between 10 to 15 fatigue events

⁷⁹ Transcript PN 328.

⁸⁰ Transcript PN 330-331.

⁸¹ Transcript PN 332.

⁸² Exhibit R5 at [30]-[33].

⁸³ Exhibit R3 at [18].

⁸⁴ Exhibit R1 at [15]-[16].

⁸⁵ Exhibit R5 at [28]-[29].

⁸⁶ Exhibit R4 at [21].

⁸⁷ Exhibit R3 at [16].

⁸⁸ Exhibit R2 at [29].

to be acted upon per month from April to September, although the latest September number has gone down to approximately 10 per week.⁸⁹

[72] Seventh, of Mr Kevin Markham's concern⁹⁰ that Tanker Drivers will only be alerted of a distraction event after 4.5 seconds, Mr Hepburn said these parameters have been set by the manufacturer following testing and trials of the technology in various environments. If the time threshold was decreased, it would likely mean there would be more false events.

[73] Eighth, Mr Hepburn addressed concerns raised by Mr Osland⁹¹ and Mr Hosking⁹² regarding placement of the Guardian. He said of the vehicles in Liquids that have Guardian installed, the camera and pods are on the dashboard and do not block the sun visor in any way. Of the concern that the location of the camera is dangerous because of sharp edges and corners,⁹³ Mr Hepburn said he is not aware of any instance where the technology has dislodged and has not had any concerns about this raised with him. He said the technology is installed by the manufacturer and securely fastened to the dashboard. Mr Hepburn also said of Mr Clifford's submission that the camera position is invasive and distracting being 68cm from his face,⁹⁴ that the technology was moved following concerns being raised that it created a blind spot. Mr Hepburn said since moving the technology, he has not been informed of any concerns about it being off-putting or distracting, despite the technology having been installed in the majority of the Liquids fleet for some time.

[74] Ninth, of the other driver monitoring systems available raised by Mr Hosking⁹⁵ and Mr Colin Markham,⁹⁶ Mr Hepburn said following extensive testing, Guardian technology was found to be the most robust technology and that it is less intrusive to drivers compared to other technology. Mr Hepburn said if Toll were to use the Volvo technology, of which there are a very small number of trucks, it would necessitate Liquids replacing its existing fleet with a fleet of Volvo trucks.

[75] Tenth, of Mr Clifford's submission that there is no need for the DVR Camera technology in light of incidents being very rare and that they are usually the result of external forces rather than Liquids' Tanker Drivers being at fault,⁹⁷ Mr Hepburn said he is aware there are, on average, 90 to 100 motor vehicle accidents nationally per year involving Liquids' Tanker Drivers, ranging from minor accidents to fatal accidents. He said irrespective of the cause, it does not eliminate the need for the technology so events leading up to an incident can be quickly identified, which decreases investigation times and associated costs and avoids Tanker Drivers being subjected to unnecessarily lengthy investigations.

[76] Eleventh, as to concerns raised by Mr Gibbs⁹⁸ and Mr Clifford⁹⁹ about DVR Cameras recording footage at all times when the engine is on or when the key is turned to accessory

⁸⁹ Transcript PN 128-131.

⁹⁰ Exhibit R5 at [27].

⁹¹ Exhibit R4 at [21].

⁹² Exhibit R3 at [17].

⁹³ Exhibit R2 at [28].

⁹⁴ Exhibit R2 at [24].

⁹⁵ Exhibit R3 at [6]-[8]

⁹⁶ Exhibit R6 at [9].

⁹⁷ Exhibit R2 at [20].

⁹⁸ Exhibit R1 at [11].

mode and thereby being monitored while on breaks, Mr Hepburn said while it is common for drivers to have breaks in the cab of their truck, any footage from the DVR Camera cannot be viewed online, nor can it be accessed remotely. To access the footage, it must be physically retrieved from the memory card in the tanker. Mr Hepburn said footage would only be obtained and reviewed if there is a need to, for example, following an accident, an incident or a complaint being made by a member of the public. He said Toll will not have designated persons reviewing footage on a day-to-day basis. Mr Hepburn also said that if a driver was to sit in the passenger seat while having their break, a good proportion, if not all of their body, would not be recorded by the DVR Camera and any concern could be alleviated.

[77] In cross-examination, Mr Hepburn said Toll had explored the possibility of the cameras not operating during break periods, despite the key being in the ignition, however the response from the manufacturer and installer was that the cameras on the MT Data unit and the DVR system are technically non-essential equipment and when entering a fuel terminal all non-essential equipment must be turned off.¹⁰⁰

[78] Twelfth, Mr Hepburn accepted Mr Clifford was concerned¹⁰¹ the DVR Camera installed in his vehicle has already been activated. Mr Hepburn said following the current dispute proceedings, the TWU and Liquids reached an agreement that the DVR Camera technology would be activated, but until the dispute was resolved, it would only be utilised in the event of a major accident or incident.

[79] The penultimate issue addressed by Mr Hepburn was Mr Clifford's contention¹⁰² that current policies in place regarding DVR Camera technology are general policies, rather than policies which specifically deal with the DVR Camera technology. Mr Hepburn said SOP-1 pertains to the IVMS and that the TWU was given an opportunity to provide feedback on the drafting of SOP-1. Mr Hepburn said the TWU at no stage raised any concerns of this nature.

[80] Lastly, of Mr Gibbs'¹⁰³ and Mr Clifford's¹⁰⁴ concerns of potential misuse of footage obtained through the DVR Camera technology by Toll, Mr Hepburn said SOP-1 is intended to ensure employees' rights are protected and contains sanctions to guard against inappropriate use or distribution of footage. Mr Hepburn said to the extent it is suggested DriveCam has been misused by Toll, he was not aware of this occurring and has not been made aware of any concerns of this nature held by Liquids' Tanker Drivers. Mr Hepburn concluded that any concerns about misuse could be raised with the union, an internal complaint could be made or the dispute could be escalated in accordance with the Agreement.

[81] In cross-examination, Mr Hepburn said Toll has not specified in any policy that it will not view or access or utilise footage of a driver while they are on their break.¹⁰⁵ He said Toll reserves the right to view and utilise the footage for any appropriate purpose per the SOP.¹⁰⁶

⁹⁹ Exhibit R2 at [21]-[22].

¹⁰⁰ Transcript PN 247.

¹⁰¹ Exhibit R2 at [18].

¹⁰² Exhibit R2 at [23].

¹⁰³ Exhibit R1 at [15]-[16].

¹⁰⁴ Exhibit R2 at [17].

¹⁰⁵ Transcript PN 248.

¹⁰⁶ Transcript PN 249.

Mr Paul Felsovary

[82] Mr Felsovary, National Risk Manager for Linehaul, started with the company in June 2016. He said in respect of Linehaul, this dispute only involves the implementation of the Guardian system, and not the upgraded digital video recorder. Mr Felsovary said the DriveCam system is used in Linehaul, though is only installed in the more recent vehicles to the fleet, with the intention that any new vehicles will also have the technology installed.¹⁰⁷ Mr Felsovary also said “Fleet Services” is not relevant to this application.

[83] Mr Felsovary said Linehaul provides long-distance transportation of freight for internal Toll customers and other entities within the Toll Group. He said generally, trips are greater than 500 kilometres and the vehicles range from B-double trailers to road trains. Linehaul drivers, of which there are approximately 200, work through the night to move Toll freight over long distances, though some longer journeys might also see work performed during the day. The Linehaul operations are based in Altona, Victoria, though there other Linehaul locations around Australia, with drivers based across Australia. Mr Felsovary appended to his statement a range of policies, standards and procedures relating to health and safety which I have had regard to.¹⁰⁸

[84] Mr Felsovary said road safety, including fatigue and its effect on road safety, is a significant issue for the road transport industry and the community. He provided some statistics by way of example, including that The Australian Bureau of Infrastructure, Transport and Regional Economics reports in the 12 month period to the end of March 2017, 217 people died from 196 fatal crashes involving heavy trucks or buses; SafeWork Australia found of the 583 fatalities in the road transport industry between 2003-2015, 92% occurred in the road freight industry; and a report by National Transport Insurance (NTI) found in 2013, 12.8% of major truck crash incidents in Australia where NTI was the insurance underwriter were caused by fatigue.

[85] Mr Felsovary submitted the fatigue risk within Linehaul is more significant than in some other parts of the Toll business because its operations often occur at night, meaning drivers are performing work at times that are at odds with when people normally function and they are more likely to be fatigued during work. Further, he said Linehaul drivers are driving on long stretches of uninterrupted road, often along familiar routes and only stopping for breaks. Mr Felsovary said he understood this exacerbates the risk of fatigue as it can lead to boredom and complacency, in contrast to the activity drivers in metropolitan areas experience. Mr Felsovary said fatigue is a difficult risk to control as it relies heavily on self-monitoring and self-reporting.

[86] Mr Felsovary said measures in place in Linehaul to minimise fatigue risk include: safe driving plans; fatigue training; drivers being accredited in the fatigue management scheme applicable in the State where they are based; compliance programs which include vehicle and driver monitoring through a GPS tracking system and DriveCam and log book reviews; fitness for work assessments; and accommodation at certain locations to promote good quality rest.

¹⁰⁷ Transcript PN 558-563.

¹⁰⁸ Exhibit A3 – Attachment PF-3 to PF-10.

[87] Despite the above measures, Mr Felsovary said fatigue-related events occur within Linehaul. Mr Felsovary outlined three incidents that had occurred in the previous six months where the likely cause of the incident was a microsleep.

[88] Of the Guardian system, Mr Felsovary said he has been informed the technology is identical to that being rolled out in Liquids. He said it was its intention that the policies and procedures supporting the implementation and use of the Guardian system will largely mirror those in place in Liquids, including the provisions relating to the collection, storage and use of the data collected.

[89] In cross-examination, Mr Felsovary said Linehaul, as well as having employee drivers, also engages owner drivers who are specific Toll drivers and do not provide services to other businesses.¹⁰⁹ He said fatigue management policies and the like apply to those subcontractors as well.¹¹⁰ Mr Felsovary said he is not aware of any proposal to insert the Guardian system into owner drivers' vehicles.¹¹¹ Mr Felsovary said at present, there is only one subcontractor used by Linehaul and he has not considered one way or the other whether the Guardian system should be installed on that vehicle.¹¹²

[90] Further in cross-examination, as to whether Toll has consulted with or obtained approval from the manufacturers of the vehicles to alter the vehicles with the installation of the technology, Mr Felsovary said it was his understanding that had occurred.¹¹³ However, he later said he is not aware of what correspondence occurred with the manufacturers of the vehicles in relation to the installation of the devices.¹¹⁴ Mr Felsovary said with the most recent installs in 12 new Volvo vehicles, they were performed at the Volvo factory prior to delivery.¹¹⁵

[91] Mr Felsovary said prior to the Guardian system being activated, Linehaul drivers would be briefed and notified.

[92] Mr Felsovary submitted the Guardian system is different to the various measures referred to in [86] which are reactive and assists Linehaul in understanding how or why an incident occurred. He said the Guardian system is proactive as it can prevent incidents from occurring in the first place. In his opinion, Mr Felsovary said the Guardian system will make a profound difference to the likelihood of fatigue-related events within Linehaul because of its capacity to prevent incidents caused by fatigue or distraction. He said it has the capacity to prevent injuries and save lives, both for Linehaul drivers and the general public.

[93] In his supplementary witness statement,¹¹⁶ Mr Felsovary said he had read the witness statements of Mr Kevin Markham,¹¹⁷ Mr Colin Markham,¹¹⁸ Mr Brad Osland¹¹⁹ and Mr Grant

¹⁰⁹ Transcript PN 582-585.

¹¹⁰ Transcript PN 586.

¹¹¹ Transcript PN 588-590.

¹¹² Transcript PN 606-608.

¹¹³ Transcript PN 626.

¹¹⁴ Transcript PN 631-632.

¹¹⁵ Transcript PN 626-629.

¹¹⁶ Exhibit A4.

¹¹⁷ Exhibit R5.

¹¹⁸ Exhibit R6.

Hosking¹²⁰ and where they had each generally described their work and rest break arrangements. In response to those matters, Mr Felsovary outlined the arrangements which are applicable across Linehaul. In Queensland, New South Wales, Victoria, Tasmania and South Australia, most Linehaul drivers operate under the Basic Fatigue Management scheme which stipulates for solo drivers, in any period of six and a quarter hours, they must not work for more than six hours work time and must have the rest of that period off work with at least a minimum rest break of 15 continuous minutes. Mr Felsovary said in Western Australia, work and rest hours are prescribed in state-based occupational health and safety legislation. This includes drivers having at least a 20 minute break from driving for every five hours of work time. Mr Felsovary also outlined the requirements in the Northern Territory and where work is performed across States or Territories. Mr Felsovary said drivers who perform two-up driving work have greater flexibility in their work and rest rules. Mr Felsovary noted that discretionary rest breaks are available across all States and Territories, which are beyond what is required by law and can be taken in scenarios such as where the driver believes they are impaired by fatigue, they become unwell and where road and weather conditions are difficult, stressful or dangerous.

[94] Second, Mr Felsovary said of criticisms made by Mr Kevin Markham,¹²¹ Mr Colin Markham¹²² and Mr Hosking¹²³ of Toll's reliance on the report of Dr Leon-Saval and Dr Large, that he accepted the Linehaul Drivers' Representative Committee (DRC) raised concerns with Linehaul management regarding its reliance on the Wirriga Report in the past. Mr Felsovary said the views were considered and the view was formed that despite the Wirriga Report relating to in-field testing of the Guardian technology in a different work environment, there were a number of general observations in the report which were relevant to Linehaul's operations. Mr Felsovary said this view was communicated to the DRC on a number of occasions.

[95] Third, Mr Felsovary addressed Mr Clifford's contention¹²⁴ that in circumstances where a driver has three fatigue incidents on a shift which are identified by the Guardian technology, there are no clear policies about the consequences for a driver and there is no obligation on Toll to find out the reason for the three fatigue incidents or to manage the issue. Mr Felsovary said while the Linehaul procedure is currently in draft mode, it is anticipated the procedure will largely mirror those in place in Liquids. He submitted one of the procedures sets out what is to occur in the event of a third fatigue alert and makes clear that when determined appropriate, Linehaul is to consider if additional preventative action is required to proactively support a driver's fatigue management. As for Linehaul procedure, Mr Felsovary said it is anticipated that where a driver has three fatigue alerts in a shift, the driver is required to park up the vehicle for the remainder of the shift and the supervisor or manager is to have a fatigue management discussion which would feed into Linehaul's investigation of the incident.

[96] In cross-examination, Mr Felsovary said the procedure regarding three fatigue events will mirror the Liquids' procedure, where if there is a fatigue event or the alarm goes off in

¹¹⁹ Exhibit R4.

¹²⁰ Exhibit R3.

¹²¹ Exhibit R5 at [10]-[13].

¹²² Exhibit R6 at [13]-[16].

¹²³ Exhibit R3 at [11]-[12].

¹²⁴ Exhibit R2 at [30].

the Guardian system, the driver is required to pull over and contact their supervisor.¹²⁵ In the event there is a third fatigue alert, they are required to park up for the rest of their shift.¹²⁶ He said following the third event and discussion with the driver, there may be a request to see a doctor, though that decision is up to Toll and there are no precise factors which it must consider under a policy.¹²⁷

[97] Fourth, Mr Felsovary responded to the TWU's claim that there are no clear policies in place regarding how Toll will deal with drivers who are the subject of false events. Mr Felsovary said he does not believe such policies are necessary as Linehaul will only be notified of genuine fatigue or distraction events. He said the footage is reviewed by the manufacturer within minutes of an event and if it is a non-genuine event, Linehaul is not notified and no further action is taken. Mr Felsovary said he has reviewed samples of various reports Linehaul will receive from the manufacturer and he is satisfied they do not contain any information about false events.

[98] However, in cross-examination, Mr Felsovary said he does not know how the manufacturer determines whether an event is a genuine fatigue event or false event.¹²⁸ Mr Felsovary said on the triggering of the alarm or seat vibration, they would be required to stop the vehicle and contact their supervisor.¹²⁹ This would happen when the device is triggered, whether it be a genuine or false event.¹³⁰

[99] Fifth, Mr Felsovary responded to concerns raised by Mr Kevin Markham,¹³¹ Mr Hosking¹³² and Mr Gibbs¹³³ regarding potential improper use of the Guardian technology by Toll. Mr Felsovary said while Linehaul may discipline drivers as a result of footage obtained through Guardian technology, this would only occur in very limited circumstances because there needs to be a genuine fatigue or distraction event for Toll to obtain the footage and the technology only records from the top of a driver's shoulder to just above their head. Mr Felsovary submitted this places significant limitations on the type of footage obtained through Guardian technology. Mr Felsovary reiterated that if there is a fatigue or distraction event which is non-genuine, Toll is not notified and no further action is taken. In cross-examination, Mr Felsovary said there is no specific policy or procedure which sets out when disciplinary action may be considered should three events occur in one shift.¹³⁴ Of the assertion that Toll has not followed proper procedure in the past regarding use of DriveCam, Mr Felsovary said it is not possible for him to respond as insufficient information has been provided, though if there was any concern, a number of options would be open to a driver, including raising a dispute under the Agreement.

¹²⁵ Transcript PN 759.

¹²⁶ Transcript PN 762.

¹²⁷ Transcript PN 774, PN 783-784.

¹²⁸ Transcript PN 794.

¹²⁹ Transcript PN 796.

¹³⁰ Transcript PN 797-798.

¹³¹ Exhibit R5 at [30]-[33].

¹³² Exhibit R3 at [18].

¹³³ Exhibit R1 at [15]-[16].

¹³⁴ Transcript PN 805-806.

[100] Sixth, Mr Felsovary responded to Mr Kevin Markham’s submission on the current fatigue management measures at Linehaul.¹³⁵ Mr Felsovary said he accepts that Linehaul currently have in place a range of controls which are designed to minimise fatigue risk, however, fatigue continues to be a significant issue affecting the business, the road transportation industry and the general community. He said Linehaul continues to see its drivers being involved in accidents and incidents attributable to fatigue and it is always considering other controls, like Guardian, which can minimise the risk of fatigue, particularly when there is capacity to reduce risk in a proactive manner.

[101] Seventh, Mr Felsovary responded to Mr Kevin Markham’s concerns¹³⁶ about the potential for incidents to occur prior to a distraction event being recognised by the system. Mr Felsovary said he has relied on the manufacturer’s recommendation that a distraction event only triggers after four seconds and when the vehicle is travelling over 30km/hr, which would also minimise non-genuine events being picked up by the system.

[102] Eighth, Mr Felsovary addressed Mr Osland¹³⁷ and Mr Hosking’s¹³⁸ concerns about the position of the Guardian system, particularly that it may block the sun visor and that the visor cannot be pulled down as the unit “goes off.” Mr Felsovary said despite most of Linehaul’s drivers working at night and therefore there is seldom use of the visor, of the seven Guardian units installed as at August 2017 in the Linehaul fleet, the left infrared pod and camera had been mounted on the dash and the right pod was initially mounted near the sun visor. The potential for the visor to block the right pod was identified and the pod was then moved. Mr Felsovary said if the sun visor did block the unit, an alarm would not be triggered, rather a ‘field of view’ event would trigger, with no alert to the driver, rather with footage sent to the manufacturer to determine if it was a genuine event or not.

[103] Ninth, Mr Felsovary addressed the suggestions of Mr Colin Markham¹³⁹ and Mr Hosking¹⁴⁰ that other systems could be used, such as the safety system which is a feature in some new Volvo trucks. Mr Felsovary said a number of factors were considered when Toll was considering its decision to invest in the technology and the decision was made that the Guardian technology was most appropriate for Linehaul’s business requirements. In terms of the Volvo technology, Mr Felsovary said if that were to be used, an entire fleet of new trucks would need to be purchased at a cost upwards of \$42,000,000. He said of the 21 Volvo trucks in the fleet, seven were equipped with Volvo’s driver support system. In cross-examination, Mr Felsovary said he was aware the safety technology in the Volvo trucks does not use infrared technology.¹⁴¹ He said of new Volvo vehicles, the Guardian system has been installed in addition to the Volvo support system.¹⁴²

[104] Penultimately, Mr Felsovary said Toll has responded to various concerns raised by the DRC. On 3 February 2016, the DRC provided Linehaul with a document entitled “*Toll Linehaul Drivers Representative Committee Response to Installation of Seeing Machines*”

¹³⁵ Exhibit R5 at [24]-[25].

¹³⁶ Exhibit R5 at [27].

¹³⁷ Exhibit R4 at [21].

¹³⁸ Exhibit R3 at [17].

¹³⁹ Exhibit R6 at [9].

¹⁴⁰ Exhibit R3 at [6]-[8].

¹⁴¹ Transcript PN 638-641.

¹⁴² Transcript PN 645.

Driver Safety System.” This document was provided to Dr David Sliney for comment and his response was appended to Mr Felsovary’s supplementary statement.¹⁴³ In summary, Dr Sliney said he was puzzled how the DRC could arrive at a conclusion that there are any health risks associated with the Guardian technology and such a conclusion could not be reached by reading his report on the latest model of the technology, or based on the documents that the DRC had cited. Doctor Sliney said the “product is clearly in the no-risk group and could be labelled “Exempt” in accordance with the IEC Standard IEC62471 for the photobiological safety of lamps and lamp systems, even though I did not explicitly state that it was “Exempt” in my report. I went further that [sic] the standard in examining the actual, reasonably foreseeable worst-case exposures during normal use.” Dr Sliney went on to say “[b]ecause of the large safety factor for the driver’s infrared exposure, an electrical fault could not produce a hazard to the driver.” The DRC provided a response to Dr Sliney’s correspondence, also appended to Mr Felsovary’s statement.¹⁴⁴ Mr Felsovary said there was an invitation sent out for a meeting of the DRC and there was further correspondence sent following that meeting to a range of concerns raised.

[105] In cross-examination, Mr Felsovary said he was aware of concerns raised by the DRC in relation to the operation of the Guardian system,¹⁴⁵ including that it involves the direction of infrared beams at the driver’s face and eyes for the duration of their driving shift¹⁴⁶ and that they wish to be satisfied there are no potential health effects.¹⁴⁷ As regards the Wirriga report, Mr Felsovary said he was aware that study had been undertaken in relation to use of a particular vehicle at a mine site¹⁴⁸ and that he became aware of that report when a member of the DRC provided it to him.¹⁴⁹ Mr Felsovary said he had not contacted either Dr Leon-Saval or Dr Large in relation to the report,¹⁵⁰ nor is he aware that anyone from Toll has done so.¹⁵¹ Mr Felsovary said he was not aware of drivers having requested a more specific study be undertaken in the context of Linehaul operations.¹⁵²

[106] Mr Felsovary said he obtained a number of reports so as to inform himself of the technology and understand whether the risks or the concerns of the drivers were valid,¹⁵³ and in doing so, sought a literature review of the systems and the IR technology.¹⁵⁴ He said he was not aware of any report being made available to him which had been commissioned by Toll,¹⁵⁵ nor whether Toll intends to undertake a specific study.¹⁵⁶ Mr Felsovary said he was not aware of any study in the world existing in relation to any potential long term health

¹⁴³ Exhibit A4 – Attachment PF-3.

¹⁴⁴ Exhibit A4 – Attachment PF-4.

¹⁴⁵ Transcript PN 651.

¹⁴⁶ Transcript PN 652.

¹⁴⁷ Transcript PN 656.

¹⁴⁸ Transcript PN 667.

¹⁴⁹ Transcript PN 673.

¹⁵⁰ Transcript PN 723.

¹⁵¹ Transcript PN 724.

¹⁵² Transcript PN 732.

¹⁵³ Transcript PN 677.

¹⁵⁴ Transcript PN 682.

¹⁵⁵ Transcript PN 713.

¹⁵⁶ Transcript PN 733 and PN739.

effects of the Guardian system.¹⁵⁷ Mr Felsovary said if the devices are implemented across Linehaul, Toll does not propose to monitor the drivers' health going forward, beyond the annual medical assessment which involves an eye test,¹⁵⁸ or implement any procedure to monitor whether there are any effects of these devices.¹⁵⁹

[107] Lastly, although he said no concerns have been raised with him about the Guardian technology being off-putting or distracting as a result of its location, Mr Felsovary responded to Mr Clifford's submission that the in-cab location of the Guardian camera is dangerous as they are attached to the roof or the dash¹⁶⁰ and is also distracting because it is 68cm from his face.¹⁶¹ Mr Felsovary said there are no Guardian cameras installed on the roof of trucks in Linehaul, all which have been installed are on the dash at least 90cm away from a driver's face. Mr Felsovary said the cameras are professionally installed and he does not believe, based on feedback and advice of others in the business (formerly heavy vehicle drivers) that the location would be off-putting or distracting. Mr Felsovary said the location of the camera does not obscure the view over the dash and the camera is less than the size of an iPhone, which in his experience, is commonly mounted by drivers in a similar position.

Submissions of the TWU

[108] The TWU submitted that while it has strong support for safe work in the transport industry, including proper management of fatigue, it does not support the introduction of technology that in of itself may put transport workers' health and safety at risk or is plainly unjust or unreasonable.

[109] The TWU submitted per clause 15(e) of the Agreement, the Commission may consider and determine matters outside the seven discrete questions posed by the parties in order for it to determine the rights and obligations of the parties to the dispute. Further, it said the introduction of the Guardian system into Linehaul and Liquids trucks is not a matter which falls under clause 40 of the Agreement as it does not involve transport workers performing a safe system of work. As to DVR Cameras in the Liquids vehicles where they will be able to monitor drivers' on their meal or rest break, the TWU submitted this also is not a matter within clause 40 of the Agreement. In the alternative, the TWU submitted the introduction of the systems as contemplated is plainly unjust and unreasonable and does not represent a proper exercise of Toll's management prerogative.

[110] The TWU contend the submission by Toll that the DVR Cameras are required to provide additional surveillance and understanding of incidents must be rejected as incidents involving Liquids tankers are very rare. It submitted using these cameras in their current configuration would record drivers on their meal and rest breaks, which could not aid in managing incidents with the vehicle or fatigue. The TWU said implementing a surveillance system of this type is plainly unjust and unreasonable and it could not be said to be something contemplated by the Agreement and should be rejected.

¹⁵⁷ Transcript PN 736-738.

¹⁵⁸ Transcript PN 748-753.

¹⁵⁹ Transcript PN 742-743.

¹⁶⁰ Exhibit R2 at [28].

¹⁶¹ Exhibit R2 at [24].

[111] The TWU submitted the Commission should not assume there is a pressing need for Toll to further implement fatigue monitoring systems in its Linehaul fleet, as Toll has introduced and promotes a strong system of fatigue management for employees in that area of the business, including drivers' sleeping quarters and considerable leeway in the allocated time for a journey to be completed. Accordingly, the TWU said the fatigue management system implemented by Toll for its Linehaul employed drivers is working well.

[112] In relation to the Guardian system, the TWU submitted the Commission should not assume that the system is safe. It submitted the Guardian system has not been tested or studied in the discrete circumstances in which Linehaul drivers work and has only been the subject of research in one real life situation, being the cab of a large mining truck at a mine site (Wirriga Report). The TWU said the report did not consider biological effects of the use of infra-red diodes being shone into a driver's eyes, rather proceeded on the basis of mathematical calculations. The TWU submitted the authors of that report have expressed that their research was only relevant to the circumstances of the mining truck and should not be relied upon for any other circumstances, including the use of the Guardian system in Linehaul's business.

[113] The TWU submitted there are few, if any, experts suitably qualified to undertake research into the biological effects of the use of infra-red lights shining into a truck driver's eyes. It said there is an absence of scientific or medical study into the effect of the Guardian technology in the discrete circumstances in which Linehaul drivers operate.

[114] The TWU said the IEC Standard 62471, under which the Guardian technology is rated in the 'Exempt' category, is currently under review, meaning it is conceivable the 'Exempt' rating could be removed rendering the opinion relied on by Toll and the manufacturer of the technology (Seeing Machines) unsafe and/or perhaps wrong.

[115] Of Toll's reliance on the Intertek study commissioned by Seeing Machines in 2015, the TWU submitted the Intertek report cannot be applied to the discrete circumstances in which Linehaul drivers operate as it is based on assumptions which are not applicable. For example, the TWU said it proceeds on an assumption that infra-red light will shine in a driver's eyes for no more than eight hours, however if introduced, it would shine in Linehaul drivers' eyes for between 11 and 14 hours. Further, the TWU says the study does not take into account external sources of light which shine into the eyes of drivers. Consequently, it submits the Guardian technology cannot be said to pose 'nil' risk to Linehaul drivers in the discrete circumstances in which they work.

[116] The TWU submitted until such adequate research has been undertaken which definitively establishes the system is safe, introducing the Guardian system is manifestly unjust and unreasonable as it has the potential to expose drivers to significant damage to their eyes.

[117] Finally, the TWU submitted Toll's policies do not specify how the company will manage drivers in the long term who have three fatigue events in a shift, or are the subject of false alarm warnings due to issues with the system wrongly activating. The TWU said the false readings are a source of anxiety and tension for Toll employees already using the system, which has been recognised by Toll in external publications.

[118] The TWU's closing submissions are considered further below.

Evidence for the TWU

Mr Stephen Gibbs

[119] Mr Gibbs filed a witness statement¹⁶² ahead of the hearing and was subject to cross-examination.

[120] Mr Gibbs said he has been driving trucks for about 30 years, working for Toll the past 14.5 years. He said he works out of the Toll Spotswood depot on a 21-day continuous rotating shift, undertaking 12-hour shifts from 4.00pm to 4.00am or 4.00am to 4.00pm. Mr Gibbs said approaching a refinery, he uses the cabin isolation switch to turn off all the electrical equipment, apart from headlights and the electric windows, which is a requirement of every refinery to ensure there is minimal risk of fire, or a spark causing a fire. He said an exception is the Shell refinery where the trucks can enter the refinery and turn the switch on when they approach the loading dock.

[121] Mr Gibbs said during his shift, he is required to have two 30 minute breaks in accordance with the fatigue management system. He said these breaks are generally taken in the truck due to restrictions in the dangerous goods code.

[122] Of the introduction of the DVR Cameras in the Liquids fleet, Mr Gibbs said he has been involved in meetings with the TWU and Toll regarding its implementation. He said the cameras, which are turned on from when the key in the ignition is turned, amount to bullying and harassment as he cannot have a meal break without being recorded. While in favour of safety measures, he said he must have his meal break in the cab and if he wants to listen to the radio or have the heating or cooling on, he must turn the key to the ignition mode. That the DVR Camera will then start recording, he said is a gross invasion of privacy and is entirely unnecessary.

[123] Mr Gibbs said of the proposal to Toll that the DVR Camera only be activated when the key was put to the start position, as opposed to the accessory position, Toll rejected this proposition. At the hearing, Mr Gibbs said he is also a qualified mechanic, and that it is possible for the DVR Camera to be isolated such that it is only activated “on the on, rather than the on and the accessory.”¹⁶³ Mr Gibbs said there can be no safety or fatigue management reason that the DVR Camera should be operating when drivers are having their meal break.

[124] In cross-examination, Mr Gibbs accepted that if anyone was sitting in the passenger seat, a good proportion, if not all of the person, would not be captured by the DVR Camera.¹⁶⁴ Mr Gibbs said it would not make sense for him to do so because he would need to move all his bags and equipment to have lunch.¹⁶⁵

[125] Mr Gibbs said he is concerned there are no safeguards to ensure Toll cannot use footage from the DVR Camera to discipline drivers for matters not related to an incident or

¹⁶² Exhibit R1.

¹⁶³ Transcript PN 846.

¹⁶⁴ Transcript PN 884.

¹⁶⁵ Transcript PN 884-885.

complaint. He said in the past, Toll had abused the DriveCam system in this way. At the hearing, he said he knew this because he had been shown footage by the one person designated to view the data.¹⁶⁶ Mr Gibbs submitted such safeguards should be in place to prevent Toll from trawling through footage to find instances of alleged misconduct.

[126] In cross-examination, Mr Gibbs was drawn to Mr Hepburn's statement¹⁶⁷ where he described footage is ordinarily stored for two weeks and then the camera begins to record over the footage and also that to obtain the footage, it must be physically retrieved from the tanker. Mr Gibbs said that this was wrong because management had advised him it was for 30 days.¹⁶⁸ Of SOP-1, Mr Gibbs said the policy, which was the same under DriveCam, was not followed by Toll.¹⁶⁹ Mr Gibbs accepted that SOP-1 does provide for the three occasions in which footage may be accessed.¹⁷⁰ He was also taken to other Toll policies, including the Guidelines for Use of Vehicle Camera Footage¹⁷¹ and Use of In-Cab Camera Footage¹⁷² and said he did not dispute the purposes of those policies are to ensure safe driving on the road.¹⁷³

[127] In relation to the Guardian system, Mr Gibbs said as far as he is aware, there are no scientific studies based on physical or behavioural activities that have been undertaken in relation to the effects of infrared light shining on a person's eyes. Further, he said there have been no studies in relation to the effect of infrared lights shining on truck driver's eyes, performing driving duties such as those performed by Liquids or Linehaul drivers, which positively state the technology is safe. This is of great concern to Mr Gibbs who said he considers the Guardian system should not be rolled out until these studies have been performed.

[128] In cross-examination, Mr Gibbs said while he had not read Dr Dain's report, he had heard it was his opinion that he knows of no reason to be concerned at the most remote level about any effects from the Guardian system and in response to being asked if he would oppose the implementation of the technology, Mr Gibbs said "they're not his eyes; they're mine."¹⁷⁴

[129] Mr Gibbs said the most recent draft policy Toll provided is very worrying as it allows Toll to force a driver to have a medical and take their accrued leave if they have more than two fatigue instances in one shift. He said it was requested that Toll only have the right to send drivers for medicals following a pattern of fatigue incidences and that drivers should not be forced to take annual leave, however Toll refused to make these amendments to their proposed policy.

[130] Further, Mr Gibbs said it was concerning there is no policy or procedure regarding what Toll will do where a driver is found to have sleep apnoea arising from use of the

¹⁶⁶ Transcript PN 994-995.

¹⁶⁷ Exhibit A1 at [44].

¹⁶⁸ Transcript PN 896-897.

¹⁶⁹ Transcript PN 909-910.

¹⁷⁰ Transcript PN 934.

¹⁷¹ Exhibit A3 – Attachment PF-4.

¹⁷² Exhibit A3 – Attachment PF-5.

¹⁷³ Transcript PN 961.

¹⁷⁴ Transcript PN 986.

Guardian system. Mr Gibbs said if this occurs, Toll should pay the cost of medical tests to see what can be done to assist the driver.

[131] Another concern articulated by Mr Gibbs was that it is possible drivers may have to replace glasses or sunglasses if their glasses prevent the infra-red light from focusing on the eye. He said Toll should bear the cost of any replacement glasses in these circumstances.

[132] Mr Gibbs also said Toll should pay for an eye examination during the regular medical all drivers must undertake. He suggested this is only fair if Toll are introducing technology that may have a damaging effect on the eyes.

Mr Dean Clifford

[133] Mr Clifford filed a witness statement¹⁷⁵ ahead of the hearing and was subject to cross-examination.

[134] Mr Clifford said he has worked in the transport industry for 35 years driving all manner of trucks, and has worked for Toll for a combined total of seven years on two separate occasions. Mr Clifford works in the Liquids division and does 12 hours shifts, though may work more than this on certain deliveries and hours are usually 3.00am to 3.00pm or 3.00pm to 3.00am.

[135] Mr Clifford said all refineries have a requirement that when a driver enters a terminal, the in-cab isolation switch is turned on, which deactivates all non-essential equipment (including cameras) with the exception of headlights and windows. Mr Clifford said these checks are modified and not consistent with Toll procedure due to terminal restrictions, though Toll has instructed drivers through toolbox meetings to follow terminal procedures. On driving out of the gate, Mr Clifford said he turns off the isolation switch in the cab, activating all of the electrical circuits, including in-cab cameras.

[136] Mr Clifford said his deliveries are usually to individual service stations and although the space to manoeuvre is often limited, he has never hit anything whilst delivering to a service station. He said to the best of his knowledge, there are very few incidents at service stations as they are professional drivers who drive defensively at all times. Mr Clifford said incidents involving tankers usually occur when they are turning left or right and are caused by other drivers not anticipating the turning circle of the truck or giving them enough room.

[137] As to rest and meal breaks, Mr Clifford said drivers take a break within the first five and a half hours of the shift and because the tanker should not be left unattended, meal breaks are taken in the cab of the truck in-between deliveries. He said he often has the key turned to the accessory site so the air-conditioning, heater and radio can be running.

[138] Of the DVR Camera, Mr Clifford said it is continuously recording when the key ignition is turned on. Mr Clifford said the TWU and Liquids' drivers support any reasonable measures which assist in making their jobs safer, and while the DVR Cameras may be of some assistance in promoting the safe operation of tankers, they are concerned the current method of its operation is highly intrusive with not enough safeguards to ensure Toll will not misuse footage to over officiate and discipline drivers. Mr Clifford said there is a DVR

¹⁷⁵ Exhibit R2.

Camera installed in his vehicle, and though he has been assured by Toll it is not activated, he said he can see a light in the camera at night which has led him to the belief it is operating. Further, he said Toll has made requests to act on some footage recovered from the system.

[139] Mr Clifford submitted that the DVR Cameras are not going to assist in ensuring that driver safety is maintained as incidents involving tankers are very rare, with the Liquids incident rate at 0.83%.

[140] Of the continuous recording of the DVR Camera, Mr Clifford said the TWU and Liquids drivers are concerned this is highly intrusive and invasive to privacy. He said during his break which he must take in the cab, he sees no reason why Toll should have footage of him eating or attending to personal matters. Mr Clifford said he was also concerned any footage of him on his break, even of innocuous activities, may be used by Toll to discipline him.

[141] Mr Clifford said the sensible solution to the concerns held would be that the DVR Camera does not activate until the keys are in the start position, and not when it is in accessory mode which would give them privacy during their meals. Mr Clifford submitted there could be no risk to safety or fatigue management as drivers would be on a break. Mr Clifford said Toll refused to do this on cost grounds.

[142] Finally in relation to the DVR Camera, Mr Clifford said the TWU and Liquids drivers are concerned there are no guidelines or policies about how Toll will use footage from the DVR Camera. He said the policy put forward by Toll is a general policy, not specifically for the DVR Camera and there does not appear to be any restriction on Toll going through footage to identify an incident that may have occurred four months prior which is not related to any driving incident or complaint.

[143] When taken to Mr Hepburn's statement which annexed SOP-1, Mr Clifford agreed it contains details of how footage taken from DVR and Guardian is to be used by Toll.¹⁷⁶ However, Mr Clifford said SOP-1 does not address his concerns. He said with the last camera system, there were similar policies and as a union delegate, he was aware that Toll misused the footage. He remains unconvinced SOP-1 would be followed.¹⁷⁷

[144] In relation to the Guardian system, Mr Clifford said it has been installed in the cab of his truck and despite the system not yet meant to be activated, he finds the position to be extremely invasive. He appears to have intended to say it is located 68cm from his face and his evidence regarding this is that it is off-putting and distracting while he is driving. Mr Clifford said the TWU and Liquids have reservations about the Guardian system and he is aware the Linehaul driver's committee has very strongly objected to the technology on the basis that there is no scientific proof that using infrared beams shining into Toll drivers' eyes for up to 10 to 12 hours is safe. Mr Clifford said he believes the only research done regarding using the infra-red beams in the manner proposed are theoretical studies or based on driving extremely large BHP mining vehicles, not the real-life circumstances of a truck driver operating a vehicle over 12 hours often at night.

¹⁷⁶ Transcript PN 1089.

¹⁷⁷ Transcript PN 1114.

[145] Mr Clifford said he had not seen the report of Dr Dain but he was aware that it was his expert opinion the Guardian system is safe. His response was, “they said the same thing about asbestos.”¹⁷⁸ As to measurements mentioned in Dr Sliney’s report, Mr Clifford said he sits inside some of those measurements in his usual seated position so it is his belief that “the jury is still out” on the new technology and whether it is safe over a long exposure.¹⁷⁹ He did not accept the expert opinion that there are no concerns whatsoever.¹⁸⁰

[146] Mr Clifford also argued the position of some of the infra-red cameras is highly dangerous, with some attached via brackets hanging from the roof and others on the dash. He said the cameras appeared to have hard, sharp edges which may dislodge and become a weapon which could injure the driver in a critical incident. He said the Guardian system is being used already in some areas of Toll’s business and that drivers have found the position of the infra-red camera and prospect of a false alarm and sudden vibration to be extremely distracting to their job, making them anxious and nervous.

[147] In relation to policies regarding use of the Guardian system, Mr Clifford said he is concerned there are no clear policies regarding what would happen to a driver if they have three fatigue events. He said there is no obligation on Toll to find out why the three events occurred or to manage the issue and there should be measures in place to assist a driver who has three such events. Mr Clifford said he is concerned the incident will be treated as a performance issue and drivers will be disciplined, rather than the issue being treated as an operational or medical issue.

[148] Mr Clifford said he understood certain types of glasses may prevent the infra-red light focusing on the eye. He said if a driver has to replace their glasses or sunglasses, this should be a cost covered by Toll. Further, Mr Clifford argued as there is uncertainty regarding use of the infra-red technology in the manner proposed, Toll should pay for the cost of an eye examination when the annual medical exams occur. He said such examinations would enable drivers to determine whether they have suffered any eye damage as a result of the infrared camera being trained in their eyes.

[149] Finally, Mr Clifford said he has suffered eye irritations in the months since the Guardian system was installed, including his eyes becoming very dry. He said his optometrist has prescribed eye drops and that the condition did not exist the last time he had an eye examination. Mr Clifford said he was concerned the cause of this was the Guardian system.

Mr Grant Hosking

[150] Mr Hosking filed a witness statement¹⁸¹ ahead of the hearing and was subject to cross-examination.

[151] Mr Hosking said he has been involved in the transport industry for over 45 years and for 25 of those years has been an employee of Toll. He drives trucks on long haul trips and

¹⁷⁸ Transcript PN 1145.

¹⁷⁹ Transcript PN 1147.

¹⁸⁰ Transcript PN 1148-1149.

¹⁸¹ Exhibit R3.

has never had an accident or serious incident. Mr Hosking outlined in his witness statement his typical weekly roster, which involves two return trips from Melbourne to Sydney.¹⁸²

[152] Mr Hosking said the Volvo truck he drives has an in-built driver alert system, though this has not been activated because Toll does not want to incur the costs of the operation.

[153] As a member of the Linehaul DRC, Mr Hosking said he has attended numerous meetings with Toll management and has an understanding of the relevant technology. Mr Hosking said his primary concern is that based on his understanding of research into the effects of infrared technology, there have been no physical or biological studies on the effects of infra-red light being shone directly on a truck driver's eyes for periods of up to 12 to 14 hours. He said his understanding of studies and analysis done to date is that they have been theoretical, based on mathematical calculations and that the studies were in relation to a different type of driving, using different vehicles to what they drive. Mr Hosking said Toll's reliance on the Wirruga Report, undertaken by BHP, was in relation to a mine site using extremely large mining vehicles during the day, whereas they operate in a much smaller cab driving predominantly at night for periods of up to 11 or 12 hours per journey.

[154] Mr Hosking said he had not read Dr Sliney's report of 25 July 2015. He noted the conclusion in that report that "the infrared illuminator pods and the LED emitters employed in the units tested do not pose a potential hazard to the eye," but said he still has concerns because this new technology has not been tested for the long-term.¹⁸³

[155] Mr Hosking submitted Toll has not, to date, been able to provide the DRC with information that definitively states it is safe to use the technology in the matter proposed. He said, in particular, he was concerned about the effects of the infrared technology shining on drivers' eyes during lengthy periods of night time driving.

[156] Mr Hosking said he does not want to be in a situation where his colleagues, or himself, find out too late that having an infrared beam shone into their eyes has caused irreparable damage to their eyes.

[157] Mr Hosking said the diodes used in the Guardian system are the same or similar to those in infrared remote controls for televisions, which come with explicit warnings that the infrared beam should not be shone in the eyes. Mr Hosking said this was extremely concerning as the diodes in the Guardian system are six times the amount in a television remote device. He said this suggests to him that the Guardian system would be six times more problematic. In cross-examination, Mr Hosking was asked about Dr Dain's statement which said "to come close to the limits for the exempt category would require several hundred IREDS."¹⁸⁴ Mr Hosking said he understood that point.¹⁸⁵

[158] Ms Hosking said the alarm and vibrating seat used in the Guardian system poses a risk in itself to drivers and the general public. He said he is aware of anecdotal reports from drivers who currently have the technology in their vehicles that when the seat suddenly vibrates, it causes them great anxiety and may cause them to react in an odd way.

¹⁸² Exhibit R3 at [4].

¹⁸³ Transcript PN 1449-1452.

¹⁸⁴ Exhibit A5 [Report] at [52[iv]].

¹⁸⁵ Transcript PN 1491.

[159] Mr Hosking said he was also concerned that the alert system may be triggered when pulling the sun visor down which may cause the alarm to be activated.

[160] Mr Hosking said his final concern was there are no safeguards in place by way of policies which would ensure the monitoring system could not be abused by Toll, such as using it as a tool to discipline drivers rather than manage fatigue incidents.

Mr Kevin Markham

[161] Mr Kevin Markham filed a witness statement¹⁸⁶ ahead of the hearing and was subject to cross-examination.

[162] Mr Kevin Markham said he has worked in the transport industry for 38 years driving interstate trucks and 26 of those years have been with Toll. He is based at Eastern Creek in Sydney and drives Sydney to Brisbane and the return corridor. He provided evidence about his typical working week.

[163] Mr Kevin Markham said he is a member of the Linehaul drivers' representative committee (DRC). He said he was provided with a copy of the Wirriga Report written by Dr Large and Dr Leon-Saval. He said it caused some concern as the report was in regard to an engagement by BHP and related to two extremely large mining trucks. He said in early 2016, his brother (Mr Colin Markham) and himself met with Dr Large and Dr Leon-Saval for approximately three hours and told them Toll were relying on the Wirriga Report to demonstrate that the Guardian system was safe. Mr Kevin Markham said both doctors were professionally and ethically concerned about this and considered it would be unsound to use their study in other circumstances. He said they stated they were physicists, not biologists, and they encouraged the drivers to obtain a report in relation to the biological effects of use of the Guardian system in their particular circumstances. Mr Kevin Markham said when they conveyed the doctors' concern, Toll refused to act upon it and said Dr Large and Dr Leon-Saval were seeking to obtain more work.

[164] Mr Kevin Markham said Mr Osland undertook a significant amount of research into the use of infrared beams and their safety, including whether there were any studies in relation to the drivers' specific work. Mr Kevin Markham said he, his brother and Mr Osland kept in touch over the months of Mr Osland's research and they identified a number of academic articles and documents which Mr Kevin Markham annexed to his statement.¹⁸⁷

[165] Mr Kevin Markham said in late 2015 or early 2016, himself and his brother sent two documents to Toll setting out their concerns in relation to the Guardian system.¹⁸⁸ Mr Kevin Markham was later given a response by Dr Sliney in relation to their concerns. Mr Kevin Markham said they responded to Dr Sliney's correspondence and this response was provided to Toll.¹⁸⁹

¹⁸⁶ Exhibit R5.

¹⁸⁷ Exhibit R5 – Attachment KM-1 to KM-9.

¹⁸⁸ Exhibit R5 – Attachment KM-10 and KM-11.

¹⁸⁹ Exhibit R5 – Attachment KM-12.

[166] Mr Kevin Markham said the DRC continued to meet with Toll management in 2017 but their key issues in the aforementioned correspondence were not addressed.

[167] Mr Kevin Markham said the drivers' primary concern is that the Guardian system is untested in their working environment. This is because there appears to be no studies or research into the use of infrared light shining into a truck driver's eyes for periods up to 12 to 14 hours, part of which is at night. Mr Kevin Markham said there are no studies on the use of six infrared diodes shining into a truck driver's eyes or whether it was safe for this to occur long term. Further, he said there appears to have been no studies on the effects of other forms of light, like LED headlights or street lights, shining into the eyes of drivers who already have the infrared light in their eyes.

[168] Mr Kevin Markham heard the evidence of Dr Dain and his concerns about the technology are heightened as a result.¹⁹⁰ He considers Dr Dain's area of expertise is in ultraviolet rather than infrared light.¹⁹¹ He also said he was aware Dr Sliney's opinion is that the units do not pose a potential hazard¹⁹² but he found the doctor's response to the DRC's concerns to be sarcastic.¹⁹³ Mr Kevin Markham said he accepts Dr Sliney's view that there is no risk in his field of expertise, but disputes whether the Guardian system is in the no risk category.¹⁹⁴ Ultimately, he said he would still have concerns unless there was a study that went for 20 years.¹⁹⁵

[169] Mr Kevin Markham submitted it was an invasion of his human rights having the infrared light shone in his eyes. He said he has not consented to the experimental use of infrared light being shone into his body through his eyes.

[170] He also said he values his eyes extremely highly, relying on them for work and that without good vision, his life would change catastrophically. He reiterated that his concern was that the technology had not been tested.

[171] As to the current fatigue management for Linehaul, Mr Kevin Markham said the current system is working. He said Toll has in place a number of fatigue management protocols, including being given ample time to make a journey, that there are fatigue management exercises which he does in the cab, that Toll maintains drivers' quarters in Sydney and Brisbane (and other depots) which allow drivers to rest and sleep between shifts, irrespective of whether they have worked overnight or during the day, and that employees are not rostered to come back onto a shift until there has been 9 to 12 hours rest.

[172] Mr Kevin Markham said he does not believe the Guardian system will achieve enhanced driver or general public safety. He said the timeframe for an alarm to be activated where vision strays is 4.5 seconds, however a fully loaded B-double travelling at 100km/hour can travel a long way in that period of time and it is quite possible an accident could already have occurred.

¹⁹⁰ Transcript PN 1831-1834.

¹⁹¹ Transcript PN 1871-1875.

¹⁹² Transcript PN 1838.

¹⁹³ Transcript PN 1846.

¹⁹⁴ Transcript PN 1854.

¹⁹⁵ Transcript PN 1896.

[173] Mr Kevin Markham also said he was concerned by anecdotal evidence from Toll drivers in other divisions who are already using the Guardian system, that it is extremely disruptive and intrusive into their working life. He said the technology is making them extremely anxious due to the real risk of false warnings and the sudden vibration of the seat. Mr Kevin Markham said he would be on edge the entire time driving his vehicle.

[174] Finally, Mr Kevin Markham said he was concerned there does not appear to be adequate safeguards in relation to the Guardian system and Toll not abusing it. He is concerned Toll will use the system to discipline drivers, rather than for enhancing safety and fatigue management. Mr Kevin Markham said he is concerned the triggering of false alarms could lead to Toll adopting the wrong conclusion if there is later a no-fault accident. He said the fear of discipline or termination as a result of false alarms would be a barrier to safe driving and may lead to drivers becoming highly anxious and more fatigued. Mr Kevin Markham said he was aware in the past Toll had not followed proper procedures regarding use of DriveCam and he is concerned the Guardian system could be used in a similar manner.

Mr Colin Markham

[175] Mr Colin Markham filed a witness statement¹⁹⁶ ahead of the hearing and was subject to cross-examination.

[176] Mr Colin Markham said he has been in the transport industry for approximately 39 years. He said 27 years ago he took up truck-driving on a part-time basis working for Finemores, which was later taken over by Toll. He said he has worked full-time for the last 13 years and has always been involved in interstate haulage.

[177] Mr Colin Markham said he works out of the Toll Mildura depot, driving 12-hour shifts between there and Sydney. Mr Colin Markham gave evidence about his typical working week, with the net effect of his roster being that he is behind the wheel for up to 11 hours at a time, mostly at night.

[178] Mr Colin Markham said he is a member of the Linehaul DRC and over the last two years, has actively been researching the Guardian system Toll intends to introduce. He said he is extremely concerned that the technology, particularly the infrared beams shining in Linehaul driver's eyes is inherently unsafe and untested in their work situation. Mr Colin Markham said their research had indicated there have been no studies into whether it is safe to shine an infrared light of the kind the Guardian system uses, into Linehaul drivers' eyes for up to 12 hours at a time, over four to six shifts while driving overnight.

[179] As to the reports which Toll relies on (the Wirriga Report and reports by Dr Sliney and Intertek), Mr Colin Markham said he has problems with all three. Regarding the Wirriga Report, Mr Colin Markham confirmed he and his brother, Mr Kevin Markham, had met with the authors of that report and he repeated similar evidence to that given by his brother in relation to that meeting and the authors' comments.

[180] Mr Colin Markham also said in May 2016, he sent an email to Professor Michael Ibbotson, Director of the National Vision Research Centre. He said on 2 May 2016, he received a response which stated the Professor was not aware of any studies which had

¹⁹⁶ Exhibit R6.

investigated the long-term biological effects of infrared light shining in the eyes, though noted that infrared was not his speciality.

[181] Mr Colin Markham repeated that once the DRC were advised that the Guardian system was intended to be rolled out in the Linehaul cabs, himself, his brother and Mr Osland undertook intensive research, predominantly on the internet, about the use of infrared technology and associated health risks with infrared light shining into people's eyes. He said they identified a body of academic opinions and studies, which were annexed to his statement.¹⁹⁷

[182] As to the Intertek report, Mr Colin Markham said the DRC and himself have a problem with some of the findings. He said the report states the infrared diodes used in the Guardian technology are in the Exempt category under the International Electrotechnical Commission (IEC) Standard 62471 and are therefore safe. He said the Wurriga Report and reports of Dr Sliney rely on the findings in the Intertek report. Mr Colin Markham said in early 2017, he telephoned Chris Aquis, an Australian representative of the IEC, and told him he was aware the IEC Standard 62471 was under review, which Mr Aquis confirmed was the case. Mr Colin Markham said advice he later received was that there could be no confirmation of when the review of IEC Standard 62471 would be complete. Mr Colin Markham submitted it is possible the IEC Standard 62471, following the review, would in effect withdraw the Exempt rating for diodes of the type used in the Guardian system, which means the findings in the Intertek report, the Wurriga Report and Dr Sliney's reports could be wrong and the Guardian system may not be without risk.

[183] Mr Colin Markham said he heard the evidence of Dr Dain, but it added to his concern.¹⁹⁸ While he acknowledged it was Dr Dain's opinion that testing of the Guardian technology in Toll conditions is unnecessary, he does not agree.¹⁹⁹ He said he did not accept the opinion of Dr Sliney that the Guardian technology is safe to use.²⁰⁰ He said a 20 year study into the effect of the infrared from the Guardian technology would satisfy him.²⁰¹ When it was put to Mr Colin Markham that it is Dr Dain's view that based on his experience, he does not anticipate any change to the limits for the Exempt category as a result of the review of IEC Standard 62471, Mr Colin Markham said he does not agree. He holds a concern that the Exempt rating may be withdrawn.²⁰²

[184] Mr Colin Markham said he also has a concern that the Guardian system is intrusive and contrary to drivers' human rights.

Mr Bradley Osland

[185] Mr Bradley Osland filed a witness statement²⁰³ ahead of the hearing and was subject to cross-examination.

¹⁹⁷ Exhibit R6 – Attachment CM1 to CM8.

¹⁹⁸ Transcript PN 1939.

¹⁹⁹ Transcript PN 1984-1985.

²⁰⁰ Transcript PN 1960.

²⁰¹ Transcript PN 1986-1987.

²⁰² Transcript PN 2015-2016.

²⁰³ Exhibit R4.

[186] Mr Osland said he has worked in the transport industry for approximately 36 years. He said he has worked for Toll for the last 25 years and has always driven interstate trucks.

[187] Mr Osland works out of the Toll QX and Toll Express depots in Brisbane. He gave evidence about his typical working week, a roster which he has worked for 15 years involving overnight travel to Sydney and back. Mr Osland said in 36 years, he has not been involved in an accident or serious incident.

[188] Mr Osland said he is part of the Linehaul DRC and has concerns about the Guardian technology. He said he, Mr Colin Markham and Mr Kevin Markham each undertook extensive research into the effects of infrared technology on eyesight and those articles were attached to his statement.²⁰⁴ Mr Osland said all the material found arising from his research was provided to Toll.²⁰⁵ Mr Osland said in meetings with Toll, the DRC gave Toll two documents²⁰⁶ setting out the DRC's response to the proposed installation of the Guardian system. Mr Osland said another document in response to comments by Dr Sliney and the Wirriga Report was also provided to Toll.²⁰⁷ Mr Osland submitted the DRC's concerns have not been addressed by Toll and said the concerns remain.

[189] In cross-examination, in relation to the first piece of correspondence²⁰⁸ the DRC provided Toll and Dr Sliney's response,²⁰⁹ Mr Osland said he understands what Dr Sliney has said but argued it conflicts with what Dr Sliney has said in other studies.²¹⁰ Mr Osland acknowledged Dr Dain gave no evidence about the technology potentially causing cataracts but argued Dr Dain did not explain the issues properly.²¹¹ He said he disagrees with Dr Dain's evidence that he has "no concerns whatsoever regarding the safety of the infrared light which is emitted from the Guardian."²¹²

[190] Mr Osland said while the literature he has reviewed may not necessarily be in relation to the same specifications as the Guardian machines, it nonetheless demonstrates there is significant difference in opinion of experts on the subject. He said if experts cannot agree the technology is not one hundred percent safe, it should not be used in Linehaul trucks at this time. Mr Osland acknowledged the reports annexed to his statement do not refer to Guardian technology specifically, but said Dr Dain gave evidence that it does not matter what the technology is.²¹³

[191] In response to the Intertek Report, Mr Osland said paragraph 4.1 of that report indicates the study assumes the infrared light will not be shone in a person's eyes for more than eight hours, however the average journey he undertakes is 11 to 12 hours, sometimes up to 14 hours. Mr Osland said he is also concerned the technology may be unsafe where at night, there are other light sources, such as LED lights from other vehicles and streetlights

²⁰⁴ Exhibit R4 – Attachment BO-1 to BO-9.

²⁰⁵ Transcript PN 1522.

²⁰⁶ Exhibit R4 – Attachments BO-10 and BO-11.

²⁰⁷ Exhibit R4 – Attachment BO-12.

²⁰⁸ See Exhibit A4 – Attachment PF-2.

²⁰⁹ See Exhibit A4 – Attachment PF-3.

²¹⁰ Transcript PN 1570.

²¹¹ Transcript PN 1615-1616.

²¹² Transcript PN 1709-1710.

²¹³ Transcript PN 1770-1772.

shining into their eyes. He said the Intertek report also states careful checks should be made that extraneous sources of radiation and reflections do not add significantly to the measurement results, and this concerns him.

[192] Mr Osland said hearing the evidence of Dr Dain did not alter his concerns.²¹⁴ He also said he was aware that the conclusion of Dr Sliney was that it is theoretically impossible for the current LEDs to cause any hazards.²¹⁵

[193] Mr Osland concluded by saying that he understands from feedback from drivers at Toll who have the Guardian system installed, that it is extremely distracting and makes them anxious and nervous, especially when the alarm and seat vibration occurs.

Closing submissions of the parties

Toll

[194] As to the agreed question which asks the Commission to determine whether Toll has a “right” to “further implement” certain technology, Toll submitted the Commission must first determine whether such a right exists, and then, if so, whether the seven concerns of the TWU members have the effect of displacing that right. Toll submitted the seven concerns are largely speculative, have no evidentiary basis and cannot be sufficient to strip Toll of its right to further implement the technologies.

[195] Toll submitted that there is no evidence of any challenge made to the initial implementation of either the DVR Cameras or Guardian technologies on any other aspect of the Toll Group enterprise, or where the technology had already been implemented prior to the initiation of the dispute.

[196] In terms of current use of the technology, Toll said Liquids have the DVR Cameras and Guardian technology operational at its Newcastle, Wagga Wagga, Western Australia, Northern Territory, Tasmania, Brisbane Fuel, Brisbane BOC, Sydney Fuel, Port Kembla, Tasmania and half of its Adelaide locations. Liquids has also installed the DVR Cameras and Guardian technology at its Altona, Newport and Dandenong locations, but the technology in these locations is not operational. More broadly, Toll submitted the Guardian technology is used by a number of its competitors, which is unsurprising given the number of customers which require use of the Guardian technology in their contracts.

Witnesses

[197] As to Toll’s witnesses, Toll relies on the evidence of Mr Hepburn, Mr Felsovary and Dr Dain. Toll submitted it was Mr Hepburn’s evidence that he has never received a complaint relating to the use of the DVR Cameras or the Guardian system by any driver in Liquids. Doctor Dain’s evidence was that in his expert opinion, continuous use of the Guardian technology does not pose any health risk whatsoever.

[198] Toll submitted that although the DVR Cameras and Guardian technology is operational in at least 160 vehicles within the Liquids fleet across the country, the TWU did

²¹⁴ Transcript PN 1530.

²¹⁵ Transcript PN 1540-1542.

not call any witness who has been driving with these technologies already operational in their vehicles to substantiate any of the express concerns.

The Agreed Question – does Toll have a right?

Express right

[199] In order to determine whether Toll has an express right to implement the DVR and Guardian technology, Toll submitted that consideration must be given to the relevant instruments that govern Toll’s enterprise and its employees – namely the Agreement, the contractual documents and the relevant policies. Of the Agreement, Toll drew the Commission’s attention to clause two, section three (including clause 16) and section five (including clauses 37 (which was clause 32 of the 2013 Agreement) and 40). Toll submitted in *Toll North Pty Ltd; Toll Transport Pty Ltd v Transport Workers’ Union of Australia (DriveCam Case)*²¹⁶ Commissioner Gregory analysed the Agreement in circumstances where the TWU opposed Toll’s implementation of the DriveCam technology in the Victorian fleet. It said the Commissioner found there was no legal or contractual barrier that could preclude Toll from installing the technology and in circumstances where the TWU did not appeal that decision, an identical finding is inescapable in the present case.

[200] In terms of employment contracts, Toll submitted each Linehaul and Liquids driver has a contract of employment based on a template, with clause nine providing drivers must comply with all directions given by Toll in relation to occupational health and safety, take all practicable steps to ensure their safety at work and the safety of others at work and report any incident, accident or hazards in the workplace as soon as possible. Further, Toll submits the Job Description of drivers sets out a number of requirements which support Toll’s right to implement the technology and the Job Description for Liquids drivers also lists “fatigue management” as an essential skill of the job.

[201] As to policies, Toll submitted there is a consistent emphasis on safety. Toll said the notion of being recorded while inside their vehicle is not new to Toll drivers. It said in May 2012, the Toll Group released its Optical & Tracking Surveillance Notification Policy, stating that “unless otherwise notified, optical surveillance operation and monitoring at Toll sites and business premises, or in Toll vehicles or equipment is continuous and ongoing.”²¹⁷ Further, in October 2013, Toll Group released its Guidelines for Use of Vehicle Camera Footage that said “as one measure of assisting in the safety and security of Toll drivers, vehicles, freight and other road users, Toll may use vehicle cameras to monitor activities in and around its vehicles and the road.”²¹⁸ In April 2017, the Toll Group released its policy for Use of In-Cab Camera Footage which applies to all Toll Group owned vehicles and subcontractor vehicles that are fitted with an inwards-facing camera.²¹⁹ Also, Toll submitted in October 2013, the In-Truck Monitoring Standard (Company Vehicles) was released, which states in line with legal obligations that Toll will monitor the speed of heavy vehicles and the fatigue of heavy vehicle drivers through installing and monitoring in-truck monitoring devices.²²⁰ In May 2016, Toll issued the Driver Fatigue Management Standard, which included guidance material

²¹⁶ [2014] FWC 2945.

²¹⁷ Exhibit A3 – Attachment PF-7.

²¹⁸ Exhibit A3 – Attachment PF-4.

²¹⁹ Exhibit A3 – Attachment PF-5.

²²⁰ Exhibit A3 – Attachment PF-6.

stating that managing fatigue is “essential for safe driving and to promote health and well-being of drivers.”²²¹

[202] Toll submitted there is no evidence before the Commission that any of the above policies have been challenged, either when they were released or subsequently. It said the TWU does not challenge the right of Toll to continue to impose these policies in the present matter.

[203] In relation to the DVR Cameras, Toll submitted the continuous footage enables it to meet its obligation in ensuring that work is carried out in compliance with each of the matters contained in clause 40 of the Agreement. Toll submitted in line with the *DriveCam Case*, there is no express provision that precludes inward and outward facing recording technology being installed in Toll’s vehicles. It said the salient difference between DVR Cameras and DriveCam is that the former records continuously rather than being triggered by a G-force event. This difference, rather than eroding Toll’s right under clause 40, was contended to enable Toll to ensure its reporting systems are better equipped to ensure a safe system of work, as opposed to the select 12 seconds previously captured under DriveCam. Toll submitted that in the *DriveCam Case*, the TWU sought to criticise the DriveCam technology on the basis that the 12 seconds of footage is short and inconclusive.

[204] Toll submitted the Guardian technology falls squarely within clause 40 of the Agreement as it allows Toll to ensure a proper system for reporting hazards and incidents, monitoring health and safety and providing targeted training and information about fatigue to its drivers. Further, it was submitted that clause 40(b)(vii) of the Agreement expressly requires Toll ensure a safe system of work through implementing systems for reporting accidents, near misses and contingencies to manage the risk of driver fatigue, the latter of which the Guardian technology is designed to manage. Toll submitted this is the most significant contingency Toll has in place once drivers are on the road.

[205] Finally, in relation to its express right to implement the technology, Toll submitted clause 40 of the Agreement demonstrates Toll is under an obligation to take *all* reasonable steps to ensure drivers operate in a safe system of work. This includes ensuring, where appropriate, that all transport work is performed in accordance with documented systems which manage the risk of driver fatigue, including but not limited to systems for reporting hazards and incidents, monitoring health and safety and contingencies to manage the risk of driver fatigue. Toll submitted its core values are expressed to include safety (clause 16) and clause 37 provides that the TWU and drivers will take *all* reasonable steps to assist Toll with all applicable workplace health and safety legislation and codes of practice. Toll submitted it is a reasonable step for it to take to further implement the DVR Camera and Guardian technology to ensure a safe system of work pursuant to clause 40 of the Agreement.

Implied right

[206] Toll submitted in addition to the express right to further implement the technologies, Toll holds a managerial prerogative to ensure its operational requirements are met in any manner it sees fit. It said in circumstances where that prerogative is not prevented by statute, the Commission is not to interfere with that lawful exercise unless it is plainly unjust or

²²¹ Exhibit A3 – Attachment PF-3, page 5.

unreasonable.²²² It submitted this argument is made by the TWU in the alternative. Toll said the requisite test is whether a reasonable person in the position of Toll could make the decision to further implement the DVR and the Guardian.

[207] Toll submitted all management decisions need to be viewed through the prism of its core values, which expressly include safety. It said fatigue is a significant factor when it comes to road safety and Toll has put in place a number of controls to minimise fatigue risk over recent years. Toll submitted in assessing what decision a reasonable person would make in the position of Toll, regard must be had to the catastrophic consequences that can occur if all reasonable steps are not taken to ensure a safe system of work.

[208] As to the DVR technology, Toll submitted that in circumstances where it has an obligation to provide a safe system of work, to investigate incidents and complaints, and is called upon to provide information to regulators and police regarding incidents involving its vehicles, the reasonable person could make the decision to further implement the DVR technology.

[209] Regarding the Guardian system, Toll submitted there can be no challenge that the further implementation of the technology is plainly unjust and unreasonable of itself (without having regard to the express concerns in the Agreed Question).²²³ Toll pointed to evidence from various TWU witnesses which support measures that will improve management of fatigue and safe driving. Toll submitted the Guardian system is the only system utilised by Toll which can actually prevent incidents from occurring and given the instantaneous benefit of its use and the catastrophic consequences it can prevent, Toll submitted the reasonable person could make the decision to further implement the Guardian technology. Further, Toll submitted given the prevalence of the technology amongst the Toll Group and its competitors, as well as the requirement of customers that this technology is installed, the decision to further implement it could be seen by the reasonable person as nothing more than being in line with industry expectations.

[210] Toll submitted the further implementation of the DVR and Guardian technology falls squarely within the management prerogative of Toll to ensure drivers are performing a safe system of work. It said the further implementation cannot be seen as being plainly unjust or unreasonable.

Concerns of the TWU members – DVR system

[211] Toll submitted once established that it has the express and implied right to further implement the DVR technology, the Commission is then to consider the two express concerns raised by the TWU, which are put by the TWU to be so significant as to classify the DVR's further implementation as being plainly unjust or unreasonable.

[212] Toll submitted the TWU's evidence to support the concern that the DVR is unreasonably intrusive, including but not limited to recording non-driving activities, was that drivers will generally take their meal breaks in the cab of their vehicle when they will often have their ignition in accessory mode to use the radio, heater or air-conditioner. Therefore,

²²² See *Australian Federated Union of Locomotive Enginemen v State Rail Authority of New South Wales* (1984) 295 CAR 188; see also *CFMEU v HWE Mining Pty Ltd* [2011] FWA 8288; 214 IR 194 at [7]-[12] and the cases cited therein.

²²³ Applicant's Closing Submissions, 25 October 2017 at (64).

the technology has a potential to record them eating on their meal break. Under cross-examination, Toll submitted Mr Gibbs agreed this is not something that would occur on every shift and if he were at a depot at the time of his break, he would have his break in the depot rather than his vehicle.²²⁴ Toll also said that Mr Gibbs agreed the positioning of the DVR Camera was such that if he was to move to the passenger seat, most (if not all) of him would not be captured by the footage.²²⁵

[213] Toll submitted the TWU's evidence on the above issue is limited to a discrete circumstance which occurs sporadically and can be easily overcome by drivers moving to the passenger seat. It contends this is not plainly unjust or unreasonable and this concern is not sufficient to displace Toll's established right to further implement the DVR technology.

[214] As to the second concern that there is capacity for footage or data captured by the DVR to be used for a purpose other than to ensure safe driving, Toll submitted the evidence relates to an alleged lack of safeguards in place to ensure that footage recorded by the DVR is not misused by Toll. Toll submitted the TWU's evidence had no regard to the standard operating procedure Liquids already has in place, SOP-1,²²⁶ and which Linehaul intends to mirror once the Guardian system is in place. Toll said SOP-1 expressly outlines the three occasions when footage will be collected and used, assuming the footage has been physically retrieved from the tanker, including; monitoring fatigue and distractions as identified using a Guardian system; investigating driving incidents, accidents and events; and investigating any other incident involving the driver of the vehicle e.g. a complaint by a member of the public or external authority. Toll said SOP-1 then identifies what the footage can actually be used for and that inappropriate use or circulation beyond authorised personnel shall be subject to disciplinary action, up to and including termination. It was submitted SOP-1 demonstrates Toll has in place comprehensive safeguards that completely address the TWU members' concerns and that Mr Gibbs²²⁷ and Mr Clifford²²⁸ agreed under cross-examination that SOP-1 dealt with their concerns. Toll submitted the true nature of this concern is the lack of trust that Toll will comply with the safeguards, even though there are clear safeguards in place.

[215] Of Mr Gibbs' hypothetical that if on reviewing footage, other matters are detected which are written up,²²⁹ Toll submitted despite this falling squarely within its authority pursuant to SOP-1, the concern seeks to have the Commission prohibit Toll from utilising technology designed to ensure safe driving because there is a risk that it may disclose that drivers have breached the law in the course of their employment.

[216] Toll submitted the concern is unable to be substantiated and the fact that certain TWU members hold baseless suspicions that unlawful activity may be captured in a manner that is explicitly contrary to policy is not sufficient to displace Toll's right to further implement safety measures in its enterprise. Toll submitted this is particularly so given the significant consequences for anyone who breaches SOP-1 and the dispute avenues available to any driver who suspects a breach. Toll said this is not plainly unjust or unreasonable.

²²⁴ Transcript PN 862-866.

²²⁵ Transcript PN 885-889.

²²⁶ Exhibit A1 – Attachment SH-5.

²²⁷ Transcript PN 937-941.

²²⁸ Transcript PN 1132, 1139.

²²⁹ Transcript PN 901.

Concerns of the TWU members – Guardian system

[217] Toll submitted that once the Commission has established that Toll has the express and implied right to further implement the Guardian system, the Commission must then consider the five express concerns raised by the TWU members.

[218] Toll submitted four of the concerns directed at the Guardian system relate to whether the continuous exposure of the Guardian technology is safe for drivers, with the fifth concern about Toll's capacity to use data for a purpose other than to ensure safe driving.

[219] Toll summarised the material before the Commission relating to the Guardian technology from Dr Dain, the Wirriga report, the 2013 Sliney report and the 2015 Sliney report. Toll submitted there was no expert material filed by the TWU, despite it being given the opportunity to do so, and indeed Mr Hosking said the TWU had not spoken to anyone who would say the technology is not safe.²³⁰ Therefore, it was submitted that Dr Dain's expert evidence was not contradicted and must be accepted.

The infrared light emitted from the system may cause health problems including but not limited to damage to a driver's eyes

[220] Toll submitted there is no evidence before the Commission to suggest the infrared light emitted from the Guardian may cause health problems to a driver's eyes, with all evidence unequivocally saying the opposite. As to the unique situation of the drivers, such as working shifts up to 14 hours, being exposed to six light emitting diodes at a time and that they are already exposed to other forms of light, Toll submitted Dr Dain gave evidence that these circumstances do not alter his opinion regarding the safety of the Guardian technology.

[221] Of the literature discovered by TWU members through internet searches, Toll submitted there was great reliance on a series of slides about infrared cataract and temperature elevation with the eye produced in 2016 for the International Commission on Non-Ionizing Radiation Protection. Toll submitted reliance on these slides is flawed for three key reasons. Firstly, that the slides come to no conclusion about the safety of IREDs on the human eye and therefore could not be seen to be contradictory to Dr Sliney's previous reports. Second, even if there was some apparent contradiction, the reports prepared by Dr Sliney in 2013 and 2015 must be favoured as they are self-explanatory and come to a specific conclusion about the Guardian technology. Third, the contents of the slides were not put to Dr Dain for comment.

[222] Toll submitted the use of Guardian technology is widespread and there is no evidence before the Commission it has ever caused a safety concern to anyone. Toll said the evidence demonstrates unequivocally there is no risk posed by the Guardian technology. In these circumstances, it was submitted the concerns of the TWU members are not sufficient to establish that the further implementation of the Guardian technology is plainly unjust or unreasonable.

The lack of definitive proof that the infrared light emitted from the system is safe

[223] Toll submitted there is no evidence before the Commission to suggest the Guardian technology is anything but safe and this concern seeks to place the onus on it to prove

²³⁰ Transcript PN 1462.

something which the TWU members have demonstrated they will never accept. Toll submitted the authoritative opinions of Dr Sliney and Dr Dain are definitive and concrete on Guardian's safety, that is, the emissions are substantially below any levels known to cause a hazard. Toll submitted there are no contradictory results to be found and no evidence before the Commission of any member of the scientific community having a contrary view to Dr Dain or Dr Sliney, with the fact no member of the community would come forward with such a view being conceded.²³¹

[224] Toll submitted the highest evidence the TWU tendered to suggest the findings may not be definitive is to say the authors of the Wirriga Report would not guarantee their findings in other working environments. Toll said this does not impact on the definitive findings of Dr Dain and Dr Sliney and is not sufficient for the Commission to determine the further implementation of the Guardian technology is plainly unjust or unreasonable.

The lack of definitive studies into the effect of the infrared light emitted from the system during prolonged night driving

[225] Toll submitted the expert opinion of Dr Dain is that exposure to Guardian's emissions during the day is the same as it is for a prolonged period at night and there is no risk the emissions will have any unsafe effects as a result of prolonged night driving. Toll said this opinion stands to reason when considered against the manner in which the technology is tested, as the 'Exempt' category tests for emissions in the worst case scenario, i.e. emissions from close range to a static eye with no pupil constriction at all. In real world driving, Toll submitted although pupil constriction may be less than during the day, it will have some form of constriction by reason of exposure to headlights, street light, LEDs in the dashboard etc. Toll said this means the eye will always be better protected than the worst-case levels tested that already establish the Guardian system to be well within the 'Exempt' group.

[226] Toll submitted the exposure during prolonged night driving has no impact on whether the further implementation of the Guardian system is plainly unjust or unreasonable and should be disregarded by the Commission.

The lack of definitive studies into the effect of the infrared light emitted from the system on sight

[227] Toll submitted Dr Dain said should a study specific to the TWU members' working environment be carried out, it would be "predestined to find no adverse effects whatsoever. There is, therefore, no need to conduct specific testing and, to put it stronger, no point in additional testing."²³² Toll said Dr Dain remained unmoved on this view during cross-examination.²³³

[228] Of Mr Kevin Markham and Mr Colin Markham's evidence of the elements that a definitive study would need to contain for them to consider it sufficient, including that it be conducted over 20 years and involve drivers working 14 hours a shift six days per week, Toll submitted that the Commission when assessing whether the further implementation of the Guardian technology is plainly unjust or unreasonable is to consider what is reasonable in all

²³¹ Transcript PN 1461-1462, PN 1483.

²³² Exhibit A5 [Report] at [55].

²³³ Transcript PN 1296.

the circumstances. Toll submitted to delay the implementation of technology which can prevent fatalities for 20 years on the chance it may produce a different result to what is before the Commission is fanciful.

[229] Toll submitted a further consideration for this concern is that despite the apparent need for definitive proof, some TWU members had not read Dr Dain's report that they knew had been put together for the purpose of addressing their concerns.²³⁴ Despite Dr Dain's report, Toll submitted the TWU members' evidence was that they are going to favour generic, irrelevant material they found on the internet. Further, Toll said it was Dr Dain's evidence that there is no meaningful prospect of the Guardian's 'Exempt' rating being withdrawn, and this should be accepted.

The capacity for data captured by the system to be used for a purpose other than to ensure safe driving

[230] Toll submitted the submissions made in relation to concern number two are repeated here, though Toll has additional processes regarding the Guardian system in SOP-2 and SOP-3 which provide for how fatigue alerts are to be managed and drivers assisted. Toll said there has been no challenge to suggest these policies do not ensure safe driving.

[231] Of Mr Clifford's hypothetical concern a driver suffering multiple fatigue events would be treated as a performance issue, Toll submitted he conceded under cross-examination that the only evidence before the Commission of such an incident occurring was addressed by Toll in the exact opposite manner to that which he was concerned about.²³⁵

[232] Toll submitted the Guardian technology is being implemented for the purpose of ensuring safe driving and a number of policies have been issued to ensure there are appropriate safeguards as to how data is to be properly used. Toll said the hypothetical and unsubstantiated concerns of certain members are not sufficient for the Commission to find that the further implementation is plainly unjust or unreasonable.

Conclusion

[233] Toll submitted it has the right to further implement both the DVR and Guardian technologies and the seven concerns expressed by the TWU do not displace that right. Toll said while original concerns may have stemmed from genuine worry and ignorance, at a certain point they have become stubborn. Toll concluded this is manifest in the concession of Mr Hosking where he says of the Guardian "yes it may save lives but also may damage the eye."²³⁶ Toll submitted the Commission has extensive evidence to substantiate the former and nothing to substantiate the latter.

TWU

[234] The TWU submitted having regard to the considerations set out in the question, the Commission is able to determine whether the implementation of the DVR Cameras and the Guardian system are reasonable and appropriate measures, including in compliance with other

²³⁴ Transcript PN 981-982, PN 1429-1433.

²³⁵ Transcript PN 1156-1157.

²³⁶ Exhibit R3 at [19].

provisions of the Agreement. In that respect, the TWU place reliance on clause 40 of the Agreement, 'Safe system of work' (set out above).

[235] The TWU submitted it is, and always has been, strongly supportive of measures which will improve the safety of the road transport industry generally and Toll's operations in particular. It said however, that new systems of work or new technologies can only be introduced in a manner which is fair and reasonable for Toll's employees and in circumstances in which all proper and appropriate testing and assessment has been undertaken to ensure the new technologies themselves do not present risks to the health and welfare of Toll employees and are implemented in a manner which properly balance the interests of Toll and its employees.

[236] The TWU submitted the introduction of the DVR Cameras into Liquids vehicles in circumstances where they will be able to monitor drivers whilst they are on a meal or rest break is not a reasonable or appropriate measure and is not a matter that falls within clause 40 of the Agreement. Further, it said introducing Guardian technology into Linehaul and Liquids vehicles and the DVR Cameras into Liquids vehicles is unreasonable and does not represent a proper exercise of Toll's management prerogative.

DVR Cameras in the Liquids business

[237] The TWU submitted Toll currently has in place a number of in-vehicle monitoring systems, including DriveCam, which comprises an inward and outward facing camera which records 12 seconds of footage in the event of a high G-force event and relays that footage in real time to the manufacturer and then quickly made available to Toll. The TWU said it is proposed to introduce the DVR Cameras into the Liquids business and not other parts of Toll's business. The TWU submitted the DriveCam system is presumably considered safe and appropriate for use in Linehaul and other parts of Toll's business. The TWU said the stated justification for the proposed implementation is that it is intended to be a safety measure and Mr Hepburn said it is the preferred technology for Liquids because of the type of materials being carried by the Liquids business. The TWU said the safety justification for the implementation of the DVR Cameras is weak at best.

[238] Firstly, the TWU said the Commission would not assume there is currently a problem regarding incidents with Liquids tankers, as incidents are very rare. Accordingly, it submitted Toll's assertion that the DVR is required to provide additional surveillance and understanding of these types of incidents must be treated with caution.

[239] Secondly, the TWU submitted the DVR Camera system, as presently configured, does not represent a technology designed to, or with the potential to, prevent accidents occurring or to aid in response to a vehicle accident. Unlike the DriveCam system, the TWU said the DVR system provides for no remote access and does not alert Toll to the fact an incident has occurred and the only potential utility of the system is to permit review of the footage for the purposes of investigating after the event.

[240] Thirdly, the TWU contend that the DVR Camera system operates in a manner which could not have any safety benefit as they continuously record from when the key is in the accessory mode and start position, irrespective of an incident which may occur. In contrast, the TWU submitted the impact of the DVR Camera system on the privacy of drivers is clear as they will be subject to continuous video surveillance at any time they are in the vehicle and

the key is in at least the accessory mode. The TWU said its witnesses explained they are frequently required to take breaks in their vehicle due to regulatory requirements. The TWU submitted this continuous surveillance is unreasonable and is particularly so because drivers will be filmed during periods when the vehicle is stationary and engine is not running. The TWU said video surveillance during those periods could have no conceivable safety benefit for Toll and is unjustified and unreasonable.

[241] The TWU submitted its members have also expressed concern about the use of footage from the DVR Camera system for purposes other than safety, to which Toll has suggested it has in place policies in relation to the utilisation of camera footage and refer to SOP-1. The TWU submitted SOP-1 in fact demonstrates Toll reserves the right to use the footage for monitoring, investigating driving incidents, accidents, events and investigating any other incident involving the driver, footage of which may be used for coaching or disciplinary purposes. The TWU submitted Toll reserves its right to view and utilise footage for whatever purpose it deems appropriate.

[242] For the above reasons, the TWU submitted the implementation of the DVR Camera system is not reasonable in the terms proposed by Toll. At the very least, the TWU said the introduction of the system should be subject to a condition the DVR Camera system be altered so as not to record at times that the vehicle is stationary and the engine is not running. The TWU said the operation of the system at such times produces no safety benefit and invades the privacy of drivers, including during break periods. The TWU said the evidence of Mr Clifford, a trained mechanic, was that such an alteration was possible.

Guardian system in Liquids and Linehaul

[243] The TWU submitted the Guardian system should not be implemented without at least the following conditions being met; Toll undertaking appropriate testing and analysis of the operation of the Guardian system in the context of its long-haul road transport operations and annual health checks being expanded to include eye examinations to ensure no harm is being caused to the drivers.

[244] The TWU said the Guardian technology is new and has only been introduced to the workplace in recent years. It said the technology is invasive and involves directing infrared lights into the face and eyes of the drivers for periods of time of up to 14 hours per day and therefore, it is reasonable for drivers to have concerns as to potential health consequences of long-term use of the technology and wish to be satisfied, to a high level, that the technology presents no adverse consequences for their eyes or sight.

[245] The TWU said for Linehaul drivers, there is already a strong system of fatigue management and the Commission should not assume there is a pressing need for Toll to implement further fatigue monitoring systems into its Linehaul fleet. It said there have been few, if any, incidents involving Linehaul employed drivers and it appears the current fatigue management system is working well.

[246] The TWU submitted it is necessary to examine the adequacy of the steps taken by Toll to be satisfied that the system can operate without risk.

[247] As to the adequacy of existing research, the TWU submitted the material before the Commission is not sufficient to demonstrate that appropriate testing has been undertaken to

assure drivers that the Guardian system is safe and without risk. It said there have been no studies which have examined the operation of the Guardian system, or similar, in road transport, with Mr Hepburn and Mr Felsovary both giving evidence they knew of no such study existing²³⁷ and Dr Dain also saying he is not aware of any empirical or clinical studies of the use of the technology.²³⁸ The TWU submitted a straightforward study could be undertaken similar to that by Dr Leon-Saval and Dr Large in the mining sector, however, Toll refuses to commission any such study.

[248] Further, the TWU said Toll refuses to undertake eye testing for its drivers to monitor whether any effects arise from the use of the Guardian system. It said medical examinations are already undertaken and it is unreasonable for Toll not to agree, as a part of the introduction of the Guardian system, to include appropriate eye examination in these assessments.

[249] The TWU submitted Toll determined to introduce the Guardian system without the benefit of Dr Dain's report and that in preparation for these proceedings, accepted it did not have satisfactory expert opinion to demonstrate the implementation of the Guardian system was without risk. The TWU said it was worrying that only the prospect of these proceedings prompted Toll to engage an expert to obtain an opinion on whether the system it was introducing did not cause harm to its employees.

[250] In relation to Dr Dain's evidence, the TWU submitted there are difficulties in accepting his report without further study having regard to;

- Dr Dain made clear he had not ever conducted any testing or examination of the Guardian system or any infrared emitting diodes and had not seen the Guardian device or visited any workplaces where the device was installed. He was unfamiliar with how the technology actually operates and was unable to say if the LED diodes operate in a continuous or pulsing manner;
- Having not done research himself, Dr Dain relied on a small selection of reports provided by Toll, only one of which undertook direct testing of the Guardian device. Further, Dr Dain was unable to say whether Dr Sliney has undertaken direct testing. The TWU also submitted the reports of Dr Sliney provided to Dr Dain are incomplete;
- The only direct testing relied upon by Dr Dain appears to be derived from the Intertek Report, with Intertek being a company based in Hong Kong which Dr Dain identified as not being accredited to undertake testing of the type set out in its report. Therefore, the TWU submitted the only direct test results relied upon by Dr Dain and made available to the Commission appear to have been undertaken in a laboratory not accredited for that type of testing;
- Dr Dain was unable to explain some aspects of the operation of the Guardian technology, for example could not explain that drivers were able to detect a visible light in the LED modules and that he would need to examine the device in order to explain; and
- Dr Dain accepted that his opinion the Guardian system could be used for longer than eight hours conflicted with the text of the Australian standard.²³⁹

²³⁷ Transcript PN 389-392, PN 729.

²³⁸ Transcript PN 1284-1286.

²³⁹ Exhibit A5 [Report] at [57[ii]] and Transcript PN 1307-1310.

[251] Of the other reports Toll has put into evidence, the TWU submitted limited weight can attach and they are an inadequate basis from which to form a clear view in relation to safety of the Guardian system without further testing. In relation to the additional reports, the TWU submitted:

- The Wirriga Report did not consider biological effects of the use of infra-red diodes but rather proceeded on the basis of mathematical calculations and further, the authors of that report have expressed the opinion that their research was only relevant to the circumstances of the mining truck and mine site which was the subject of their research and should not be relied upon for any other circumstances, including the use of Guardian technology in Toll's Linehaul business;
- The Intertek report commissioned by Seeing Machines in 2015 found that the infrared diodes emitted by the Guardian were within the range that is classified as 'Exempt.' However, the Intertek report cannot be applied to the discrete circumstances in which Linehaul drivers operate, where it proceeds upon an assumption the light will shine in a driver's eyes for no more than eight hours, and without further taking into account external sources of light which shine into a driver's eyes. Further, it was noted Intertek is not accredited for the type of measurements undertaken; and
- The reports of Dr Sliney are incomplete and the basis of the opinions expressed are not entirely clear. The report dated 10 November 2013 is a supplementary report to an earlier report which was not in evidence and which was not provided to Dr Dain. The report by Dr Sliney dated 18 July 2015 is a laboratory test only and Dr Dain said it was unclear whether Dr Sliney conducted any analysis himself or in what laboratory or facility any testing was actually carried out.

[252] In relation to the documents and studies provided to Toll by the DRC, the TWU submitted Toll has not taken these matters seriously, for example, Dr Dain was not provided with the reports and studies or asked to comment upon the concerns expressed in the documents. The TWU said Toll has not attempted to address the concerns of the drivers. The TWU said it is not submitted the material obtained by the drivers proves that the Guardian system will harm the eyesight of drivers, however the documents raise concerns in the minds of drivers which they believe should be addressed and warrant further study. The TWU said the reports raise the following issues:

- "The report prepared by Intersil Americas LLC, dated 28 April 2016 noted potential photobiological effects of exposure to near-infrared light, the potential for near-infrared light to cause damage to the cornea and retina and indicated that, although consumer products generally produced low levels of near-infrared radiation, under specific conditions and operational modes near-infrared radiation to exceed exposure levels";²⁴⁰
- The report of Nikolaos Kummels and Margaret Tzaphlidou, dated 1 March 2011 and entitled 'Eye Safety Related to Near Infrared Radiation Exposure to Biometric Devices,' noted the potential for infrared LED diodes to cause direct eye damage. The report concluded that it was important for every user to be appraised of the

²⁴⁰ Exhibit R6 – Attachment CM-1.

safety level methodology and exposure limits and asserted the appropriateness of epidemiological studies of long term infrared exposure effects,²⁴¹

- The article by Jim Dryden, dated 1 December 2014 and entitled ‘The human eye can see ‘invisible’ infrared light’ noted the potential for the pigment molecule in the retina to be hit in rapid succession by a pair of photons and thereby deliver the same amount of energy as a single hit with a lower wavelength causing the light to become within the visible range,²⁴²
- The report of Leslie Hopkins, dated July 2013 and entitled ‘Visual Activity Evoked by Infrared in Humans after Dark Adaption’ demonstrated through empirical studies the potential for the human eye to perceive infrared stimulus particularly after dark adaption. That is, the potential for the eye to see light within the near-infrared range contrary to the assumptions made by Dr Dain and Dr Sliney;²⁴³ and
- The report of Tsutomu Okuno entitled ‘Infrared Cataract and Temperature Elevation within the Eye’ (which was supervised by Dr Sliney) noted the potential thermal effects of exposure to infrared emissions and the concern that infrared LEDs and diode lasers may cause cataracts.²⁴⁴

[253] The TWU submitted to the extent it is suggested it has failed to put forward expert evidence, the submission is misconceived as it wrongly suggests there is some onus on the TWU, in circumstances where Toll brought the dispute proceedings. The TWU said Toll decided to introduce the Guardian system without any adequate basis upon which to be satisfied or to assure its employees that the technology is safe and only obtained the report of Dr Dain after it had commenced implementing the Guardian system and shortly before the matter was listed for hearing. In the time available to it, the TWU said it was unable to identify another expert who was qualified and able to give an opinion about the technology. In this respect, the TWU submit Toll have misrepresented the evidence of Mr Hosking where it suggested he said no one the TWU had spoken to would say that the Guardian technology was not safe. Rather, the TWU says the evidence of Mr Hosking was actually that persons the drivers were able to contact were unwilling to provide an opinion either way in the absence of further study being undertaken.

[254] The TWU contends the present state of the research cannot demonstrate the Guardian system is safe and poses ‘nil’ risk to Linehaul drivers. Until such time as research has been undertaken, the TWU submitted the introduction of the Guardian system is unreasonable as it has the potential to expose those being subjected to the infrared light to the risk of significant damage to their eyes. At the very least, the TWU said the technology should be subject to further study in the particular circumstances of Toll’s business and regular medical assessments for drivers to ensure no adverse effects ensue.

Lack of employee safeguards

[255] The TWU submitted Toll has some policy documents in relation to use of video footage and it reserves its right to view and utilise the footage obtained from the DVR Camera system for whatever purpose it deems appropriate. It said Toll’s policies do not specify how

²⁴¹ Exhibit R6 – Attachment CM-2.

²⁴² Exhibit R6 – Attachment CM-4.

²⁴³ Exhibit R6 – Attachment CM-5.

²⁴⁴ Exhibit R6 – Attachment CM-6.

Toll intends to manage drivers in the long term who have three fatigue events in a shift or are the subject of false warnings.

[256] The TWU said the Guardian system has the potential to produce false alerts, which is alarming. It said, however, that Toll's witnesses did not know how an assessment would be made as to whether an event was genuine or false. Further, the TWU said in the event of a fatigue or distraction event being detected, the driver will be notified by the alarm and seat vibration and is required to stop the vehicle and contact their supervisor. The TWU said these false readings are a source of anxiety and tension for Toll employees already using the system which has been recognised by Toll in external publications.

[257] The TWU said as with footage obtained through the DVR Camera system, the footage from Guardian is able to be used by Toll for any purpose it considers appropriate, including to support disciplinary action and direction to attend a medical examination. The TWU said Toll has no policies setting out the circumstances in which disciplinary action or medical referral may result. The TWU said such new technology should not be introduced in the absence of clear guidance as to the circumstances in which disciplinary action or medical referral will result from the operation of the Guardian system.

Toll's submissions in reply

[258] Toll submitted that the TWU's closing submissions proceeded on two fundamental misconceptions about the arbitration, being that the implementation of the technology is entirely new and that the Commission is to have little-to-no regard to the Agreed Question.

The technology is not new

[259] Toll submitted the uncontested evidence is that the DVR and Guardian have been operating within the Toll enterprise for years. It said there is no evidence that any of the concerns raised regarding the further implementation of the DVR or Guardian system have transpired elsewhere, despite the widespread use of the devices over a number of years. Further, Toll said the TWU properly concedes that the material obtained by drivers does not prove the Guardian system will harm the eyesight of drivers.

The Commission is to determine the Agreed Question

[260] In response to the TWU's submission that the Commission has broad power to arbitrate and is not limited to the matters raised by the parties, Toll said the Agreed Question has not been provided to the Commission as a form of "assistance," but rather the point of the Agreed Question was to place limits on the scope of the dispute between the parties. It said it is not open to the TWU to invite the Commission to take a range of matters into account which are beyond the agreed scope of the dispute.

Right vs method

[261] Toll submitted the error in the TWU's submissions manifests itself where it urges the Commission to determine the *method* by which the technology is to be further implemented. It said the Agreed Question asks whether Toll has a 'right' to 'further implement' the technology and the seven concerns are what the Commission must have regard to. It said

there is nothing which would enliven a power of the Commission to determine *how* the technologies are to be further implemented.

[262] Of the TWU's submissions that the DVR should be implemented only subject to it being altered so as not to record when the vehicle is stationary and that conditions should also be imposed on the introduction of the Guardian technology, Toll submitted the TWU is urging the Commission to take into account a range of matters which are not relevant to the Agreed Question. Toll said despite the TWU submission that it is obvious a straightforward study could be done, this ignores the evidence before the Commission that such a study is predetermined to find no adverse results, there is no purpose in spending money to produce a predictable outcome and the TWU members will not accept anything less than a study performed over 20 years on a driver who is not employed by Toll. Toll submitted this study is anything but 'straightforward.'

Satisfaction of the Commission, not the TWU drivers

[263] Of the TWU's submissions which go to the satisfaction of the drivers as regards the technology, Toll submitted this is confused. It said the point was elaborated upon where the TWU submits Toll introduced the technology without adequate basis at the time to confirm that it was safe. Of this, Toll submitted the TWU is seeking to challenge the basis upon which the Guardian technology was introduced some three to five years earlier which has no relevance to the Agreed Question, that is, whether Toll has a right to *further* implement the technology. Further, Toll submitted the Agreed Question and clause 15(e) of the Agreement dictate the Commission is to determine the dispute based on the evidence put before it. It said no challenge can reasonably be made against a party for relying upon expert evidence produced in a hearing to satisfy the tribunal of a question in dispute. Toll submitted the Dain Report is the most probative and relevant evidence about the safety of the Guardian technology and it is proper for Toll to rely on that report.

[264] Toll submitted in any event, the Commission is not limited to information only available to parties at the outset of the dispute, as the TWU suggests.

Employee safeguards

[265] Toll submitted that the TWU's submissions regarding false alarms, the alleged anxiety and tension suffered by drivers as a result of the false alarms and the manner of assessment by the manufacturer as to whether events are genuine or false have no tangible link to any of the express concerns in the Agreed Question and are therefore irrelevant to the Commission determining this dispute.

The Commission to consider totality of the evidence

[266] Toll submitted the TWU submissions have failed to take into account the totality of the evidence and set out various examples.

Conclusion

[267] Toll submitted weighing up the following makes it clear that Toll ought to have a right to further implement the technology:

- The potential significance of the risk at play arising from fatigue (injury or death to Toll employees and/or the public);
- The likelihood that the technology can reduce that risk;
- The likelihood of harm associated with the technology, having regard to the best evidence available; and
- The safeguards in place regarding use of footage obtained by the technology.

[268] It concluded the Commission should answer the Agreed Question in the affirmative.

Final oral hearing

Toll submissions

[269] Toll submitted it is common ground between the parties that it should be doing whatever it can to ensure its business is being conducted in the safest manner possible.²⁴⁵

[270] Toll summarised that the agreed question is whether it has the right to further implement the DVR and Guardian technologies in its enterprise, taking into account those express concerns of the members. It submitted the dispute is whether Toll has the right to further implement technologies, either expressly through the Agreement or whether it has a managerial prerogative. It summarised that the test, as defined by Lawler DP in *CFMEU v HWE Mining Pty Ltd*, is “that an exercise of managerial prerogative will not be unreasonable in this sense if a reasonable person in the position of the employer, could have made the decision in question.”²⁴⁶

[271] Toll submitted in answering the Agreed Question, the Commission is required to view the dispute from the position of the employer. In this regard, it was noted that the objects of the Agreement lists as the first item that objects include enhancing the safety and fairness of Toll’s operations. It submitted in its policies, it is expressed that safety is at the heart of everything Toll does and that it adopts a group wide strategy of think safe, act safe, be safe. Further, at clause 16 of the Agreement, it is expressed that Toll’s core values expressly include safety.

[272] In regards to the road transport industry in which the dispute is concerned, Toll submitted the industry accounts for a disproportionately high number of work related fatalities. It said the evidence before the Commission is that 17% of all worker deaths between 2003 and 2015 were road transport workers, despite them making up just two percent of the Australian workforce. It submitted that although the TWU submitted incidents in Liquids are very rare, Toll submitted that Liquids was involved in 90 to 100 motor vehicle accidents per year which included third party fatalities between May 2016 and October 2017.

[273] Toll submitted it is seeking to further implement technologies that it has identified as being capable of saving lives and which is capable of ensuring its enterprise is carried out in the safest manner it can.

[274] In terms of the technology, Toll summarised that the DVR technology provides for more extensive camera footage than the DriveCam technology, which is currently being

²⁴⁵ Transcript PN 2076.

²⁴⁶ [2011] FWA 8288.

utilised in parts of Toll, and it is said that this has capacity to exonerate drivers involved in accidents or incidents, and decreases investigation times and associated costs following an accident or incident. Toll submitted that the evidence shows that the DVR also provides a useful tool for training and coaching of drivers that can result in the prevention of accidents in the future. As to the Guardian technology, it was submitted this has the capacity to prevent accidents and related injuries by alerting drivers when potential fatigue events are occurring. Toll submitted research into the Guardian system has found that this technology can lead to a 95% reduction in safety incidents, and this is arising through direct feedback and in-cab alerts.

[275] Toll submitted both the above technologies are widely used throughout the Toll enterprise and have been for a number of years. It submitted the Guardian technology is used extensively in a number of industries throughout the world, but there is no evidence before the Commission to suggest that any use of these technologies has caused any adverse effects anywhere.

[276] Toll's position is that it has the express power to further implement these two technologies through clause 40 of the Agreement, and in the alternative, has the managerial prerogative to further implement these technologies. It submitted that concerns expressed by the TWU members are largely speculative, have no evidentiary basis and cannot be seen as being sufficient to strip Toll of its right to further implement these important safety technologies.

[277] As to the first concern of the TWU members, that the DVR is unreasonably intrusive including but not limited to recording non-driving activities, Toll submitted the TWU's evidence was limited to a discrete circumstance, for example, meal times being filmed whilst they are in the cab of the truck. Toll put this only occurs sporadically and is something that can be easily overcome by the driver moving to the passenger seat. Toll submitted the height of the evidence was that to do so would "be a pain in the butt" and no one would do it. Toll submitted the imposition of having somebody move to a passenger seat is not plainly unjust or unreasonable, particularly when viewed from the position of the employer and the important end Toll is seeking to achieve for these technologies.

[278] As to the second concern regarding the DVR, that it has the capacity for footage or data captured by it to be used for a purpose other than to ensure safe driving, Toll submitted the evidence to support this concern relates to an alleged lack of safeguards in place to ensure the footage is not misused by Toll or its management. Toll submitted this concern does not have regard to the standard operating procedure that Liquids already has in place regarding this technology (SOP-1). Toll submitted the scope of that procedure states that it is to apply to all vehicles in Liquids that have camera safety systems installed in or on them, which includes the DVR and the Guardian. Toll contended SOP-1 expressly outlines three types of occasions when footage is allowed to be collected by Toll, and if one of those situations is satisfied, then the procedure provides for what the footage can be used for.

[279] Toll submitted the contents of SOP-1 demonstrate that Toll has in place comprehensive safeguards which completely address each of the TWU members' expressed concerns. Toll said under cross-examination, Mr Gibbs and Mr Clifford not only agreed that the procedure itself dealt with the exact concerns that they raised, but also conceded that the manner in which the footage was to be used was to ensure safe driving, which is at the heart of what this concern is.

[280] Toll further submitted the true nature of the concerns was apparent throughout concessions under cross-examination that yes, the safeguards are in place, but they do not trust Toll will comply with them. It was submitted this was maintained in the face of the procedures themselves providing for termination if any Toll employee is found to have misused data or footage contained in these technologies.

[281] Toll submitted in the circumstance where there is an allegation that footage had been misused or was improperly accessed, the driver subject to that misuse has the potential to bring a dispute either under the Agreement or through the standard operating procedure (SOP-1, SOP-2 and SOP-3), which say if a person is found to have misused video footage, they shall be subject to disciplinary action up to and including termination of their employment.

[282] Toll submitted the procedures are there to allow a dispute, including where there is a concern of type two or seven outlined in the Agreed Question, to be brought at the appropriate time through the appropriate channel. Toll submitted this dispute about whether it has the right to further implement is not the proper vehicle for that sort of challenge.

[283] As to the five concerns relating to the Guardian technology, Toll submitted the first four concerns relate to whether continuous exposure to the Guardian is safe, with the fifth concern identical to that previously discussed regarding capacity for data captured to be used for purposes other than safe driving. In terms of that fifth concern, Toll submitted the submissions made in relation to SOP-1 are applicable to it, save that for the Guardian technology, there is also SOP-2 and SOP-3 which outline how multiple fatigue events are to be dealt with. They also deal with how false alarms are to be managed, including that where a driver believes a false alarm is occurring, he need not stop and report it. Toll submitted the TWU members' statements expressly raised these issues, though did not have regard to the content of the procedures. It put that as to the concern that procedures would not be followed, this dispute is not the appropriate vehicle to be challenging that position.

[284] In relation to safety concerns for the Guardian technology, Toll submitted the general expert evidence before the Commission, as said by Dr Dain, is:

"I know of no reason to be concerned even at the most remote level about any effects, adverse or advantageous, from the levels of infrared from the Guardian."

[285] Toll submitted Dr Dain went on to say he had no concerns whatsoever regarding its safety. Of the two reports about the Guardian technology by Dr Sliney before the Commission, it was put that the second report deals with the current technology which is the subject of this arbitration, but in both reports he said that LEDs are radiant limited and cannot produce exposure levels at the retina that even approach the levels that are known to cause retinal thermal injury. He said:

*"In other words the infrared LEDs would have to emit far more power to pose a serious acute hazard to the retina and this is theoretically impossible for current LEDs."*²⁴⁷

[286] It was submitted that Dr Sliney went on to say that the use of the technology at a distance of 80 centimetres, around what you would expect in a truck cab, exceeded the required safety requirements of 250 fold.

²⁴⁷ Exhibit A1 – Attachment SH-13 at page 10.

[287] It was further put that Dr Sliney provided a written response to the drivers' representative committee, which is made up largely of TWU members who were witnesses to this dispute, and the concerns put to him are in effect of the same substance in this dispute. It was submitted Dr Sliney's response to the DRC included:

"In conclusion I am very sorry that the DRC was misled by erroneous information on the internet and the DRC may not have had access to health and safety experts. In any case, it would be a tragedy if drivers rejected a perfectly safe system designed to improve their safety and reduce accidents and potential injuries based upon misrepresentation."

[288] As to Dr Dain's evidence, Toll submitted it was never put to him, or suggested in the TWU's submissions, that any of the information provided to him was incorrect. It was said the TWU accepted Dr Dain is a respected expert in the areas in which he works and conceded that none of the materials submitted by the TWU in itself proves the Guardian system will harm the eyesight of drivers. Of criticisms about what Dr Dain was provided and the fact he did not himself conduct the testing and may not be sure exactly who conducted the testing, Toll submitted there was never any criticism about whether or not it was accurate.

[289] In response to my question regarding the TWU's assertion that the reports of Dr Sliney are incomplete and the basis of the opinion is not entirely clear and that further, the 10 November 2013 report is a supplementary report to an earlier report which is not in evidence and does not appear to be obtained by Toll or provided to Dr Dain, Toll submitted:

*"It is incorrect to suggest that the only direct testing of the Guardian was the Intertek Report, as Dr Sliney's 2015 report is based on the very technology that is subject of this arbitration. Further, while Intertek may not be accredited for this type of testing, Dr Dain gave evidence that he still has a level of confidence in their reporting because they are accredited in other areas."*²⁴⁸

[290] Toll submitted it puts no significance on saying that Dr Sliney's reports are incomplete. It submitted Dr Dain was concrete in his evidence and his expert opinion had no qualifications to it, with him saying *"I have no concerns whatsoever regarding its safety."*

[291] Further, Toll submitted the TWU concede that none of its material suggests, or in itself proves, that the Guardian system will harm eyesight and Mr Hosking conceded that the TWU and its representatives did not speak to any expert in the field that would say the Guardian in itself is not safe.

[292] As to concern number three, that the infrared light emitted from the Guardian may cause health problems, including but not limited to damage to a driver's eyes, Toll submitted its position is consistent with the evidence which is referred to. It put that the use of Guardian technology is widespread and there is no evidence before the Commission that it has ever caused any safety concern to anyone. Toll submitted the evidence demonstrates unequivocally there is no risk posed by Guardian technology and that this concern is not sufficient to establish that the further implementation is plainly unjust or unreasonable given the expert evidence before the Commission.

²⁴⁸ Applicant's Submissions in Reply at [27(c)] and Transcript PN 1257-1260.

[293] Toll submitted in relation to concern four, that there is a lack of definitive proof that the infrared light emitted from the Guardian system is safe, Toll submitted the opinions of Dr Sliney and Dr Dain are definitive and their expertise has never been challenged. Toll put this is not a case where the safety of the technology is ‘touch and go’ as there are no qualifications. Toll submitted there were no changes put to them, either perceivable or hypothetical about the environment, that may alter any expert opinion. Toll further submitted there are no contradictory results anywhere in the evidence, including from any member of the scientific community with a contrary view to Dr Dain or Dr Sliney.

[294] As regards concern number five, that there is a lack of definitive studies into the effect of the infrared light emitted from the Guardian during prolonged night driving, Toll submitted the evidence on this point is that exposure during the day is the same as exposure during the night, and that this concern could have no meaningful impact on the decision making of the Commission.

[295] In relation to concern six, that there is a lack of definitive studies into the effect of the infrared light emitted from the Guardian on sight, Toll submitted it was the evidence of Dr Dain that any further studies would be an exercise in futility. Dr Dain said:

“It’s an exercise in the predictable and I am 100 per cent confident in the results that you would come to at the end.”

[296] Toll submitted the only manner of testing articulated by the TWU came through Mr Colin Markham and Mr Kevin Markham when, under cross-examination, they said the minimum testing required would need to be conducted over 20 years, involving drivers who do not work for Toll and who work 14 hour shifts, six days per week, as well as “extra things” which were not articulated. Toll submitted a reasonable person in its position, having access to all the expert advice as to the safety of the Guardian, would not reasonably insist on such a test.

[297] It was put that the TWU submitted²⁴⁹ the Guardian should not be implemented without at least two conditions being met, that Toll undertake appropriate testing and analysis of the operation of the Guardian in the context of its long haul driving operations and that annual health checks be expanded to include eye examinations to ensure no harm is being caused to the drivers. Of the latter, Toll submitted it is futile to start testing for damage when it is known that there is no damage that can be caused. Further, the TWU submitted at the very least, any introduction of the Guardian should be subject to further study in the particular circumstances of Toll’s business and regular medical assessments.²⁵⁰ Toll submitted these submissions are inviting the Commission to start informing itself as to how this technology should be further implemented, and does so without giving the Commission any guidance or providing any evidentiary basis for the request.

[298] Toll submitted despite submissions that a straight forward study could be undertaken, this ignores the evidence before the Commission that:

- (a) such a study is predetermined to find no adverse results

²⁴⁹ Respondent’s Final Submissions at [32].

²⁵⁰ Respondent’s Final Submissions at [51].

- (b) there is no purpose in spending money to produce a predictable outcome
- (c) the only thing that its members, the DRC will accept, is nothing less than a study performed over 20 years, 14 hours per day, six days per week.

[299] Toll submitted the above is not a straight forward study.

[300] As to the debate around the Australian standards and the eight hour period of exposure and what I was to make of that in relation to Dr Dain's opinion and evidence, Toll submitted the salient part of Dr Dain's evidence is that it makes no sense to apply an eight hour limit to these particular hazards. Dr Dain said "*I think the standard is ambiguous in this and I understand your interpretation of it but I have a different interpretation of it.*"²⁵¹ Toll submitted Dr Dain's expert opinion on this should be accepted and his explanation of the ambiguity and what flows from any ambiguity is what should be accepted by the Commission. Further, Toll pointed to Dr Dain's evidence that the Guardian is suitable for continuous use without risk to health²⁵² and that "*what is safe at 1000 seconds or 10 seconds as applicable to crystalline lens or the retina respectively is safe forever.*"²⁵³

[301] In concluding, Toll referred to the *DriveCam case*, a matter before the Commission which involved a dispute between Toll and the TWU under the 2013 Agreement and whether Toll could implement the DriveCam technology into its Victorian fleet. Toll submitted the relevant clauses dealt with in the Agreement are the same. Toll highlighted the following from the *DriveCam case*:

*"I have considered the various provisions in the Agreement that have been referred to ... and am satisfied there is nothing in the Agreement that precludes Toll from doing what it now proposes. ..."*²⁵⁴

*"In summary, I am not satisfied that there is anything in place in terms of a legal or contractual barrier that prevents Toll from doing what it now proposes."*²⁵⁵

*"In conclusion, and having considered all the evidence and submissions I am satisfied, firstly, that there is nothing that prevents Toll from installing both the outward facing and driver facing cameras into its heavy vehicle fleet in Victoria. I am also satisfied that the evidence indicates the system can contribute to better safety outcomes in the road transport industry and should be considered by the parties in this context. ..."*²⁵⁶

[302] Toll submitted the real difference between the DVR technology the subject of this dispute and the DriveCam technology the subject of the *DriveCam case*, is that the DVR technology records continuously, rather than as a result of being triggered by a G-force event. It submitted it is hard to see how the Commission could come to a different conclusion about the DVR technology, which is again outward and inward facing cameras that can contribute to better safety outcomes. It submitted the evidence of Toll management is that the DVR technology ensures that Toll's reporting systems are actually better equipped to ensure the

²⁵¹ Transcript PN 1310.

²⁵² Exhibit A5 [Report] at [29].

²⁵³ Exhibit A5 [Report] at [52[ii]].

²⁵⁴ [2014] FWC 2945 at [72].

²⁵⁵ Ibid at [76].

²⁵⁶ Ibid at [85].

safe system of work, as opposed to just having 12 seconds of footage the DriveCam system provides. Toll submitted it is better able to comply with its obligations under clause 40 of the Agreement with the DVR technology.

[303] As to the evidence of the TWU in the *DriveCam case*, Toll highlighted the following passages from the case:

*“I do not take issue with the fact the TWU and its members in Victoria have these concerns. However, there was little evidence provided in the proceedings to substantiate these concerns, despite the fact the DriveCam system has been in place in other States for at least two years, and in some cases longer. It is also in place in other countries according to the evidence...”*²⁵⁷

*“...it could be expected evidence from the operation of the system elsewhere would have been provided to the Commission to support the concerns being raised. However, apart from some exchanges in cross examination about an employee in Queensland ... there was little else put to the Commission by way of specific evidence to support the concerns being expressed by the TWU and its members.”*²⁵⁸

[304] Toll submitted a similar finding in the current case is almost inescapable. It was submitted the Commission has been addressed as to the nature of the evidence which was in effect completely one-sided when it comes to any potential safety hazard of the Guardian, and despite the TWU in Victoria having concerned members raising issues about the DriveCam technology, it appears to have approached this dispute in the same manner. Toll submitted any concerns with DriveCam have been traversed before the Commission in the *DriveCam case* and there is no difference with the DVR, save for the length of filming, the manner in which filming will start upon the key moving to the accessory position and the manner in which footage is retrieved.

TWU submissions

[305] The TWU submitted the relevant touchstone upon which the Commission would operate is a judgment about the reasonableness of the steps or measures that Toll proposes to implement arising from clause 40 of the Agreement.

[306] The TWU submitted it should not be the approach of the Commission to look at the matter from the perspective of the employer and be limited in some sense to whether any reasonable employer would adopt the step. The TWU accepted that a number of Commission decisions have accepted that in certain respects, the Commission will have some regard to management’s view as to the way in which a business would be run, and it does not suggest Toll’s view is irrelevant. It submitted the Commission should make an assessment as to whether it is satisfied, on the material before it, that the measures proposed to be introduced are reasonable steps to achieve the objective contemplated by clause 40 of the Agreement.

[307] As to Toll’s suggestion that the DVR and the *DriveCam case* raises the same issues, the TWU submitted that is not the case for at least three reasons. Firstly, the justification for the implementation of the continuous DVR technology is said to be safety based. The TWU

²⁵⁷ Ibid at [81].

²⁵⁸ Ibid at [82].

submitted in that respect, any perceived or alleged safety benefits from a continuous recording are difficult to accept, as unlike the DriveCam technology, the DVR technology does not permit real time notification of incidents which have occurred, which does produce a safety benefit. The TWU submitted with the DVR technology, all that could occur is an investigation after an event by viewing the footage. The TWU noted there is no difficulty with the outward facing cameras, just the inward facing cameras.

[308] In response to my question about the significance of real time notification and that DriveCam does not stop an event occurring, the TWU submitted DriveCam transmits footage of an incident so it can be viewed in a very timely way, which could allow assistance to be rendered, or for the company to ascertain if any damage to the vehicle has occurred or if there has been any effect on the driver which might compromise the ongoing operational safety of the vehicle and the driver.

[309] The TWU submitted a further reason why this matter is distinct from the *DriveCam case* is that concerns drivers have with respect to continuous DVR technology did not arise with respect to the DriveCam technology as the privacy concerns were, if not non-existent, at least negligible in the sense DriveCam only records when an incident occurs and only for a short period of time. That use of the footage for other purposes was raised in the *DriveCam case*, the TWU said again that concern was of a much reduced type compared to a full-time recording device which records drivers at all times.

[310] In respect of use of the footage, the TWU submitted that the restrictions contained in the policies are directed at a particular individual employee of Toll using the footage in a manner which was not authorised by the organisation, which is quite distinct from the concerns of witnesses about whether or not the terms of the policies themselves would be complied with.

[311] At to the Guardian technology, the TWU submitted the issue is that the device involves directing infrared beams at the face and eyes of the drivers throughout the time they are driving the vehicle. It was said that the TWU members have a common-sense and understandable concern about such a device and whether it is and can operate safely without risks, particularly long-term risks, to their health and eyesight. The TWU submitted given this common-sense concern, it is appropriate that there be a high threshold of satisfaction for such a device to be implemented and that it not be implemented until Toll and the drivers have access to appropriate material demonstrating it can operate safely in the long term. The TWU submitted it is clear from the evidence that Toll had no material before it in relation to safety when it decided to implement the Guardian system. It submitted Toll obtained the Wirriga report and material from Dr Sliney and Dr Dain only as a consequence of these proceedings and subsequent to the receipt of the TWU's evidence.

[312] The TWU submitted notwithstanding the reports which were obtained, it remains the position that there is no study referred to, or that anyone is aware exists, that has been conducted in relation to the use of the Guardian device in the context of road transport. Further, the TWU made clear that Dr Dain had not seen such a device and relied on data obtained from only one source, Intertek, which is a company according to Dr Dain that is not accredited to undertake that kind of testing. Further, the TWU submitted it is unclear whether Dr Sliney had undertaken any research himself or upon what research he relied.

[313] The TWU contended this is a situation where there is no study which has been conducted in relation to the use of Guardian technology in the road transport context and an expert opinion from Dr Dain to the effect he is not concerned about it, but in circumstances where Dr Dain has himself not seen the device and where it appears he relies on a single set of empirical studies undertaken by an organisation not accredited in that type of testing. Further, the Intertek report notes it was utilised on the basis that there would be eight hours of maximum exposure which Dr Dain indicated was derived from the Australian standards, which Dr Dain questioned as to the appropriateness of that limit in relation to hazards which caused thermal as opposed to biological effects upon the eye. The TWU submitted Dr Dain did not contest that was what the standard said, though questioned whether it was appropriate for thermal hazards.

[314] The TWU submitted, in summary, the question is whether or not there is sufficient material to demonstrate, or to make it reasonable for Toll, to implement this technology in circumstances where there is no study which has been conducted into the use of the device in this particular context. At best, the TWU submitted there is a report from an expert expressing firm opinions, but the expert has not seen the device and relies on one set of testing from a non-accredited source and in circumstances where although Dr Dain expressed an opinion about the appropriateness of the standard, the Australian standard suggests an eight hour limit on use which would be exceeded by these individual drivers.

[315] The TWU submitted given the concerns of its members about the implementation of this technology, the TWU's position is the technology should not be implemented and it is not reasonable for it to be implemented without further study being undertaken. The TWU submitted it is inexplicable Toll would refuse to undertake such a study. Further, it submitted one witness referred to a 20 year study, however that was not the submission of the TWU.

[316] As to the Wirriga Report, the TWU said it was originally relied upon by Toll as demonstrating the appropriateness of the device. The TWU submitted, on inquiry, the authors indicated it ought not be relied upon outside of the context of which it was conducted in the mining site. The TWU said it referred to the report for the purpose of indicating what kind of approach other employers have taken when they have implemented this type of technology, that they had undertaken discrete studies in the circumstances in which it was actually to be applied. The TWU submitted, in short, the Wirriga Report is a piece of evidence which cannot be sufficient to demonstrate the appropriateness of the technology in the context of road transport for reasons including duration and the fact there is night driving as well as day driving in the road transport industry.

[317] The TWU further submitted that the other feature drivers indicate should accompany any implementation of the Guardian technology would be that there is an additional feature of medical examinations so they may be given confidence that there is no adverse effect on the eye. It was accepted this would be an additional feature of the already annual medical testing, though was submitted it is difficult to see why it would be an unreasonable impost in the circumstances of the implementation of the new technology.

[318] The TWU submitted the question of the reasonableness of implementing a measure incorporated with it the conditions in which it would be implemented. It contended it would be unreasonable for the technology to be implemented without some further study being undertaken to ensure there is no risk presented and also where there is no ongoing medical assessment, which is not onerous, to ensure there were no adverse consequences.

[319] The TWU said of Toll's referral to the Agreement not incorporating the medical assessment element, it is not sure the Agreement deals with medical assessments at all, so the consideration does not arise.

[320] In response to my question about what I was to make of the material obtained by the drivers and its relevance to the Guardian system, in circumstances where none of the authors were witnesses, the TWU submitted in a general sense they concern infrared technology. The TWU put that it did not submit the material affirmatively proves the Guardian technology is damaging. The TWU submitted the material demonstrates that there are questions to be answered about the long-term use of devices that direct infrared lights in the eye and they support the submission that it is not reasonable, given the falsity of other reports and evidence, for the technology to be implemented without an appropriate study being undertaken by Toll.

Toll reply submissions

[321] In response to my question that given the manner in which the agreed question is framed, in determining the dispute why might I not impose an obligation to eye test if it was introduced, Toll submitted the issue is not the introduction of something, but rather the further implementation in a manner that has already been implemented. It put that the same vice that comes with whatever a straight forward study that needs to be implemented is there in the suggestion of further eye testing. Toll submitted there is no guidance as to what sort of testing that would require or who would perform it and there is not sufficient evidence before the Commission to answer these questions.

[322] Toll further submitted that returning to the evidence, any further testing of the technology is an exercise in futility because it knows there is no damage which could be caused.

[323] As to what the appropriate test should be by the Commission in terms of answering the Agreed Question, Toll submitted the reason it relies on the test in *CFMEU v HWE Mining*²⁵⁹ is set out in paragraphs [7] to [11] of that decision and the conclusion at paragraph [12], which says:

*"I proceed on the basis that an exercise of managerial prerogative will not be unreasonable in this sense if a reasonable person in the position of the employer, could have made the decision in question."*²⁶⁰

[324] In response to my question as to the whether the position of Toll is that the test is a reasonable person in the position of the employer and the TWU's position is that it is a reasonable person at large, the TWU submitted that was correct, though there was a drift. Toll submitted it highlighted this point as it was not accepted that that was the test.

[325] In relation to the TWU's submission querying how the DVR system could be a safety measure when it does not provide real time footage, Toll submitted the similarities between how it is used with DVR is apparent in the *DriveCam case* where it was said by a witness:

²⁵⁹ [2011] FWA 8288.

²⁶⁰ *Ibid* at [12].

“...the system was not a significant safety initiative because it was essentially a reactive rather than a proactive tool, and did nothing to actually prevent incidents or particular types of behaviour from occurring or being exhibited.”²⁶¹

[326] Toll submitted this is what it is seeking to do with Guardian, which is still being challenged. Toll highlighted the Commissioner went on to say:

“However, various witnesses made reference to the fact the footage can be used to demonstrate to drivers, by means of coaching and training sessions, how certain behaviour can contribute to incidents, and how this coaching and training can assist in altering behaviour. In this context it does seem the system can be proactive in terms of changing behaviour so that it does not contribute to incidents occurring.”²⁶²

[327] Toll concluded this is exactly how footage from the DVR can also be used.

Consideration

[328] The parties have framed their dispute by reaching agreement on the question to be determined by the Commission by way of arbitration. As they have agreed this, I am not persuaded to accept the submission of the TWU that I may also determine matters outside of the agreed question and the accompanying concerns posed, in order to determine the rights and obligations of it and Toll.

[329] Determining the question of whether or not Toll has the right to further implement an infrared driver fatigue / distraction monitoring system, and an upgraded digital video recorder (with both an inward and outward facing camera monitoring system) requires confirming the source of the right.

[330] In terms of the Agreement, Clause 40 requires Toll and the Transport Workers to take all reasonable steps to ensure that all work performed by Transport Workers is performed in accordance with a safe system of work, which must include ensuring, where appropriate, that all transport work is performed in accordance with documented systems which manage the risk of driver fatigue. Guidance as to what constitutes systems which manage the risk of driver fatigue is provided in Clause 40(b) of the Agreement. They include, but are not limited to, systems for reporting hazards and incidents (Clause 40(b)(iii)), monitoring health and safety (Clause 40(b)(iv)) and contingencies to manage the risk of driver fatigue (Clause 40(b)(vii)).

[331] I am satisfied these are sufficient to establish the source of the right and therefore the question, as far as the operation of the Agreement is concerned, becomes one of asking whether the further implementation of an infrared driver fatigue / distraction monitoring system and an upgraded digital video recorder are “reasonable steps to ensure that all work performed by Transport Workers is performed in accordance with a safe system of work”.

²⁶¹ [2014] FWC 2945 at [84].

²⁶² Ibid.

[332] Outside of the operation of the Agreement, Toll submits it has an implied right to further implement founded in its managerial prerogative, which is subject to the test it submits Vice President Lawler outlined in *CFMEU v HWE Mining*.²⁶³

“...an exercise of managerial prerogative will not be unreasonable...if a reasonable person in the position of the employer, could have made the decision in question.”²⁶⁴

[333] The TWU cautioned against an approach that assesses the exercise of managerial prerogative from the position of the employer, but ultimately suggested that not too much turned on the way in which the parties have submitted the exercise of managerial prerogative should be assessed.

[334] It seems to me both steps taken under the Agreement (at Clause 40) and the exercise of managerial prerogative are required to be reasonable and I intend to proceed on the basis that I am required to assess the material before me and determine whether the further implementation of an infrared driver fatigue / distraction monitoring system and an upgraded digital video recorder are reasonable, having regard to the seven concerns outlined.

DVR Camera Technology

[335] Prefaced with “[d]oes Toll have a right to further implement an infrared driver fatigue/distraction monitoring system, and an upgraded digital video recorder (with both an inward and outward facing camera monitoring system), having regard to ...” the two discrete concerns in relation to the upgraded digital video recorder are:

- 1) Does Toll have a right to further implement an upgraded digital video recorder (with both an inward and outward facing camera monitoring system), having regard to the concern of the TWU members that the digital video recorder is unreasonably intrusive including but not limited to recording non-driving activities; and
- 2) Does Toll have a right to further implement an upgraded digital video recorder (with both an inward and outward facing camera monitoring system), having regard to the concern of the TWU members of the capacity for footage or data captured by the digital video recorder to be used for a purpose other than to ensure safe driving.

(my underlining)

[336] The DVR camera operates as a two-way camera taking vision of both the driver and road. I have noted it records on a continuous loop while the vehicle is turned on, including in accessory mode, and footage is kept for approximately two weeks before being recorded over.

[337] As to the first of the two questions in relation to the upgraded digital video recorder, I have noted the evidence of Mr Hepburn that the DVR Camera technology is preferred by Liquids because:

“(a) Given the dangerous nature of the goods which are transported by Toll Liquids, our customer base requires that all electricals (other than the engine) be turned

²⁶³ [2011] FWA 8288.

²⁶⁴ Ibid at [12].

off prior to entering a customer's terminal. A number of issues have been experienced in turning the DriveCam technology on and off, making it not particularly suitable for Toll Liquids' requirements;

(b) Toll Liquids has struggled to support the DriveCam technology from a technical perspective, and as a result, monitor and fix issues with the technology in a timely manner. This is because the DriveCam technology is being phased out of the broader TRGL line of business, which is responsible for monitoring and servicing the technology for Toll Liquids;

(c) In a number of cases, Toll Liquids has found that the footage obtained from the DriveCam system has not been enough to obtain a thorough understanding of the circumstances leading up to an accident or incident. In these cases, the eight seconds of footage that is recorded has been insufficient to properly understand events leading up to the incident; and

(d) Accidents or incidents have occurred without DriveCam recording any footage, because the event does not register as a G-force event. This is a result of the size of the vehicles which are used in the Toll Liquids fleet. Toll Liquids' vehicles are so heavy that they may not feel or register an impact to the same degree that a smaller vehicle would in the same or similar circumstances.²⁶⁵

[338] I have also noted Mr Hepburn's evidence that the DVR Camera technology can be used in the training and coaching of drivers and that as it provides more extensive camera footage, with greater capacity to track events leading to an incident, this may in turn decrease investigation times and ensure drivers are not subjected to unnecessarily lengthy investigations.

[339] Having regard to this evidence, I consider Toll's submission that as the DVR Camera technology records continuously rather than just being triggered by a G-force event, it can ensure its reporting systems are better equipped to ensure a safe system of work, has some potency. I am satisfied that the continuous footage is capable of enabling Toll to meet its obligation to ensure that work is performed in accordance with Clause 40(b)(vii) of the Agreement.

[340] I also find Toll's submissions that the more extensive camera footage from the DVR Camera technology has the capacity to exonerate Toll drivers involved in accidents or incidents and decrease investigation times and associated costs following an accident or incident, and that the DVR provides a useful tool for training and coaching of drivers that may result in the prevention of accidents in the future, compelling.

[341] The TWU submitted that it is difficult to accept the alleged safety benefits from a continuous recording because, unlike the current DriveCam technology, the DVR technology does not permit real time notification of incidents that have occurred and the safety benefit that flows from this. I am not persuaded much turns on this because with both systems, irrespective of when the footage from them can be viewed, the incident still will have occurred. I consider that what the technology can capture of the cause of the incident will determine its value in relation to the future prevention of incidents.

²⁶⁵ Exhibit A1 at [45].

[342] I have had regard to the argument of the TWU that the DVR is unreasonably intrusive because of its capacity to record non-driving activities. This argument relied in large part on the assertion that drivers will generally take their meal breaks in the cabin of their vehicle when they will often have their ignition in accessory mode, so as to use the radio, heater or air-conditioner. However, the evidence suggested this will not always be the case and there will at times be other venues available, such as depots. Moreover, I consider such concerns can be overcome by the driver simply moving to the passenger seat of the cabin and this is not an unreasonable step to have to take.

[343] The second concern articulated by the TWU was that there is capacity for footage or data captured by the DVR to be used for a purpose other than to ensure safe driving. I am satisfied that SOP-1²⁶⁶ adequately deals with this for Liquids and will likewise do so if it were to be adopted for Linehaul. This procedure outlines the requirements for the fitment, management, repair and use of footage recorded by in Vehicle Monitoring Systems (IVMS) in or on Toll vehicles. Features of SOP-1 include:

- The use of footage recorded by vehicle cameras is managed according to Toll Privacy Policy;
- Only authorised persons have access to camera footage;
- Footage is only collected and used for the purposes for which it was recorded (as described in the Procedure);
- Footage will be accessed by authorised persons;
- Footage is appropriately stored in a secure location that can only be accessed by the most Senior person onsite; and
- Drivers and other employees, as relevant, are informed of vehicle cameras and advised how the footage is used.

[344] SOP-1 further stipulates that vehicle camera footage will be collected and used for:

- Monitoring fatigue and distractions;
- Investigating driving incidents, accidents and events;
- Investigating any other incident involving the driver of the vehicle (e.g. complaint by a member of the public or external authority);
- Reviewing and using the footage to coach drivers, improve safety outcomes, driver skills and behaviours;
- Reviewing and using the footage to help exonerate drivers involved in an incident and to recognise driver skill and performance;
- When deemed appropriate, reviewing and using the footage as evidence to discipline drivers where poor behaviour and safety is identified and/or the breaching of Road Safety Laws and Toll Policy and procedures has occurred; and
- Only the purpose for which it was recorded.

[345] Finally, SOP-1 states that inappropriate use or circulation of recorded footage beyond authorised personnel shall be subject to disciplinary action, up to and including termination of employment. On a practical level, accessing the footage requires retrieval from a memory card and viewing requires the use of specific inscription software.

²⁶⁶ Exhibit A1 – Attachment SH-5.

Conclusion – DVR Cameras

[346] Toll submits it seeks to further implement technologies that it has identified as being capable of saving lives and which are capable of ensuring its enterprise is carried out in the safest possible manner. It further submitted the further implementation of the DVR Camera technology is a reasonable step to ensure a safe system of work, pursuant to clause 40 of the Agreement.

[347] I am persuaded by Toll’s submission that in circumstances in which it has obligations to provide a safe system of work, investigate incidents and complaints and is called upon to provide information to regulators and police regarding incidents involving its vehicles, a reasonable person could make the decision to further implement the DVR technology.

[348] While I acknowledge the employees have concerns that Toll will not comply with SOP-1, there are practical limitations that place some control over access and the safeguards contained in SOP-1 are comprehensive and a statement of Toll’s intent. In these circumstances, I am not persuaded that these concerns should act as a barrier to the further implementation of the DVR Cameras.

Infrared driver fatigue / distraction monitoring system – Guardian technology

[349] Prefaced with “[d]oes Toll have a right to further implement an infrared driver fatigue/distraction monitoring system, and an upgraded digital video recorder (with both an inward and outward facing camera monitoring system), having regard to ...”, the five discrete concerns in relation to the infrared driver fatigue / distraction monitoring system are:

- 1) Does Toll have a right to further implement an infrared driver fatigue / distraction monitoring system, having regard to the concern of the TWU members that the infrared light emitted from the System may cause health problems including but not limited to damage to a driver’s eyes;
- 2) Does Toll have a right to further implement an infrared driver fatigue / distraction monitoring system, having regard to the concern of the TWU members as to the lack of definitive proof that the infrared light emitted from the System is safe;
- 3) Does Toll have a right to further implement an infrared driver fatigue / distraction monitoring system, having regard to the concern of the TWU members as to the lack of definitive studies into the effect of the infrared light emitted from the System during prolonged night driving;
- 4) Does Toll have a right to further implement an infrared driver fatigue / distraction monitoring system, having regard to the concern of the TWU members as to the lack of definitive studies into the effect of the infrared light emitted from the System on sight; and
- 5) Does Toll have a right to further implement an infrared driver fatigue / distraction monitoring system, having regard to the concern of the TWU members of the capacity for data captured by the System to be used for a purpose other than to ensure safe driving.

(my underlining)

[350] The Guardian technology, I have noted, is an ‘in vehicle’ system that uses a console mounted camera to track driver eye behaviour, determine their drowsiness state and detect micro-sleeps and distractions the instant they occur. Drivers are immediately alerted of fatigue events by audio and seat vibration alarms and Toll operations are notified of incidents in close to real time.

[351] I have noted the general basis of Dr Dain’s opinion:

- a) The hazards of infrared radiation are not a risk to the eye until they reach levels well beyond what is emitted from infrared emitting diodes, IREDS;
- b) Damage through optical radiation can be biochemical (which is not a factor having regard to the IRED emissions in question in this matter) or thermal;
- c) In terms of thermal, optical wavelengths, if absorbed, cause temperature to rise and if the temperature rises more than a certain amount, tissue will be damaged. The amount of radiation necessary for damage only comes from an object that is extremely and uncomfortably bright;
- d) In the occupational environment, it is mainly lasers that pose a thermal risk to eyes;
- e) Lasers are classified under Australian/New Zealand standards and Class 1 lasers are in the equivalent of the Exempt category (i.e. they can be viewed without any risk of damage whatsoever);
- f) The levels from IREDS are substantially less than the levels of Class 2, 3 and 4 lasers (Class 3 and 4 lasers are, at least in theory, hazardous to eyes);
- g) IREDS have been used in eye movement recorders for at least 40 years and in them, the eye is irradiated by IREDS that are much the same as in the Guardian system. In these eye movement systems the IREDS are typically placed as close as 10-20mm from the eye so that the irradiance will be at least 1000x that of the Guardian system. They have never caused any problems; and
- h) As such, Dr Dain would not expect the Guardian technology being anything other than Exempt (i.e. it can be viewed without any risk of damage whatsoever).

[352] I have further noted from Dr Dain’s evidence:

- a) In answering the question “*does the Guardian meet the Australian Standard, Photobiological safety of lamps and lamp systems,*” Dr Dain said the Guardian system meets the Exempt category (does not pose any photobiological hazard for the end points in this standard) and is suitable for continuous use without risk to health.
- b) That the irradiances and radiances generated by the Guardian are less than 1/500th of the irradiance and far less than 1/50th (radiance) limits of the standard, such that he knows of no reason to be concerned, even at the most remote level, about the effects from the levels of IR from the Guardian technology.

c) That he has no concerns whatsoever regarding the safety of the infrared light which is emitted from the Guardian technology, including if emitted during prolonged night driving.

d) As to the possibility of infrared light having any adverse effects on a driver's sight, Dr Dain noted the radiation emitted is, in principle, invisible. He considered in theory it could become a visible glare source, which could be annoying to the driver and cause objects to be less visible due to scattered light, but noted there is no expectancy nor suggestion that the emissions of the IREDs in question being visible to any significant extent. Dr Dain therefore concluded there is no possibility for the infrared radiation which is emitted from the Guardian to have adverse effects on the driver's sight.

e) That he considers Dr Sliney is one of the foremost authorities in the world on optical radiation safety and protection, such that he views Dr Sliney's reports with particular confidence. For his part, Dr Sliney had concluded that the Guardian technology was within the safety guidelines²⁶⁷ and there were no cognizable hazards to the cornea, lens or retina from even lengthy, repeated exposures.²⁶⁸ He said the infrared LEDs would have to emit far more power to pose a serious acute hazard to the retina and this is theoretically impossible for current LEDs.²⁶⁹

f) That he considers the Guardian technology poses no risk at 20cm away from the eye but even if the distance was less than 20cm, he would expect it would still be in the Exempt category.

g) The duration of the exposure to the Guardian technology did not concern him, with his evidence being:

“the hazard analysis according to AS/NZS IEC 62471:2011 has been carried out for unlimited exposure time. For these thermal hazards, the safety issues beyond the longest time limit set do not increase, since any temperature rise generated has reached equilibrium and does not rise any further. What is safe at 1000s or 10s (as applicable to the crystalline lens or retina respectively) is safe for ever...”²⁷⁰

This view was unchanged when the scenario of a 14-hour shift was put to him and he considered the length of shift to be irrelevant.²⁷¹

h) His opinion there is no need for specific testing on the device or additional testing as the hazard analyses provided indicate substantial margins of safety and the only influence on the exposure of the eye are the distance between the unit and the eyes of the driver. Similarly, Dr Dain said he would not have expected to see a specific report

²⁶⁷ Exhibit A1, Attachment SH13 at page 10.

²⁶⁸ Ibid at page 11.

²⁶⁹ Ibid at page 10.

²⁷⁰ Exhibit A5 [Report] at [52[ii]].

²⁷¹ Exhibit A5 [Report] at [57[ii]] and Transcript PN 1301.

testing the Guardian technology device for an extended period of time because there is no effect anticipated.²⁷²

i) With the values for maximum permissible exposure having remained the same for decades, he has absolutely no reason to assume they will change now and as such, he did not expect the Australian Standard to be reviewed, such that the Guardian Technology would no longer be in the Exempt category.

j) There was no reason to be concerned about the impact on people with photosensitive eyes because photosensitivity is related to photochemical effects, which have no influence on thermal hazards.

[353] The TWU produced no expert evidence that challenged the evidence of Dr Dain. I had amended Directions so as to provide an opportunity for this to occur, but the TWU ultimately submitted it was unable to identify another expert who was qualified to give an opinion about the technology. The TWU did however refer to the series of reports that its witnesses had sourced through their own internet research and said of these:

“It is not submitted that the material obtained by the drivers, in itself, proves that the Guardian system will harm the eyesight of drivers. However, the documents have raised concerns in the minds of the drivers which they believe should be addressed and warrant further study”,²⁷³

[354] The TWU submitted:

- Dr Dain’s evidence made clear he had not ever conducted any testing or examination of the Guardian system or any infrared emitting diodes and had not seen the Guardian device or visited any workplaces where the device was installed;
- Dr Dain was unable to explain some aspects of the operation of the Guardian technology;
- Dr Dain was unfamiliar with how the technology actually operates and was unable to say if the LED diodes operate in a continuous or pulsing manner;
- Dr Dain relied on a small selection of reports provided by Toll, only one of which undertook direct testing of the Guardian device, was unable to say whether Dr Sliney has undertaken direct testing and was given incomplete reports of Dr Sliney;
- in terms of direct test results, Dr Dain relied on results undertaken in a laboratory not accredited for that type of testing; and
- Dr Dain accepted that his opinion the Guardian system could be used for longer than eight hours conflicted with the text of the Australian standard.

[355] The TWU submitted the material before the Commission is not sufficient to demonstrate that appropriate testing has been undertaken to assure drivers that the Guardian

²⁷² Transcript PN 1284.

²⁷³ Respondent’s Final Submissions dated 2 November 2017 at [46].

technology is safe and without risk. It said there have been no studies which have examined the operation of the Guardian technology, or similar, in road transport. The TWU further submitted that until such time as research has been undertaken, the introduction of the Guardian system is unreasonable because it has the potential to expose those being subjected to the infrared light to the risk of significant damage to their eyes.

[356] At the very least, the TWU submitted the technology should be subject to further study in the particular circumstances of Toll's business and there should be regular medical assessments for drivers, to ensure no adverse effects ensue.

[357] I have weighed up the evidence of Dr Dain outlined above and the TWU's critique of it. I note Dr Dain has been a registered optometrist for nearly 50 years. I further note he is Emeritus Professor, School of Optometry and Vision Science at the University of New South Wales and has specialised in the relationship of eyes and vision within the workplace and the physical world in general. He has considered, as part of this work, the measurement, assessment and necessary protection of eye hazards. Doctor Dain chaired the National Association of Testing Authorities of Australia, Registration Advisory Committee in Optics and Radiometry from 1990-2008 and has been on the Standards Australia committee on eye and face protection for over 40 years.

[358] As to the TWU critique, I note that while Dr Dain did not conduct testing on the Guardian device, his evidence was that what is important is the amount of radiation being absorbed in the structure and it does not matter what sort of device the radiation is generated from.²⁷⁴ As to whether the LED diodes operate in a continuous or pulsing manner, Dr Dain's evidence was that it makes no difference from the point of view of hazard analysis.²⁷⁵

[359] I have also considered the TWU's submissions in relation to the reports of Dr Sliney and note that Dr Sliney's 2015 Report outlined that an infrared pod was measured in the laboratory of Terry L. Lyon and he outlined the results²⁷⁶ and the unequivocal conclusions he reached.

[360] I further note Dr Dain acknowledged that Intertek was not accredited for the measurements of light emitted from the devices. His evidence having regard to this was that ultimate confidence in results is when they come from an accredited report and the second best is when they come from a laboratory accredited for other capabilities because this gives them "some credence" as "they understand the needs and the responsibilities in accreditation."²⁷⁷

[361] Finally, as to the assertion that Dr Dain accepted that his opinion the Guardian system could be used for longer than eight hours conflicted with the text of the Australian standard, I have considered the totality of Dr Dain's evidence on this point.²⁷⁸ His evidence was that while it makes sense to apply an 8-hour limit to a biochemical risk, it makes no sense to apply it to the thermal hazards in question and it is in this respect that he queries the wording of the Australian Standard for possibly being inexact or ambiguous.

²⁷⁴ Transcript PN 1303.

²⁷⁵ Transcript PN 1273, 1323 and 1329.

²⁷⁶ Exhibit A1, Attachment SH13 at page 1.

²⁷⁷ Transcript PN 1257.

²⁷⁸ Transcript PN 1305-1316 and Exhibit A5 [Report] at [57].

[362] While I acknowledge the particular concerns of the TWU witnesses in this case, Dr Dain's evidence satisfies me in relation to the Guardian technology generally and the four specific concerns the TWU have raised in relation to it. That Dr Dain has no concerns whatsoever regarding the safety of the infrared light which is emitted from the Guardian technology, including if emitted during prolonged night driving, nor any concerns about the length of time the drivers might be exposed to the Guardian technology and sees no need for specific testing on the device or additional testing because the hazard analyses provided indicate substantial margins of safety, forms the basis of my satisfaction.

[363] I turn next to the fifth concern of the TWU members of the capacity for data captured by the System to be used for a purpose other than to ensure safe driving.

[364] In relation to policies regarding use of the Guardian system, I note the concern of Mr Clifford that there are no clear policies regarding what would happen to a driver if he or she has three fatigue events. In particular, Mr Clifford said there is no obligation on Toll to find out why the three events occurred or to manage the issue and he argued there should be measures in place to assist a driver who has three such events. Mr Clifford said he is concerned such an incident would be treated as a performance issue and drivers would be disciplined, rather than the issue being treated as an operational or medical issue. Toll submitted Mr Clifford conceded under cross-examination that there was evidence before the Commission of such an incident and it indicated the incident had been addressed by Toll in the exact opposite manner to that about which he was concerned. However, Mr Clifford said that particular approach was not a policy of Toll and it is not obligated to repeat that treatment with any other driver.²⁷⁹

[365] In responding to the fifth concern, Toll again relied on the safeguards in SOP-1 (discussed above) and further outlined additional processes regarding the Guardian system in SOP-2²⁸⁰ and SOP-3,²⁸¹ which it submitted provide for how fatigue alerts are to be managed and drivers assisted. Toll said there has been no challenge to suggest these policies do not ensure safe driving.

[366] I note that SOP-2 provides guidelines for managing the Guardian systems installed in the Liquids fleet. Features of SOP-2 include:

- The use of footage recorded by vehicle cameras is managed according to Toll Privacy Policy;
- Only authorised persons have access to camera footage;
- Footage is only collected and used for the purposes for which it was recorded (as described in the Procedure);
- Footage will be accessed by authorised persons;
- Footage is appropriately stored in a secure location that can only be accessed by the most Senior person onsite; and
- Drivers and other employees, as relevant, are informed of vehicle cameras and advised how the footage is used.

²⁷⁹ Transcript PN 1156-1158.

²⁸⁰ Exhibit A1, Attachment SH15.

²⁸¹ Exhibit A1, Attachment SH16.

[367] SOP-2 confirms that the following occurrences will necessitate a fatigue management discussion between a driver and their Line Manager to improve safety outcomes:

- A third fatigue event;
- A second fatigue alert requiring a driver to park up for the rest of the shift; and
- Reports showing multiple fatigue events or a pattern of fatigue events.

[368] It is further outlined in SOP-2 that the driver and Line Manager will discuss fatigue management training undertaken by the driver, a review of steps being taken by the driver to ensure they are fit for duty, and matters believed to be impacting on the drivers' fitness for duty. Further training may be provided, there may be a period of leave or a short-term amendment to working hours. A referral for medical assessment may also be considered. SOP-2 states that the use of the Guardian system "*is all about achieving better safety outcomes to help ensure drivers go home safely after every shift, rather than being about disciplining or terminating drivers.*" As for disciplinary action, SOP-2 states it will be undertaken where a driver engages in behaviour inconsistent with their fatigue obligations.

[369] In SOP-3, it is specifically acknowledged that there may be false events triggered in a vehicle and if a driver is certain there was not a fatigue event, they can continue their shift without having to pull over and undertake the outlined process.

[370] I have considered the evidence and submissions of the TWU and its witnesses, but I am satisfied that SOP-2 and SOP-3 adequately address the concerns of the TWU members regarding the capacity for data captured by the System to be used for a purpose other than to ensure safe driving. The embarkation of disciplinary action is limited to scenarios in which a driver engages in behaviour inconsistent with their fatigue obligations and the emphasis under the policy appears to be very much directed towards better safety outcomes before such a path is trodden.

[371] More generally, I have considered the statistics provided and I am satisfied they support the contention that road safety, including fatigue and its effect on road safety, is a significant issue for the road transport industry and the community. They included:

- The Australian Bureau of Infrastructure, Transport and Regional Economics reports in the 12 month period to the end of March 2017, 217 people died from 196 fatal crashes involving heavy trucks or buses;
- SafeWork Australia's finding that of the 583 fatalities in the road transport industry between 2003-2015, 92% occurred in the road freight industry; and
- a report by National Transport Insurance (NTI) that found in 2013, 12.8% of major truck crash incidents in Australia, where NTI was the insurance underwriter, were caused by fatigue.

[372] I have also considered the Toll-specific evidence of incidents involving fatigue, given by both Mr Hepburn²⁸² and Mr Felsovary. I accept the evidence of Mr Felsovary that features of the Linehaul business raise fatigue risks which are difficult to control due to the reliance of self-monitoring and self-reporting. I have also noted the submission, through Mr Hepburn,

²⁸² For example, see above at [75].

that the Guardian technology “is a proactive safety tool” which has the capacity to reduce safety incidents related to fatigue by 95%.²⁸³

[373] I have outlined Toll’s current use of the technology above at paragraph [43] and have noted its submission that the Guardian technology is used by a number of its competitors and a number of customers require use of the Guardian technology in their contracts. I have also noted no evidence of specific complaints regarding the use of either form of technology was put before the Commission. While some generalised concerns were raised and the suggestion was made that the Guardian technology is already a source of anxiety and tension, I have noted the approach Toll has previously adopted in terms of consultation²⁸⁴ and Mr Hepburn’s evidence that all affected Tanker Drivers would be briefed regarding the operation of the technology prior to it being activated in their vehicles, and on the various Standard Operating Procedures, and that they will be notified in advance of the Guardian and DVR Cameras being activated in their vehicles.

Conclusion – Guardian Technology

[374] Having considered all these factors, I am satisfied, on balance, they weigh in favour of the finding that Toll has the right to further implement an infrared driver fatigue / distraction monitoring system and doing so, having particular regard to the five concerns outlined, would be a reasonable step.

Conclusion

[375] As outlined above at [3], I order the agreed question for arbitration submitted to the Commission on 30 May 2017 is taken to be before the Commission and is the agreed question to be determined in the hearing of this matter.

[376] For completeness, in terms of the procedure adopted in determining the matter, I order pursuant to s.589(1) of the Act, that for the purpose of clause 15(d)(i) and (iv) of the Agreement, the evidence and submissions given in relation to the application made under the 2013 Agreement (C2017/1983) is taken to be evidence and submissions put before the Commission pursuant to the application filed pursuant to clause 15 of the Agreement.

[377] Finally, as I have outlined in my consideration above, I have had regard to the seven concerns of the TWU members but am nonetheless satisfied and conclude that Toll has the right to further implement an infrared driver fatigue/distraction monitoring system, and an upgraded digital video recorder (with both an inward and outward facing camera monitoring system).



DEPUTY PRESIDENT

²⁸³ Exhibit A1 at [63(a)] and Exhibit A1 – Attachment SH-9.

²⁸⁴ See above at [56]-[57].

Appearances:

Mr Denton of Counsel for the Applicant.

Mr Gibian of Counsel for the Respondent.

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