



## **Fatigue Standard**

# **Standard for Fatigue Management**

**Abstract:** To provide instruction and detail the mandatory requirements for the management of fatigue risk in the workplace.

**Keywords:** fatigue, fatigue risk, fatigue management, fatigue calculator

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# Standard for Fatigue Management

## 1 Overview

### 1.1 Purpose

The purpose of this Standard is to provide information and mandatory requirements for the management of fatigue-related risk in the workplace. This Standard applies to all Energy Queensland workers and workplaces.

### 1.2 Scope

This Standard provides the minimum mandatory requirements for working hours, work schedules, rest periods, fatigue assessment and other fatigue-related responsibilities of workers, supervisors and managers to support the effective management of fatigue risk.

The Union Collective Agreements (UCA) provide industrial entitlements in relation to hours of work, overtime, meal breaks, crib breaks and rest breaks after overtime, which are not referenced in this Standard. This Standard complements the UCA, but if any conflicts arise between the two documents, the limits of the more conservative standard apply.

## 2 References

### 2.1 Energy Queensland controlled documents

HSE Incident Management Framework R073 - 690160  
HSE Learning and Assurance Framework R252 - 692115  
Standard for Operating Motor Vehicles S018 - 691719  
Standard for the Use of Aircraft S014 - 691344

### 2.2 Other sources

Natural Disaster Working Arrangements  
*Heavy Vehicle National Law Act 2012*  
*Work Health and Safety Act 2011* (Qld)

## 3 Definitions, acronyms, and abbreviations

Term	Definition
Fatigue Regulated Heavy Vehicle (FRHV)	A vehicle with a gross vehicle mass (GVM) of more than 12 tonnes; a vehicle combination, if adding the GVM of each vehicle in the combination gives a total GVM of more than 12 tonnes; or a bus with a GVM of more than 4.5 tonnes that seats more than 12 adults.
Fit for Work	A state (physically and psychologically) which enables a person to perform assigned tasks competently and in a way that does not threaten or compromise the safety or health of themselves or others.
Leader	Includes supervisor or manager.
National Heavy Vehicle Exemption Notices	Regulatory notices for employees who drive Energy Queensland Fatigue Regulated Heavy Vehicles that exempt drivers from the record keeping, work diary; and the work and rest hour requirements of the Heavy Vehicle National Law.
Natural Disaster Working Arrangements	Alternative working arrangements that provide guidance for conducting work in response to a declared natural disaster.
Night Work Hours	Any hours worked between 11pm and 5am (23.00h to 05.00h)
Planned work	Planned work includes normal operations, planned overtime, shift rosters, planned disaster response work, planned away rosters or project work.

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Sleep Opportunity	A break that provides the potential for adequate recovery before the next work period. Example includes the minimum 9-hour break and 14-hour overnight break.
Union Collective Agreement/s (UCA)	Energy Queensland Union Collective Agreement 2017 Energy Queensland Retail Union Collective Agreement 2017
Unplanned work	Unplanned work includes emergency work, initial disaster / event response activities, emergency call out work (stand-by rosters).
Work Period	Work period for counting hours of work and identifying when rest breaks are required. A 24-hour period commences at the <i>start of work</i> following the completion of at least a minimum 9-hour break (or another longer break) and ends 24 hours later.

## 4 Responsibilities

Managing fatigue in the workplace is a **shared responsibility**. It requires every worker to take reasonable action to minimise the risk of fatigue-related incidents and injuries.

### 4.1 Energy Queensland

Energy Queensland is responsible for providing safe systems of work including establishing mandatory requirements, consulting with the workforce and providing tools, training and support to effectively manage fatigue risk.

### 4.2 Leaders

Leaders are accountable, within their areas of responsibility, for maintaining compliance with the requirements of this Standard and for identifying and managing fatigue risks.

Achieved by:

- monitoring workers, recognising fatigue signs and symptoms and responding appropriately;
- managing fatigue-related risks when planning rosters, scheduling and allocating work;
- considering whether accommodation is adequate to allow opportunity for sleep for away work, with consideration of noise, temperature and light control within the bedroom;
- ensuring that all work is compliant with the working hour limits and break requirements;
- encouraging open and frank conversations about fatigue and other hazards to safe work; and
- implementing controls to help ensure that there is a system to work safely with fatigue present.

### 4.3 Workers

Workers have a legal duty to take care of their own health and safety; to help ensure that their actions do not adversely affect the safety of others and to identify foreseeable hazards that could pose a risk to health and safety – even if that hazard is the worker themselves.

Achieved by:

- being fit for work by managing lifestyle, medical, medication and personal factors that contribute to fatigue and alertness; and using breaks between work to obtain the sleep required to be fit for work;
- reporting to their leader if they are affected by fatigue to a level that it impacts on safety or has a high probability of impacting on safety;
- reporting any unsafe fatigue-related behaviours or where the work or rest requirements have not been met;
- complying with the mandatory requirements of this standard including not exceeding the maximum limits; and
- performing a fatigue assessment and identifying relevant controls at the fatigue action thresholds and any other time fatigue is likely to affect fitness for work.

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## 5 Management of Work and Rest Periods

Increased working hours result in less opportunity for sleep and recovery and an accumulation of fatigue. Night work, early morning work and extended working hours that impact on normal preferences for sleep timing, increase the likelihood of fatigue.

### 5.1 Work Thresholds and Maximum Limits

The minimum mandatory requirements for working extended hours including overtime, or unplanned emergency call out and standby situations are outlined in Table 1 and Table 2. All work hours are inclusive of paid and unpaid breaks within periods of work e.g. meal, crib, rest breaks.

Planned work should be scheduled in accordance with the Planned Work Thresholds in Table 1.

Fatigue Assessment is required to identify appropriate controls to allow work to continue safely past 12 hours in any one day and for any night hours worked. Refer to [5.3 Fatigue Assessment](#) for more detail.

Maximum limits allow for emergency and unplanned work, but these limits should not be considered targets for daily planned or predictable operations. **Working up to the maximum hour limits poses a significant fatigue risk exposure that must be closely managed.**

**Table 1 – Work Thresholds, Actions to Extend and Maximum Limits**

Time Period	Planned Work Threshold	Action to Extend Work	Maximum Limit
1 day (24-hour period)	12 hours	Fatigue Assessment	<b>16 hours</b>
Night work (over 7 days)	0 hours	Fatigue Assessment	<b>24 hours</b>
3 days	<i>Up to 36 hours</i>		<b>42 hours</b>
7 days	<i>Up to 60 hours</i>		<b>84 hours</b>
Consecutive days	<i>7 days</i>		<b>14 days</b>

**Table 1 Notes:**

- All work hours are cumulative for the period.
- A 24-hour period commences *at the start of work* following the completion of at least a minimum 9-hour break (or another longer break).
- All time periods are *rolling periods* – i.e. rolling 3 and 7-day periods for thresholds and limits.
- Night work hours is any work between the hours of 23:00h and 05:00h.
- Fatigue assessment is required on each day as indicated - not just the first day.
- A calendar day (00:00 – 23:59h) where no work is conducted breaks the consecutive day count.
- Planned Work Threshold values in italics are included for guidance and may be exceeded for planned work. See 5.5 Planned Overtime for more detail.

Phone calls that last for a short duration and do not require the worker to leave their home / residence, do not constitute work for the purposes of counting fatigue hours of work or days worked. However, multiple phone calls received overnight will interrupt sleep opportunity. Any increase in fatigue risk or concerns with fitness for safe work must be acknowledged and effectively managed.

### 5.2 Minimum Rest Breaks

Rest breaks are a key control for fatigue. Minimum mandatory rest breaks and when they apply are listed below.

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Table 2 – Minimum Rest Breaks

	Rest Break	Description
Breaks Between Work Periods	<b>Minimum 9-hour Break</b>	Minimum 9-hour break plus reasonable travel. Must be commenced <u>within every 24-hour period</u> (incl. Sat, Sun, Public Holidays) and then be continued until completed.
	<b>14-hour Overnight Rest</b>	Minimum 14-hour rest including period from 11pm to 5am is required whenever there are three consecutive nights with total of 12 hours (or more) night work hours. The fourth night is 14-hour rest. (See Notes below).
	<b>30-hour Reset</b>	Minimum 30-hours and should include two (2) consecutive nights. Required following 14 consecutive days work. Can be used to 'reset' fatigue hours to zero to plan for operational needs.
Breaks Within Work Periods	<b>Heavy Vehicle 15-minute break</b>	Any driver of a Fatigue Regulated Heavy Vehicle (FRHV) <b>must</b> break for 15 mins (or more) after 5 hours and 30 mins of work. NB. EQL requirements are that at least a 15-minute break is required after 2 hours of driving – any vehicle.
	<b>UCA Breaks</b>	All rest breaks, crib breaks, pauses within periods of work should be taken as they are key fatigue controls.

**Table 2 Notes:**

- 14-hour overnight rest example: Night 1 - 11pm to 3am, Night 2 - 1am to 4am, Night 3 - 11 pm to 5am = 13hrs total night work hours over 3 consecutive nights. A 14-hour rest break applies including the period 11pm to 5am on Night 4.
- 14-hour overnight rest applies to emergency work, stand-by and other generally unplanned arrangements. Does not apply to rostered night shift work e.g. control room 24-hr roster or planned night work overtime e.g. planned storm roster where the fatigue risk must be managed in the development of the work schedule and pre-determined roster.

### 5.3 Fatigue Assessment

Fatigue assessment is required before work can continue:

- Whenever 12 hours (continuous or cumulative) is worked in 1 day;
- Where any work is performed between the hours of 23:00 and 05:00 (night work hours); or
- Where a worker advises they are not fit for work due to sleep and/or fatigue issues.

Fatigue Assessment
<ol style="list-style-type: none"> <li>1. Start with a conversation – talk to your work mates, check in with each other, how do you feel?</li> <li>2. Use the Fatigue Calculator app on the work phone to find your Fatigue Score.</li> <li>3. Refer to the Fatigue Action Table in the app and note relevant actions.</li> <li>4. Talk about the job, think about the task, how can work proceed safely with fatigue present? Does it need to be delayed, reallocated, rotated?</li> <li>5. Come up with controls relevant to the job, your fatigue score and how you feel. You may need to discuss this with your supervisor before proceeding.</li> <li>6. Note it down on the HazChat and put your agreed actions into play.</li> </ol>

The key actions and controls must be implemented and documented to manage the level of fatigue risk to allow work to proceed safely. Refer to [6. Working Safely with Fatigue](#) and [Appendix 1 - Fatigue Assessment and Fatigue Actions Table](#).

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Communication and planning are critical to help ensure fitness for safe work whilst at work and travelling to and from work. This includes communication between workers and supervisors to coordinate relief, prioritise critical works, arrange accommodation and/or withdraw workers where maximum hours will be breached or when workers are not considered fit for work. Managers and supervisors must consider the use of additional or alternate resources to monitor and control fatigue risk and apply them as deemed necessary. Where emergency works are likely to continue over an extended period, managers and supervisors also need to ensure work schedules are developed to reduce all unacceptable risks of fatigue that could impact the safety of work.

If at any stage a worker identifies fatigue as a potential risk exposure that might impact on safety, it must be assessed, and controls implemented as deemed necessary.

## 5.4 Stand-by Rosters

Emergency response, stand-by and on-call rosters should be designed to meet the following key principles:

- Manage sequential nights of disrupted sleep by keeping them to a minimum;
- Manage the times that only a 9-hour break is occurring between shifts to a minimum, and considering the times of the 24h day most easily used for sleep when deciding on what break should apply between periods of work;
- Limit night hours work (11pm to 5am) to emergency restoration and critical response only wherever possible;
- Consider work life balance – stand-by of more than 14 consecutive days even where the call-out volume is low and ‘work’ is not performed on each day should be escalated to Area Manager for approval. Note: The mandatory limits and requirements of Table 1 and Table 2 still apply.

This requires an assessment of the call out patterns and requirements for a particular work group, work type, geographic location or season. Different roster lengths and patterns will suit different scenarios. For example, where there is a high frequency of night call-outs on-call roster length should be shortened to 3 or 4 days. Where the pattern of call-outs is less frequent the on-call roster length can be longer, up to 7 days. Consideration should be given to the lifestyle and social impact of prolonged restriction for stand-by where the pool of available staff for rostering is limited (e.g. small depots, leave arrangements etc.).

## 5.5 Planned Overtime

Fatigue risk can and should be managed within the work schedule or roster for planned work (e.g. planned overtime, shifts, event response). Planned work including planned overtime should be managed to comply with the Planned Work Thresholds in [Table 1 - Work Thresholds, Actions to Extend and Maximum Limits](#) and must not exceed the maximum limits. As a guideline, normal work and planned overtime should:

- not collectively total more than 60 hours per week;
- not be a sustained or overly frequent occurrence;
- minimise sequential nights of sleep loss/reduction;
- consider recent preceding work patterns; and
- consider the likelihood of being able to get adequate sleep in a particular break given the available accommodation.

There may be cases where the planned work will exceed the Table 1 Planned Work 3 and 7 day Thresholds where there is an operational need and adequate management of fatigue risk. For example, a 10-day, 10 hour per day away work roster, with no overnight work would exceed the planned work threshold guidance for hours over 7 days and for consecutive days worked but fatigue risk could be adequately managed. Similarly, overtime planned and scheduled to occur in night hours may be required in some circumstances with adequate assessment of fatigue risk and controls.

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The sample rosters in [Appendix 2 - Sample Rosters \(Planned Work; Disaster Response\)](#) should be considered for planned extended hours as they have been assessed using the FAID® fatigue prediction software and comply with the prescribed limits.

## 5.6 Shift Work Arrangements

Shift work arrangements contribute to work related fatigue by interfering with the circadian rhythms (the body clock) which regulate sleeping patterns, hormone levels, digestion and other brain and body functions. In addition to complying with [5.1 Work Thresholds and Maximum Limits](#) and [5.2 Minimum Rest Breaks](#), the following principles should be considered for shift working arrangements. Shift roster design or shift work patterns that are not consistent with these principles should be adequately risk assessed, controlled and escalated to relevant business unit General Manager for approval.

### 5.6.1 Shift Design

There is no one set prescription for shift design. The most appropriate roster depends on the duration, rotation, shift length and the risk profile of the work. Questions that should be asked are: *'How many hours are being worked in total?'* *'How many of them result in disrupted sleep?'* and *'What level of control is needed to manage the risk of fatigue?'*

Key principles of shift roster design:

- Use a rapid rotation of shifts (days) or a slow rotation of shifts (weeks).
- Use a forward rotation of shifts (i.e. morning/afternoon/night).
- Restrict the number of consecutive night shifts – preferably to 2 or 3 nights as this limits the accumulation of sleep debt.
- Allow two consecutive nights off following night shift.
- Avoid early morning starts – preferable to start day shift after 6am.
- Allow 12 hours between shifts, and a minimum 10 hours.
- Avoid rosters that result in long working hours (more than 40 to 50 hours per week).
- Build free weekends into the shift schedule, at least every three weeks.
- Consider travel time, public transport, social and domestic aspects in start and finish times.
- Use tools such as FAID to ensure high fatigue risk periods identified and minimised.

An individual Fatigue Assessment is not mandated for work conducted as part of the standard shift roster, i.e. for night hours worked on a standard night shift roster. However, where hours are extended beyond the shift roster (overtime, call out etc.) and any other time fatigue is a risk, a Fatigue Assessment is required.

### 5.6.2 Shift Work Plus Overtime

As shift workers are more likely to experience fatigue, the interaction of shift work and additional overtime requires extra control.

Key principles of combining shift with overtime:

- Overtime plus shift should not exceed 12 hours in a 24-hour period.
- The combination of shift plus overtime should be below 60 hours over a week.
- Avoid allocating overtime after night or afternoon shift ends.
- Keep an eye on night hours – maximum limits over 7 days apply.
- Aim for a minimum of 2 consecutive nights off per week.

Aim for 2 weekends off per month, minimum of one every 3 weeks.

## 5.7 Emergency Event and Natural Disaster Response

In the early stages of a response effort or for short response events, work can be scheduled in accordance with [5.1 Work Thresholds and Maximum Limits](#) and [5.2 Minimum Rest Breaks](#).



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For longer response capability or where there is adequate time for planning, a predetermined and risk assessed roster should be implemented to manage fatigue risk. Depending on the nature and scale of the event either a Storm Roster or a longer Natural Disaster Roster should be used.

## 5.7.1 Storm Roster

The Storm Roster can be used to schedule 12-hour day and night shifts. The hours of work over preceding days must be considered prior to commencing this roster as stand down for a 30-hour reset period may be required. These rosters should not be run back to back i.e. one worker works the day roster and then onto the night roster.

**Table 3 – Storm Roster Day and Night**

Period	Work Hours	Rest Breaks	Fatigue Controls	Maximum Limits
7 days	12 hours 06:00 to 18:00	12 hours 30-hour reset at Day 8	Day 5, 6 and 7	84 hours 7 days
4 nights	12 hours 18:00 to 06:00	12 hours 30-hour reset at Day 5	23:00 each night	24 'night hours' - 4 nights

Actions and controls must be implemented and documented to manage the level of fatigue risk to allow work to proceed safely under these rosters. FAID analysis of this roster shows that additional control is required:

- Day Roster - from day 5 onwards, particularly in the last 3 hours of day 5 and 6; and the last 4 hours of day 7;
- Night Roster – in the last 2 to 3 hours of night 3 and 4.

The day roster can be improved by starting at 6.30am or later and by reducing the length of shift to 10 or 11 hours, or by reducing the consecutive number of days.

The night roster can be improved by reducing the consecutive nights - two or three is preferable for managing fatigue risk. However, a maximum of four consecutive nights shifts in any 7-day period is allowable. This is because it is a planned, risk assessed roster, where the worker is able to plan for adequate sleep during the day to be fit for work during the known night work period (i.e. not taking call outs or working in rostered *off* time). See Table 2. Minimum Rest Break Notes for clarification about the application of the 14-hour Overnight Rest Break on night 4, following 3 consecutive nights of night work hours during stand-by, emergency call out or other generally unplanned work.

## 5.7.2 Natural Disaster

Work patterns for conducting work in response to a declared natural disaster will be planned in accordance with the requirements of this Standard and the Natural Disaster Working Arrangements. When allocating crews to response efforts, the work patterns prior to deployment must be considered to determine the maximum continuous days that can be worked before a reset break is required. [Appendix 2 - Sample Rosters \(Planned Work; Disaster Response\)](#) has example rosters for work patterns and hours over a short (7-day), medium (12-day and 14-day) and long term (21-day with programmed rest days) response. They have been developed to manage fatigue risk while providing suitable response capabilities and assessed using FAID to ensure they are within appropriate fatigue risk levels. Any alternative rosters should be assessed using FAID® fatigue prediction software.

## 6 Working Safely with Fatigue

Implementing effective fatigue control strategies can allow work to continue safely when fatigue is present. Fatigue controls must be relevant to the type of work being undertaken. For example, the fatigue control strategies for someone who is fatigued working in an office on the computer would be quite different to the level of controls for a person conducting live line work or driving.

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The selection and application of fatigue controls is dependent on the task that is being performed and the likelihood of fatigue. Where the level of risk increases due the type of work affecting a potential outcome of a fatigue-related error, higher order fatigue controls are required.

Typical high fatigue risk activities include undertaking line work, switching, driving or operating any vehicle or machinery, civil/ underground and substation work, work performed in extremes of temperature and humid conditions, shift work activities and work undertaken during significant natural disaster events such as floods, cyclones and earthquakes.

Example fatigue controls:

- Prohibit certain safety critical tasks from occurring at night and the early morning hours;
- Have conversations about fatigue signs, symptoms, rules and controls in planning, meeting, toolbox talks, during the HazChat at the start of a shift, day or task and proactively throughout the day to decide if work should be modified for fatigue risk;
- Monitor the job to allow planning to manage any fatigue risk e.g. contingency planning should extra hours be required to complete the task;
- Understand the potential consequence of an incident related to the task and how fatigue may increase the likelihood of an incident occurring;
- Use a buddy; double check or checklist system i.e. call back instructions or check of critical processes;
- Increase the level of supervision for safety critical tasks;
- Schedule additional rest breaks within the shift;
- Rotate or change tasks to reduce time on task (that is, reduce monotony or high workload);
- Consider how to get home safely including using pick-ups, taxis/Uber's as appropriate, flying instead of driving after extended away work; and
- Use available tools and processes to monitor and manage fatigue risk (e.g. Fatigue Calculator, FAID, HazChat, Hours of Work Counter PowerApp, Journey Management tools).

Any implemented fatigue control strategies should be noted on HazChat. Email or other documentation would appropriate records for non-field situations.

There will be occasions where it is not possible to reduce the fatigue risk with additional controls and therefore work will not proceed or continue in these circumstances.

## 7 Fatigue Support Tools

There are a number of tools and resources available to assist with sticking within the rules, identifying and managing the risk of fatigue at work. Some tools are available for all of EQL, some tools are in an interim state and available in either SEQ or Northern and Southern. It is expected that DEBBs / SAP timesheet system will replace some of these interim support tools.

### 7.1 Hours of Work Tools

#### 7.1.1 Hours of Work Counter PowerApp

The Hours of Work PowerApp is an optional support tool to assist workers with personally keeping track of any extended work hours against the fatigue thresholds and limit. Access this app through PowerApps on your work phone. Further details on the Fatigue Wire Page.

#### 7.1.2 Fatigue Management 'FatMan'

The Fatigue Management application is used to manage hours of work for crews during South East Queensland storm and emergency event response. Contact [Occupational Health](#) or lodge a Service Now Request for more information.

#### 7.1.3 Hours of Work Calculator Excel

The hours of work excel spreadsheet provides support for tracking hours worked and required breaks against the work and rest fatigue limits. It is used in Northern and Southern to manage

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hours worked at a work group level and plan for and manage event response. Further details on the Fatigue Wire Page.

## 7.2 Fatigue Assessment and Planning Tools

### 7.2.1 Fatigue Calculator

The Fatigue Calculator (also referred to as the Personal Fatigue Calculator PFC) is used as part of the [5.3 Fatigue Assessment](#). The Fatigue Calculator uses personal sleep and wake information to find an individual's *likelihood* of fatigue – their Personal Fatigue Score (PFS) – which aligns to signs and behaviours a person may be typically displaying. Even if the PFS is low, the person may still be feeling fatigued and should take all necessary actions to work safely. The PFC is available on all work phones as an Energex (FatigueCalcEX) and an Ergon Energy (FatigueCalcEE) app. The algorithm behind both tools is identical.

Required actions to manage fatigue are determined by referring to the Fatigue Assessment Actions table (in the app and at [Appendix 1](#)), considering the activity or task being carried out and talking to your colleagues and your supervisor.

### 7.2.2 Fatigue Behavioural Scales and Self-Assessment Tools

Fatigue behavioural scales such as the Karolinska Sleepiness Scale provide a mechanism for workers to self-assess and then report their level of fatigue and for supervisors to check on observable behaviours and initiate discussions. There are also various apps available to download free such as the [Fatigue Safe Fatigue Self-Assessment Tool](#) by Integrated Safety Management. Refer to the Fatigue Wire page for more information.

### 7.2.3 FAID - Roster Planning Tool

Fatigue Audit Inter Dyne (FAID) software is a tool that calculates the work-related fatigue associated with any existing or proposed work periods. FAID analyses a roster and calculates a 'Fatigue Score' for every hour that is worked. This score is based on the time of day and duration of work and breaks; the work history and the biological limits on recovery of sleep. FAID generates information that predicts a fatigue level for a worker at any point in time which can be useful for determining the appropriateness of a work roster for managing fatigue.

FAID requires Fatigue Tolerance Limits to be assigned so task fatigue risk can be assessed. Energy Queensland Fatigue Tolerance Limits are:

- Low 100 - applies to general office-based duties.
- Moderate and High 80 - applies to all other field-based tasks and network control tasks.

The Fatigue Tolerance Limits are based on guidance published by the creators of FAID, experience of other industries and advice from noted fatigue risk management experts. [Occupational Health](#) or your HSE Business Partner can provide further information on FAID and how it can be used or lodge a Service Now Request.

## 8 Transport

### 8.1 Fatigue Regulated Heavy Vehicles

The Heavy Vehicle National Law (Queensland) imposes obligations for the driver of a Fatigue Regulated Heavy Vehicle (FRHV) and persons in the chain of responsibility (e.g. schedulers, managers) to take steps to ensure that a person does not drive a FRHV while impaired by fatigue.

Energex and Ergon Energy operate under three (3) exemptions to the National Heavy Vehicle Law:

1. Queensland Electricity Entity Work and Rest Hours Exemption Notice 2021 (No.1)
2. Queensland Electricity Entity Work Diary Exemption Notice 2021 (No.1)
3. Queensland Electricity Entity Fatigue Record Keeping Exemption Notice 2021 (No.1)

The Exemptions include conditions that must be met for compliance including working to the fatigue requirements of this Standard. Further information on complying with the conditions of the Heavy Vehicle Exemption Notices can be found on the Fatigue Wire Page including FAQs.

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The EQL Motor Vehicle Standard provides further information on vehicle regulation, safety and driving hazards.

## 8.2 Aircraft

Aerial service providers are required to manage flight times within a Civil Aviation Safety Authority (CASA) approved system. When undertaking aerial work EQL workers are required to comply with the CASA approved fatigue management system which may be more stringent than the requirements of this Standard. Refer to the Standard for the Use of Aircraft S014 - 691344 for further information.

## 9 Health and Wellbeing

### 9.1 Health and Wellbeing Programs and Resources

Being physically and emotionally fit and healthy is a great start to managing the risks associated with fatigue in the workplace. Energy Queensland provides various tools, resources and information to assist employees to manage their health, improve their wellbeing and maintain their fitness for work. Certain medical and lifestyle conditions such as obesity, diseases such as glandular fever or influenza and disorders such as sleep apnoea can increase fatigue. The Health and Wellness Wire Page provides information, programs and resources to promote healthy choices and support individuals.

### 9.2 Counselling and Support

The Employee Assistance Program (EAP) is a free, confidential counselling service for staff and their family members. Assistance can be provided for a range of issues including stress, trauma, anxiety and depression, family and relationship matters and alcohol and drug related concerns. Visit the Employee Assistance Program Wire page or call 1800 808 374.

### 9.3 Medical Assessments

Pre-employment and ongoing medical assessments are undertaken for identified positions and job functions where high-risk work is being undertaken. These assessments may involve discussion about the employees' sleep quality and duration, sleepiness and/or review of relevant medical history.

If you are concerned about your medical status or you are aware of a disorder or condition that could increase your likelihood of fatigue you should have it medically assessed. Medical reporting of long term or permanent medical conditions that could affect the ability to drive safely is a legislative requirement. More information on Jets Law can be obtained from the Queensland Department of Transport and Main Roads. For more information specific to your circumstances contact the [Injury and Illness Management](#) team.

## 10 Training & Awareness

Adequate training and awareness must be provided to all workers to ensure work practices are managed to reduce the risk of fatigue impacting safety, that the signs of fatigue are recognised and where appropriate, additional controls to allow work to continue safely are implemented.

The Fatigue Management online (1077) course includes information on the factors that contribute to, and the risks associated with fatigue, the minimum mandatory fatigue requirements, how to undertake risk assessment and potential controls to manage fatigue in the workplace. This course was rolled out to all EQL employees in 2019; is included in the new employee onboarding framework; and is available for leader or self-nomination in SAP LMS for any employee as required. Fatigue hazard and control awareness is included in annual summer season preparedness activities and communications.

## 11 Incident Management

All incidents will be reported, classified and investigated in accordance with the HSE and Asset Incident Management Framework. Reportable fatigue related events will be notified to the National Heavy Vehicle Regulator in accordance with the HSE and Asset Incident Management Framework as per the National Heavy Vehicle Queensland Electricity Entity Fatigue Record Keeping

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Exemption Notice 2021 (No 1). Further information can be found on the HSE Manage Incidents Wire page.

## 12 Auditing, Monitoring and Review

Managers and supervisors will monitor and review compliance with this guideline. The fatigue risk management framework and implementation will be audited regularly in line with the HSE assurance processes and include the requirements of the National Heavy Vehicle Regulator in accordance with the conditions of the National Heavy Vehicle Queensland Electricity Entity Fatigue Record Keeping Exemption Notice 2021 (No 1). This Fatigue Standard will be reviewed 12 months from commencement. The review will consider the outcomes of audit activities and findings of a quantitative assessment of risk control effectiveness. Quantitative post implementation assessment will include elements such as patterns and frequency of work against the fatigue thresholds and maximum limits and guidance within this Standard. Compliance against fatigue risk management business requirements will also be assessed through audits and other monitoring activities and programs under the HSE Learning and Assurance Framework R252 - 692115.

# Standard for Fatigue Management

## Appendix 1 - Fatigue Assessment and Fatigue Actions Table

### Fatigue Assessment

1. Start with a conversation – talk to your work mates, check in with each other, how do you feel?
2. Use the Fatigue Calculator app on the work phone to find your Fatigue Score.
3. Refer to the Fatigue Action Table in the app and below and note relevant actions.
4. Talk about the job, think about the task, how can work proceed safely with fatigue present? Does it need to be delayed, reallocated, rotated?
5. Come up with controls relevant to the job, your fatigue score and how you feel. You may need to discuss this with your supervisor before proceeding.
6. Note it down on the HazChat and put your agreed actions into play.

Fatigue Assessment Actions		
Personal Fatigue Score	Fatigue Likelihood Level	Actions
0	Low	Good to go? Continue to monitor fatigue. Note assessment on the HazChat. Do not exceed maximum work hours.
1-7	Moderate	Discuss with crew / team and decide on appropriate controls. Advise Supervisor if appropriate. Controls may include self/peer monitoring, task rotation, increased breaks, pacing work load. Consider whether high risk tasks should occur. Note assessment and actions on HazChat.
8-12	High	Stop Work. Discuss controls with crew / team and with the Supervisor. Controls may include increased supervision, task re-assignment, buddy check, arrange back-up, transport alternatives may be required. High risk tasks should not be performed. Note assessment and actions on HazChat.
13+	Extreme	<b>Stop Work (or do not commence).</b> <b>Discuss contingency with Supervisor.</b> <b>Controls are unlikely to be sufficient. Make arrangements to convey worker home. Continuing with any work requires GM approval.</b>

# Standard for Fatigue Management

## Appendix 2 - Sample Rosters (Planned Work; Disaster Response)

These rosters have been assessed for fatigue risk using FAID. Fatigue risk increases significantly with early morning starts, longer days and more consecutive days. Any alternative roster patterns should be assessed using FAID and must align with the principles and requirements of this Standard. Consideration must be given to preceding work patterns, stand down prior to roster may be required.

### 7 Day Rosters

Roster A:

- 10.5 hour day; seven (7) consecutive days.
- 0700 to 1730 includes all breaks within work (e.g. crib, meal).

Roster B:

- 11 hour day; seven (7) consecutive days.
- 0700 to 1800 includes all breaks within work (e.g. crib, meal).

### 12 Day Roster

- 10 hour day; twelve (12) consecutive days.
- 0700 to 1700 includes all breaks within work (e.g. crib, meal).

### 14 Day Roster

- 10.5 hour day;
- 0700 to 1730 includes all breaks within work (e.g. crib, meal).
- Six (6) consecutive days Day 1-6;
- Rest Day 7;
- Seven (7) consecutive days Day 8-14.

### 21 Day Rosters

Roster A:

- 10.5 hour day;
- 0700 to 1730 includes all breaks within work (e.g. crib, meal).
- Ten (10) consecutive days Day 1-10;
- Rest Day 11;
- Ten (10) consecutive days Day 11-21.

Roster B:

- 10.5 hour day;
- 0700 to 1730 includes all breaks within work (e.g. crib, meal).
- Six (6) consecutive days Day 1-6;
- Rest Day 7;
- Six (6) consecutive days Day 8-13;
- Rest Day 14;
- Seven (7) consecutive days.

### Night Roster

- 10.5 hour shift; maximum four (4) consecutive nights.
- 1930 to 0600 includes all breaks within work (e.g. crib, meal).
- A rest break prior to commencement and post completion of this roster is critical.