

## **Attachment 16 – Ausgrid’s pass through application**

### **Ausgrid’s Be Safe Hazard Guideline 16: Managing Fatigue**

August 2015



## Be Safe Hazard Guideline 16: Managing Fatigue



The Be Safe Management system is Ausgrid's Work Health and Safety System. These hazard guidelines help you to manage specific hazards at Ausgrid and provide ways to prevent injuries from occurring. Let's work together to make safety a part of everything we do, every day.

Trevor Armstrong  
Chief Operating Officer Ausgrid

### Managing Fatigue

- **Stop** and consider if you are fit for work
- **Think** do you feel tired, lethargic, or have you had enough sleep lately
- **Do** follow the requirements and guidelines in this document to help protect you and your work mates from fatigue related incidents

# YOUR QUICK GUIDE TO MANAGING FATIGUE

## STOP

What could go wrong if this isn't managed correctly?

Fatigue affects your performance and can have a catastrophic effect on your safety, the safety of your colleagues, contractors, and the public. Fatigue can kill or cause serious injury and harm.

Fatigue reduces your ability to:

- concentrate and avoid distraction;
- make safe decisions;
- recognise risks;
- coordinate hand-eye movements; and
- communicate effectively.

Fatigue can also:

- slow your reaction time;
- increase error rates leading to an increase of the likelihood of incidents and injuries;
- reduce your personal health and wellbeing; and
- impact on your relationships with family and friends.

## THINK

What should I consider when doing a fatigue risk assessment?

- Have I reviewed the relevant local Fatigue Management Plan?
- Have I attended a Fatigue Management Awareness Session?
- Am I experiencing any of the signs or symptoms listed in this hazard guideline?
- How many hours have I worked, or will I work today?
- How many hours have I worked in the past seven days?
- Have I obtained adequate sleep during my non-work breaks?
- Have I done unplanned overtime or irregular work hours in the past week?
- Is the work I am doing a physically or psychologically demanding task?
- Is the work I am doing safety critical?
- Am I doing tedious or monotonous work?

## DO

What are the key controls available to me?

- Talk to your manager/supervisor.
- Undertake approved control measures in accordance with *Be Safe HG-16.1F: Fatigue Risk Assessment (Individual)* and *Be Safe HG-16.2F: Branch Fatigue Management Plan*.

### Tools and Forms

- Be Safe HG-16.1F: Fatigue Risk Assessment (Individual)
- Be Safe HG-16.2F: Branch Fatigue Management Plan

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## 1 Compliance Requirements

The following table provides a summary of the key compliance requirements of this hazard guideline. Refer to the hazard guideline, in full, for all requirements.

<b>Standard requirements</b>	<b>You must be aware of, and adhere to, the Branch Fatigue Management Plan.</b>	<b>Page 8</b>
<b>Branch Fatigue Management Plan</b>	<b>You must complete and agree to a Branch Fatigue Management Plan in accordance with the standard requirements in this hazard guideline.</b>	<b>Page 8</b>
<b>Fatigue risk assessments</b>	<b>You must complete a fatigue risk assessment in accordance with the mandatory requirements or at any time you personally experience signs and symptoms of fatigue.</b>	<b>Page 10</b>
<b>Monthly assessments</b>	<b>Managers/supervisors must complete one random fatigue risk assessment each month.</b>	<b>Page 13</b>
<b>Investigations</b>	<b>The appropriate manager must confirm that the seven days of working hours preceding a level 2, 3 or 4 incident are provided to the Manager - Assurance and Improvements, HSE division within five business days of an incident.</b>	<b>Page 13</b>
<b>Training and awareness</b>	<b>You must attend fatigue management training and awareness sessions.</b>	<b>Page 14</b>
<b>Compliance reviews</b>	<b>If asked to provide documentation by the Manager - Assurance and Improvements for the purposes of a compliance review, you must provide those documents within ten business days of the request.</b>	<b>Page 15</b>



**This hazard guideline is about verifying that Ausgrid workers and the public are not at risk as a result of fatigue-related work incidents.**

## 2 Purpose

To provide appropriate knowledge, skills and tools for the management of fatigue. This guideline has been developed in conjunction with the *Guide for Managing the Risk of Fatigue at Work (Safe Work Australia 2013)*. This guideline recognises that measures to manage the risks associated with fatigue will vary from one workplace to the next, depending on the nature of the work, environmental conditions and individual factors.

This hazard guideline replaces previous policies and documents relating to the management of fatigue, extended working hours or other directives specifically designed to reduce the adverse impact of fatigue in the workplace.

It is expected that Ausgrid branches will develop *Be Safe HG-16.2F: Branch Fatigue Management Plans* specific to job demands and workers with a focus to:

- maintain a safe and healthy work environment by minimising the risk of fatigue to workers, visitors and the public;
- set out general fatigue management guidelines that should be followed;
- encourage all workers affected by work and non-work related fatigue to seek appropriate assistance;
- encourage all workers experiencing symptoms of fatigue to notify their manager/supervisor before engaging further in any work or potential activity arising from work (ie, driving home from work);
- enable the right workers to perform their role and responsibilities under this hazard guideline whilst maintaining the privacy and confidentiality of others;
- determine that work and travel (commute) patterns take into account the potential for fatigue on the worker's fitness for work;
- continuously improve our processes by reviewing incidents and working hours for potential fatigue-related risks; and
- educate and provide a greater understanding of the effects of fatigue and how to manage fatigue to workers and visitors.

## 3 Scope

This hazard guideline:

- applies to Ausgrid workers;
- articulates our commitment to proactively manage, mitigate and measure the risks associated with fatigue. Branch Fatigue Management Plans will detail appropriate measures, supporting processes and training, seeking to determine that workers are not engaged to work in conditions that will cause unacceptable levels of work related fatigue; and
- must be considered in conjunction with other relevant Be Safe Management System documentation, in particular;
  - *Be Safe Hazard Guideline 10: Motor Vehicles;*
  - *Be Safe Hazard Guideline 13: Remote Work; and*
  - *Be Safe Hazard Guideline 24: Hot and Cold Environments.*



### 3.1 Contractors and labour hire

Where a contractor or labour hire agency has a fatigue risk management system in place, and that system provides a higher level of guidance or mandatory requirements than the Ausgrid Branch Fatigue Management Plan, then the contractor or labour hire workers are required to adhere to their organisation's fatigue management system.

It is a requirement of this hazard guideline that, in a contractor or labour hire agreement, a provision exists that requires the organisation to accept or agree to comply with this hazard guideline or provide verification that the organisation's own fatigue management system is appropriate.

### 3.2 Heavy Vehicle National Law (NSW) 2013

In relation to fatigue, the main purpose of the legislation is to provide for the safe management of drivers of fatigue-regulated heavy vehicles while they are driving on a road. A fatigue-regulated heavy vehicle is:

- a vehicle with a gross vehicle mass (GVM) of over 12t;
- a combination when the total of the GVM is over 12t;
- buses over 4.5t fitted to carry more than 12 adults (including the driver); and
- a truck, or a combination including a truck, with a GVM of over 12t with a machine or implement attached.

The laws cover all aspects of work and rest relating to heavy vehicles including:

- work and rest hours;
- recording work and rest times;
- fatigue management exemptions; and
- chain of responsibility obligations.



**Fatigue is a hazard that Ausgrid is obligated to manage under the WHS Act 2011 to enable a safe and healthy workplace for all our workers.**

## 4 Background

Ausgrid has identified a range of hazards relevant to our workplaces and the tasks we conduct, in accordance with *Be Safe Procedure 10: Managing WHS Risk*. As determined by the General Manager – Health Safety and Environment, in consultation with the Ausgrid Executive Leadership Team, Be Safe hazard guidelines are developed.

This hazard guideline has been developed to reflect the *Guide for Managing the Risk of Fatigue at Work (Safe Work Australia 2013)*.

### 4.1 What is fatigue?

Fatigue is a state of mental and/or physical exhaustion which reduces a person’s ability to perform work safely and effectively (*Safe Work Australia 2013*).

It can occur because of prolonged mental or physical activity, sleep loss and/or disruption of the internal body clock. Fatigue can be caused by factors which may be work related, non-work related or a combination of both and can accumulate over time.

Work causes of fatigue	Non-work causes of fatigue
Unplanned overtime or irregular work hours	Family and social responsibilities
On-call arrangements	Outside of work physical activities (ie, competitive sports, renovating a home)
Scheduling work and sleep at inappropriate biological times (ie, working night shifts)	Travelling significant distances to and from work each day
Physically or psychologically demanding work tasks	Emotional stressors and depression
Working in safety critical and high-risk situations	Having a sleep disorder (ie, sleep apnoea)
Monotonous, repetitive work tasks	Illness (ie, having the flu)
Exposure to extremes in temperature	Significant life changes (ie, getting married, having a baby, death in the family)
Work related travel	Increasing competition between sleep and other non-work activities

### 4.2 Why is fatigue a problem?

Fatigue-impaired performance can have a catastrophic effect on your safety, the safety of your colleagues, contractors, and the public. Fatigue can kill. As per the *Guide for Managing the Risk of Fatigue at Work (Safe Work Australia 2013)*, fatigue reduces alertness which may lead to errors and an increase in incidents and injuries, particularly when:

- operating fixed or mobile plant, including driving vehicles;
- undertaking critical tasks that require a high level of concentration; and
- undertaking night or shift work when a person would ordinarily be sleeping.



Fatigue impairs judgment, hand-eye co-ordination, reaction times, concentration, problem-solving abilities, motivation levels, communication skills, health and relationships with family, friends and work colleagues. The impairment caused by fatigue can be comparable to having a blood alcohol limit in excess of the legal driving limit. Fatigue is therefore a hazard that must be managed.

Long term health effects of fatigue		
Heart disease	Diabetes	Anxiety/Depression
High blood pressure	Gastrointestinal disorders	Lower fertility

The most critical factor in managing fatigue is gaining adequate recovery sleep. In this regard both Ausgrid and workers engaged by Ausgrid have a shared responsibility.

### 4.3 How to identify fatigue

The Safe Work Australia (2013) guideline has detailed the signs and symptoms that may indicate a worker is fatigued. The guideline also details the signs and symptoms that may be experienced by a fatigued worker but are not obvious to others.

Observations	Declared
Excessive yawning or falling asleep at work	Feeling drowsy
Short term memory problems and an inability to concentrate	Headaches
Noticeably reduced capacity to engage in effective interpersonal communication	Dizziness
Impaired decision-making and judgement	Difficulty concentrating
Reduced hand-eye coordination or slow reflexes	Blurred vision or impaired visual perception
Other changes in behaviour, for example repeatedly arriving late for work	A need for extended sleep during days off work
Increased rates of unplanned absence	

#### The identification of fatigue affected workers/workgroups can occur as a result of:

- self-assessment and voluntary disclosure by the person affected to their manager or supervisor;
- direct observation of the affected person’s behaviour;
- investigation of a workplace incident or near miss;
- a hazard guideline compliance review;
- completion of a fatigue risk assessment in accordance with these guidelines; and
- monthly supervisor fatigue assessments.



#### 4.4 Health and safety duties in relation to managing the risks of fatigue

As a part of Ausgrid’s responsibilities, associated hazards are recognised in this hazard guideline so that fatigue can be appropriately managed in all our workplaces and the risks of fatigue-related incidents are eliminated. This hazard guideline details the shared responsibility of Ausgrid and its workers on managing the hazards associated with fatigue so that it does not pose a risk to the health, safety and wellbeing of our workers or the public, as a result of the work that we undertake.

WHS Act 2011	
Ausgrid has an obligation to ensure, so far as is reasonably practicable, a safe and healthy workplace free of hazards that pose a risk to the health, safety and wellbeing of our workers (Section 19). Ausgrid and its management are responsible for:	In accordance with Section 28, workers must take reasonable care for their own health and safety and must not adversely affect the health and safety of others. Ausgrid workers are responsible for:
<ul style="list-style-type: none"> <li>providing appropriate training and awareness sessions;</li> </ul>	<ul style="list-style-type: none"> <li>obtaining adequate recovery sleep between all work periods;</li> </ul>
<ul style="list-style-type: none"> <li>monitoring compliance to this hazard guideline;</li> </ul>	<ul style="list-style-type: none"> <li>notifying their manager/supervisor when they have, or are about to, breach the maximum daily/weekly hour limit;</li> </ul>
<ul style="list-style-type: none"> <li>providing support for workers who are experiencing fatigue and fatigue related concerns;</li> </ul>	<ul style="list-style-type: none"> <li>notifying their manager/supervisor when they are experiencing fatigue symptoms whilst at or before starting work;</li> </ul>
<ul style="list-style-type: none"> <li>continually reviewing the appropriateness of this hazard guideline; and</li> </ul>	<ul style="list-style-type: none"> <li>stopping work immediately when fatigue is impairing their ability to work;</li> </ul>
<ul style="list-style-type: none"> <li>verifying fatigue risks are assessed and a Branch Fatigue Management Plan is in place where appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>seeking appropriate counselling or medical attention when they are concerned that fatigue is having an impact on their physical and psychological wellbeing; and</li> </ul>
	<ul style="list-style-type: none"> <li>advising their manager/supervisor where they are required to travel more than 60 minutes between their home and their place of work.</li> </ul>

As per the *Safe Work Australia Guidelines (2013)*, this does not mean that workers must never work extra hours. However, they should talk to their manager or supervisor to let them know when they are fatigued. They should also avoid working additional hours and undertaking safety critical tasks when they know it is likely they are fatigued.

Ausgrid also has responsibilities under the *Heavy Vehicle National Law (NSW) Act 2013* to clearly define the chain of responsibility and workers within the chain understand the requirements that are to be met for the safe operation of Ausgrid heavy vehicles.



Heavy Vehicle National Law (NSW) Act 2013	
Ausgrid's management is responsible for:	Workers are responsible for:
<ul style="list-style-type: none"> <li>clearly defining the roles within the chain of responsibility;</li> </ul>	<ul style="list-style-type: none"> <li>notifying their manager/supervisor when they have or are about to breach the maximum daily/weekly hours limit;</li> </ul>
<ul style="list-style-type: none"> <li>monitoring compliance to the <i>Heavy Vehicle National Law (NSW) Act 2013</i>;</li> </ul>	<ul style="list-style-type: none"> <li>notifying their manager/supervisor when they are experiencing fatigue symptoms whilst at or before starting work;</li> </ul>
<ul style="list-style-type: none"> <li>confirming that operating procedures and processes relating to fatigue are developed and implemented;</li> </ul>	<ul style="list-style-type: none"> <li>purchasing work diaries from the Roads and Maritime Services (the regulator);</li> </ul>
<ul style="list-style-type: none"> <li>taking reasonable steps to develop work schedules that are developed in a way drivers of heavy vehicles do not operate them whilst impaired by fatigue;</li> </ul>	<ul style="list-style-type: none"> <li>completing work diaries for all work completed outside 100kms radius from home depot;</li> </ul>
<ul style="list-style-type: none"> <li>working with drivers of heavy vehicles to determine that they understand their responsibilities to not breach work and rest hours or other laws during the course of their duties; and</li> </ul>	<ul style="list-style-type: none"> <li>keeping work diaries with the driver for at least 28 days after the last entry, even when they have replaced completed diaries with replacement diaries; and</li> </ul>
<ul style="list-style-type: none"> <li>clearly defining standard work and rest hours.</li> </ul>	<ul style="list-style-type: none"> <li>completing work/rest times daily with factual information and never writing intentionally misleading or false information in work diaries.</li> </ul>



**Ausgrid and its workers share the responsibility of managing fatigue across Ausgrid workplaces. Management of fatigue includes mandatory processes; compliance reviews; training and awareness sessions.**

## 5 Process – How to manage risks associated with fatigue

How risks are managed across the company will depend on the nature of the area or division. The measures to manage the risks of fatigue will depend on the nature of work, environment conditions and individual factors. Each branch will have a workplace specific Branch Fatigue Management Plan based on this hazard guideline.

Branch Fatigue Management Plans need to reflect the functions of the work group and should be developed following a systematic process that includes:

- identifying the factors which may cause fatigue in the workplace;
- assessing the risks of injury from fatigue;
- controlling the risks by implementing the most effective control measures reasonably practicable in the circumstances; and
- reviewing control measures to determine they are working as planned.

The plans will be reviewed and approved by the relevant general manager after endorsement from the Manager - HSE Compliance or appropriate delegate of the Manager - Assurance and Improvements.

Branch Fatigue Management Plans are to be developed using *Be Safe HG-16.2F: Branch Fatigue Management Plan* as the standard template so that consistency can be achieved across the company.

Branch Fatigue Management Plans will be developed with contributions from workers and Health and Safety Committees.

### 5.1 Identifying the factors that contribute and increase the risk of fatigue

Safe Work Australia Guidelines - Methods to identify factors which may contribute to or increase the risk of fatigue can include:

• consulting with workers;	This includes all levels of the company consulting on the impact of workloads and work schedules, including work related travel and work outside normal hours.
• examining work practices;	This may include the degree of choice and control workers have over working hours, the pace of work and rest breaks.
• examining worker records;	This may include sign in-out sheets, billing sheets and shift changeovers to determine working hours and in particular whether excessive hours have been worked or hours have been worked at times which may have led to body clock disruptions.
• obtaining advice and information;	This relates to material on fatigue from relevant experts, research, guidance materials and data published by regulators, industry associations, unions or other sources.
• reviewing workplace incident data; and	Includes incidents travelling to and from the workplace.
• reviewing human resource data.	Rates of unplanned absenteeism, worker turnover and workers compensation claims.

Fatigue risk factors to consider (this list is not exhaustive)

Prior sleep and wakefulness – the amount of sleep a person has had prior to work and the duration of their work period.

Working without a rest break to meet critical deadlines/milestones.

Sleep patterns affected by frequent call outs over a limited period and extended hours of work.

Work tasks/activities requiring concentration or high levels of muscular exertion for extended periods of time.

Tedious or monotonous work.

Heavy or exhausting physical activity.

Working in high risk situations.

Inadequate recovery from interrupted or poor quality sleep.

Working successive shifts, frequently on call and regular emergency work outside standard hours.

External factors that affect a worker's fatigue risk level while at work.

How often the situation occurs – the more often a worker is fatigued, the greater the likelihood is that an incident will occur.

Commuting – time spent travelling reduces time available for recovery.

Emergency works/time of day – incidents are more likely to happen in low circadian points (especially night time between 2am and 6am).

Length of shifts worked – the effects of fatigue are cumulative, workers are more likely to feel fatigued in the final hours of a shift, than in the first few hours of a shift.

Rest breaks – the number and duration of breaks taken.

How many workers are fatigued – generally, the greater the number of workers who are fatigued, the more likely an incident is to occur.

Number of consecutive night shifts worked.

Personal, special circumstances (medical conditions).

Shift rotation – relevant shift changes and start/finish times.

Driving vehicles when tired.

Occupational exposure levels – extended exposure to dust, noise and chemicals.

Sleep inertia - drowsiness after being woken.



## 5.2 Assessing the risks

Managing fatigue is about managing our sleep, the duration of our sustained awake time and the type of work that we perform. The development of Branch Fatigue Management Plans requires that a fatigue risk assessment must be undertaken, as required, to evaluate fatigue risks. These work related risk factors shall be addressed as they can reduce physical performance, personal health and impact on psychological factors such as judgement, concentration, vision and decision-making processes.

### Safe Work Australia Guidelines - A risk assessment can assist in finding out:

- where, which and how many workers are likely to be at risk of becoming fatigued;
- how often fatigue is likely to occur;
- the degree of harm which may result from fatigue;
- whether existing control measures are effective;
- what action should be taken to control the risk of fatigue; and
- how urgently action to control the risk needs to be taken.

When assessing risks, contributors to fatigue should not be considered in isolation.

Fatigue is not exclusive to those workers who are working extended hours or shift work. Some workers are at higher risk due to the fact that their work contains some or all of the factors leading to fatigue. These include shift workers, night workers, on call and call back workers and emergency workers. Fatigue can also be a risk due to the nature of the work performed which may include safety critical tasks.

## 5.3 Controlling the risks

### 5.3.1 General guidelines

The following general guidelines must be considered in the development of Branch Fatigue Management Plans. These guidelines are not mandatory, however they should be followed unless specific controls are in place to mitigate the risk.

#### General guidelines

No individual should work beyond the time which is a 14 hour extension of their start time without a ten hour break.

No individual should work more than 56 hours in a seven day period.

Workers should be provided with at least one 36 hour non-work break per eight days.

Safety critical tasks should be avoided between the hours of 2am and 6am.

The guideline relating to the limit of 14 hours in a 24 hour period makes provision for up to 60 minutes travel time both to and from work (outside of the 14 hour work period).

There should be a minimum ten hour break from completion and commencement of work. This should include eight clear hours between travel to and from work.

Plans need to incorporate other environmental factors which include remote locations, hot/cold environments and long distance driving.

**Work hours table**

This table is to be used as a guide for supervisors to calculate appropriate extended hours and work breaks. If work hours exceed the guidelines below, then additional control measures need to be considered.

## Continuous hours from start of shift

Travel time <i>(one way)</i>	Work shift <i>(preferred max from start of shift)</i>	Shift break <i>(including eight hours between travel time)</i>
30 mins	14 hours	10 hours
45 mins	14 hours	10 hours
60 mins	14 hours	10 hours
75 mins	13.5 hours	10.5 hours
90 mins	13 hours	11 hours
1 hour 45 mins	12.5 hours	11.5 hours
2 hours	12 hours	12 hours

**5.3.2 Identifying control measures**

## Other control measure options to consider

Minimise working overtime after an afternoon or nightshift.

For pre-planned operations that would require a recall, stand down the affected workers ten hours prior to the planned works.

Redesigning work practices so that routine administrative tasks are minimised for night shift workers, allowing focus on core duties during night work.

Rotate jobs for repetitive or monotonous work, or work that involves heavy physical demands.

Redesign jobs to eliminate boring tasks.

Provide assisted travel arrangements (eg, taxi or organise travel companion).

Provide local accommodation.

Manage safe and sufficient shift hand-over periods.

Manage adequate breaks during shifts to allow recovery.

Improve communication and communication processes.

Use alarms and monitors, particularly for solo work (eg, driving vehicles).

Schedule later start times so that a maximum night's sleep can be obtained before starting work (this may impact on night shift workers).

Provide regular night workers at periods of normal nights' sleep to catch up on their sleep deficit.

Provide at least two full nights' sleep after the last night worked in a period.

Schedule low risk work during periods of high fatigue (night times between 2am and 6am) and/or in the latter half of the shifts.



Provide sufficient supervision, particularly during periods of high fatigue (such as night time, or in the latter half of shifts) and especially for hazardous work.

Provide contingency plans if workers become fatigued. This would involve removing fatigued workers from work activities where there is a considerable risk to health and safety (eg, operating heavy machinery or plant).

Provide strict controls and procedures if performing necessary safety critical tasks during high fatigue risk periods (ie, 2am – 6am).

Share overtime shifts between two workers, considering an overlap between their start and finish times.

Consider quality assurance processes (two workers confirming an activity has been completed safely before proceeding, ie, double checking a switch has been turned off).

The frequency of working beyond 14 hours a day should be limited to no more than two occasions within a five day work period.

### 5.3.3 Fatigue Risk Assessment (Individual)

Workers engaged by the company are responsible to self-assess their fatigue levels where they believe they may be impaired due to the effects of fatigue. Self-assessment is generally performed identifying *Signs and Symptoms of Fatigue (Appendix 1)* and/or by using the *Prior Sleep Wake (PSW) Model (Appendix 2)*.

Individual workers may also use *Be Safe HG-16.1F: Fatigue Risk Assessment (Individual)*. Although this is a voluntary assessment initiated by an individual, where the worker identifies a medium or high risk level, they are responsible for discussing their self-assessment with their manager/supervisor.

Any worker who identifies they are impaired by fatigue to the extent that it may limit their ability to maintain the health and safety of themselves or others in the workplace must cease work immediately and contact their manager/supervisor. A formal risk assessment using *Be Safe HG-16.1F: Fatigue Risk Assessment (Individual)* will then need to be completed. Any worker who is unfit for work due to fatigue impairment caused by work related activity will seek a direction from their manager/supervisor who will determine the appropriate action which may include leave or changing work assignment.

Any worker who is unfit for work due to fatigue impairment caused by personal circumstances shall apply for sick or unpaid leave. This leave will be dependent on available leave balances and in accordance with the relevant leave procedure or the *Ausgrid Agreement*.

Any worker who undertakes a self-assessment, that results in a non-attendance (due to taking appropriate leave), will not have the self-assessment details recorded. Excessive non-attendance may be managed as per the company's performance management procedures.

If the requirements of the Branch Fatigue Management Plan are, or are likely to be breached, then a self assessment *Be Safe HG-16.1F: Fatigue Risk Assessment (Individual)* needs to be completed by the affected worker and approved by their level 4 manager.

In extreme circumstances, where multiple workers are, or are likely to breach a Branch Fatigue Management Plan, a specific *Be Safe HG-16.2F: Branch Fatigue Management Plan* needs to be completed and approved by the appropriate level 4 manager. This only applies in situations where the Branch Fatigue Management Plan does not contain relevant controls for these exceptional circumstances.



### 5.3.4 Incident investigation

For all level 2, 3 and 4 incidents (or near misses), actual work hour data (for seven days) of each worker involved, up to and including the day of the incident, must be provided to the Manager - Assurance and Improvements or their appropriate delegate. This information must be provided within five days from the date of the incident. Results of a *Be Safe HG-16.1F: Fatigue Risk Assessment (Individual)* must be provided to the investigator to include in the final report.

The Manager - HSE Compliance or the appropriate delegate of the Manager - Assurance and Improvements is responsible for working collaboratively with incident investigators to undertake a seven day risk assessment of fatigue relevant to all level 2 and above incidents and near misses that occur at Ausgrid or as a result of the work of Ausgrid (this includes incidents that are not notifiable for WorkCover NSW purposes). This may include a worker driving home from work.

The investigating officer is required to obtain the actual working hours of the worker/s involved in the incident, for the seven days leading up to and including the day of the event. This information must be obtained within five days of the event occurring.

The Manager - HSE Compliance or appropriate delegate of the Manager - Assurance and Improvements is responsible for returning the findings to the investigating officer for inclusion in the final incident report. They are also responsible for collating that information in a central location to continuously monitor the implementation and effectiveness of this hazard guideline.

The working hours data should be considered (where applicable) in terms of contributing or causal factors to the incident. Where fatigue is identified as a contributing or causal factor, the data relating to hours worked must be included as an attachment to the investigation report (including level 2, 3 or 4 investigation reports). In addition, recommendations for improvement of controls relating to fatigue must be developed where systemic failures are identified.

### 5.3.5 Monthly assessments

A branch manager, as a part of the development of the Branch Fatigue Management Plan, must undertake one random fatigue risk assessment per month and determine an appropriate workgroup to be involved. The assessment will be filed in an appropriately classified file in accordance with this hazard guideline. If a manager/supervisor has a workgroup that includes shift workers, then at least two random risk assessments must be completed per month. In completing these random assessments, the manager/supervisor must:

- complete the Fatigue Risk Assessment (Individual) for the randomly selected team members;
- take the appropriate action where the fatigue risk identified is medium or higher;
- file the document in a secure folder (TRIM); and
- provide folder to the Manager - HSE Compliance or other delegate of the Manager - Assurance and Improvements when requested.

### 5.3.6 Reasonable suspicion assessment

Reasonable suspicion is identified from observation of signs and symptoms that may be displayed by a person likely to be impaired by fatigue.

If a manager/supervisor has a reasonable suspicion that a worker is impaired by fatigue, they must, as soon as possible, direct the worker to stop performing any duties that, if the worker is fatigued, may present a risk of injury. The manager/supervisor should then initiate a *Be Safe HG-16.1F: Fatigue Risk Assessment (Individual)*.

If workers suspect another worker is affected by fatigue, they should advise a duty supervisor or on-call safety officer, that worker's representative (contract administrator) or a Safety Advisor, where the above action is then required to be undertaken.



In the event that it is not possible or practical for a worker to undertake an assessment, their manager/supervisor will direct them not to perform any further work. That worker will remain in an area where they present no safety risk to themselves or others until they can be assessed. Alternatively, their manager/supervisor may make arrangements for their safe transport home, including relocation of their vehicle and/or safe return to the site later.

### 5.3.7 Information, instruction, training and supervision

Ausgrid will provide all workers with fatigue management training and awareness sessions. These sessions will assist workers to:

- understand their rights and responsibilities under this hazard guideline;
- develop the knowledge, confidence, support and ability for workers to manage their own fitness for work, relating to fatigue; and
- foster an environment where workers are not unfairly treated when raising fatigue concerns with their manager/supervisor.

Safe Work Australia Guidelines - Ausgrid will provide information/training which will include:

- the work health and safety responsibilities of everyone in the workplace;
- the factors that can contribute to fatigue and risks that may be associated with it;
- symptoms of fatigue;
- the body clock and how fatigue can affect it;
- effective control measures for fatigue;
- procedures for reporting fatigue;
- effects of medication, drugs and alcohol; and
- balancing work and personal demands.

Managers and supervisors will also be trained to:

- recognise fatigue;
- understand how fatigue can be managed and how to implement control measures; and
- take appropriate action when a worker is displaying or has declared a fatigue related impairment.

### 5.3.8 Privacy and confidentiality

The use of information gained as a result of a fatigue risk assessment, investigation or compliance review will be strictly limited to purposes consistent with this hazard guideline.

Worker's and visitor's information will be kept secure and confidential. Any documentation and requests for disclosure will be handled according to relevant legislation. Information will only be used for the purpose of determining fitness for duty, assignment of duties, treatment and support needs and the compliance to, and adequacy of, this hazard guideline in managing fatigue risks in Ausgrid.

Ausgrid will release information to a third party only as required by law, and with the written permission of the appropriate manager or delegate after the worker to whom the information is concerned has been advised. The worker concerned will be advised and this advice shall be documented.

Records of fatigue assessments are not to be passed on by the company to any future employer except in the case of a transmission of business where an employee transfers their employment to the new business owner.

Ausgrid will closely monitor and scrutinise the behaviour and actions of all parties involved in the action undertaken as per this hazard guideline. Any concerns about privacy and confidentiality should be reported to a manager/supervisor, health and safety representatives or union delegates. Ausgrid recognises that breaches of confidentiality are serious matters and will not be tolerated in the company and will be treated in accordance with performance management processes.

## 5.4 Monitoring and reviewing

When control measures have been developed and implemented, they should be monitored and reviewed to verify that they continue to effectively manage fatigue. This can be done by introducing trial periods and seeking feedback from affected workers. Changed or new control measures need to be documented in the *Be Safe HG-16.2F: Branch Fatigue Management Plan*.

### Safe Work Australia Guidelines - Control measures should be reviewed when:

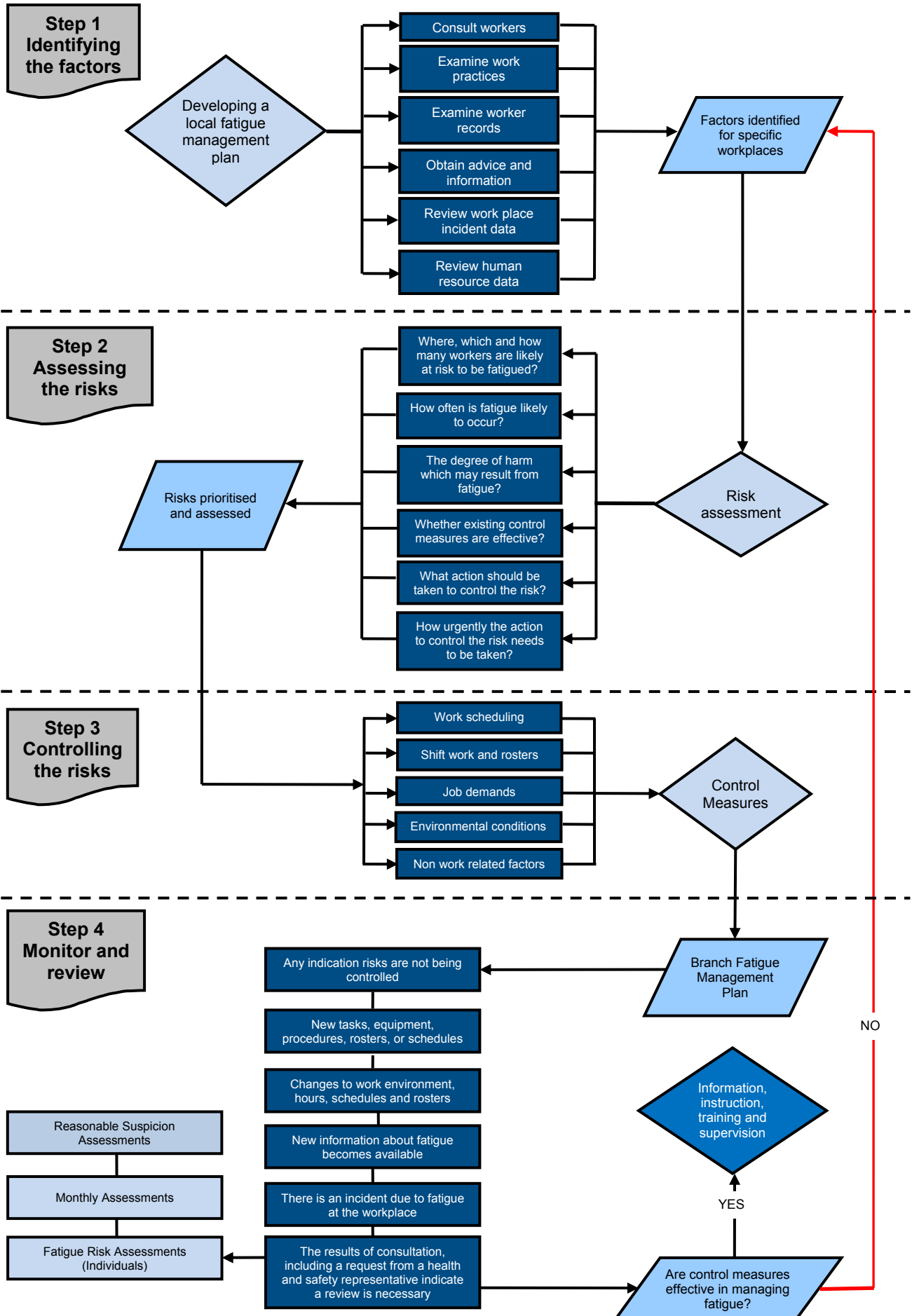
- there is any indication risks are not being controlled;
- new tasks; equipment; procedures; rosters or schedules are introduced;
- changes are proposed to the work environment; working hours; schedules and rosters;
- there is an incident due to fatigue at the workplace;
- new information regarding fatigue becomes available; and
- the results of consultation, including a request from a health and safety representative, indicate a review is necessary.

When control measures are required to be included or amended, the Branch Fatigue Management Plan needs to be updated and endorsed by the Manager - HSE Compliance or appropriate delegate of the Manager - Assurance and Improvements. The amended Branch Fatigue Management Plan should then be approved by the relevant general manager.

The Manager - HSE Compliance or appropriate delegate of the Manager - Assurance and Improvements is responsible for establishing a resource in the HSE division to manage the ongoing compliance review process. This process will involve:

- randomly selecting workgroups across Ausgrid, and conducting a review of their working hours to assess fatigue risk levels;
- randomly selecting workgroups to review the group's fatigue risk assessment folders and control plans as maintained by their manager/supervisor;
- coordinate the analysis of incident data to provide information for investigation reports;
- report the findings of the above to the Executive Safety Committee (ESC) on a monthly basis; and
- report to the appropriate manager where a review has identified that performance management procedures need to be considered when it is identified that this hazard guideline has not been followed.

If you are asked to provide documentation by the Manager - HSE Compliance or appropriate delegate undertaking a compliance review, then you must provide that documentation within ten business days of that request.





**Ausgrid has the responsibility to provide a safe place to work. Some roles have other specific responsibilities.**

## 6 Responsible, Accountable, Consulted and Informed

R	The person RESPONSIBLE for doing the action	Board	Chief Operating Officer	General Manager – Health Safety and Environment	Manager - Assurance and Improvements	Managers (Level 4)	Supervisors	Safety Advisor	Workers
A	The person who has ultimate responsibility and will be held ACCOUNTABLE for the action								
C	The person who must be CONSULTED during the action								
I	The person who must be INFORMED of the action and/or outcomes								
	Present to Ausgrid worksites “fit-for-duty”, free from fatigue related impairment	I	A	R	R	R	R	R	R
	Notify manager/supervisor if experiencing symptoms of fatigue (see Appendix 1 for possible symptoms)		A	R	R	R	R	R	R
	Notify manager/supervisor of travel time to and from home, if either journey is 60 minutes or more		A	C	R	C	C	C	R
	If unsure whether experiencing symptoms of fatigue, complete a Prior Sleep Wake (PSW) Model self-assessment as per Appendix 2		A	R	R	R	R	R	R
	Foster an environment of open communication and support	A	R	R	R	R	R	R	C
	Make available awareness and training sessions		I	A	C	R	R	C	I
	Complete training sessions and attend awareness session		A	R	R	R	R	R	R
	Demonstrate that members of their workgroups attended fatigue awareness sessions and training		A	R	R	R	R	C	I
	Provide information, support and resources to implement this hazard guideline		A	R	R	R	R	R	I
	Complete and agree on a Branch Fatigue Management Plan where required		A	C	C	R	R	R	C
	Undertake at least one random fatigue risk assessment in a work team per month		I	I	I	A	R	I	C
	Monitor workgroups periodically for workers displaying potential symptoms of fatigue	A	A	A	R	A	R	R	C
	Complete compliance reviews periodically across Ausgrid	I	I	R	C	C	C	C	I
	When requested, provide HSE division with what is required to complete compliance reviews	I	I	C	A	A	R	I	I
	Consider Branch Fatigue Management Plans and approve/reject extended working hours or emergency service accordingly	I	I	A	C	C	C	I	I
	Identify changes, including to legislation, which may impact on this hazard guideline		I	A	R	C	C	C	I
	Periodically review and, as required, update this hazard guideline		I	A	C	C	C	C	C
	Obtain the previous seven days of working hours pertaining to individuals involved in WHS incidents at Ausgrid and provide to HSE division		I	A	C	C	R	C	C



## 7 Training, Skills and Competency

It is a requirement of this hazard guideline that workers will participate in the fatigue awareness training arranged by the HSE division in order to recognise symptoms and behaviours associated with the affects of fatigue, including support mechanisms and the application of this hazard guideline. Managers/supervisors, management and health and safety personnel will be required to participate in the job specific training arranged by the HSE division.

It is a responsibility of the manager/supervisor to verify workers within their workgroups attend fatigue awareness training sessions in a timely manner. Records of training must be maintained in the SAP Training Management System (TMS).

The training and awareness program will be on-going and flexible. It will respond to fatigue related trends through compliance reviews and incident investigations and changes in the fatigue management landscape within the Australian and international community.

The Employee Assistance Program (EAP) is also available to provide employees and their families with assistance and/or support and may be able to provide further education and information as required.



## 8 Acronyms, Definitions and Abbreviations

Emergency	For the purposes of this hazard guide, an emergency is where an unforeseen, unplanned situation arise that places considerable resource demands on Ausgrid, that is time critical and may pose a threat to the safety and health of the public, or where the government deems it as an emergency.
Extended hours	Extended hours are to be considered the time worked after 14 hours from the commencement of work in a 24 hour period. Extended hours also refers to the period of time worked after the 56 hours in a seven day period.
Fatigue	<p>Fatigue is a state of mental and/or physical exhaustion which reduces a person's ability to perform work safely and effectively (<i>Safe Work Australia 2013</i>).</p> <p>It can occur because of prolonged mental or physical activity, sleep loss and/or disruption of the internal body clock. Fatigue can be caused by factors which may be work related, non-work related or a combination of both and can accumulate over time.</p>
Fatigue-related incident	An incident that impacts on the health, safety and wellbeing of a person whether in the workplace, on the way to or from home or as a consequence of work, where fatigue is a factor.
Fatigue Risk Assessment	The process used by Ausgrid to determine fatigue risk level and suitable control measures for all personnel. It may be used for situations such as call outs, extension of work time, random, due cause etc.
Fit for duty	In the context of this hazard guideline, it refers to persons attending work duty without impairment of judgment, reaction time, behaviour and performance and not affected by fatigue.
Night shift	Is a shift finishing between 2400 and 0800 hours.
On call	An employee who is on call is required to be available for emergency and/or breakdown work at all times outside the employees' usual hours of duty.
Ordinary hours	Are the agreed hours between an employee and Ausgrid as the standard, agreed hours to be completed each week which attract an ordinary rate of pay or as otherwise prescribed in the Ausgrid Agreement.
Recovery sleep	Restorative sleep that reverses the effects of fatigue and is required in different amounts by each individual.



Remote or isolated work	In relation to a worker, means work that is isolated from the assistance of other persons because of location, time or the nature of the work.
Rest period	A period allocate for recovery and/or restorative sleep.
Safety critical task	<p>Safety critical tasks are those where the consequences of a mistake or error of judgement could cause serious injury, for example:</p> <ul style="list-style-type: none"> <li>• driving a road vehicle, such as a taxi or courier van, or operating a crane or other high risk plant;</li> <li>• working at heights;</li> <li>• working with flammable or explosive substances; and</li> <li>• other types of work identified as hazardous, for example electrical work.</li> </ul>
Shift work	Work which is rostered outside the normal spread of hours and which provides for two or more shifts on a day and which requires employees to rotate or alternate in working their shifts.
Shift worker	Is an employee who works shift work (with those shifts usually within 24-hour operations).
Manager or supervisor	For the purposes of this hazard guideline a manager or supervisor, is the person who has at least one direct report. That is one person who directly reports to them on a regularly basis. It is expected that a supervisor or manager is the person that would approve that direct reports leave or authorise them to undertake a specific work role.
Worker	<p>A person is a worker if they carry out work in any capacity for Ausgrid including work as:</p> <ol style="list-style-type: none"> <li>(a) an employee, or</li> <li>(b) a contractor or subcontractor, or</li> <li>(c) an employee of a contractor or subcontractor, or</li> <li>(d) an employee of a labour hire company who has been assigned to work in the person’s business or undertaking, or</li> <li>(e) an outworker, or</li> <li>(f) an apprentice or trainee, or</li> <li>(g) a student gaining work experience, or</li> <li>(h) a volunteer, or</li> <li>(i) a person of a prescribed class.</li> </ol>
Workgroup	For the purposes of this hazard guideline a workgroup is any group of employees or contractors that report to a single supervisor and undertake work that directly or indirectly relates to work on the energy network (ie, cable jointers, control room operators, district operators, overhead line works).





## 9 References

The following documents were reviewed as part of developing this hazard guideline.

### **Codes of Practice, Industry Codes etc**

Guide for managing the risk of fatigue at work (Safe Work Australia 2013)

How to Manage Work Health and Safety Risks Code of Practice (2011)

Fatigue Prevention in the Workplace (2008) - WorkCover NSW

### **Standards**

AS/NZS ISO 31000:2009 Risk management – Principles and guidelines

### **Be Safe Procedures or other internal documents**

Be Safe Procedure 10: Managing WHS Risk

Be Safe Hazard Guideline 10: Motor Vehicles

Be Safe Hazard Guideline 13: Remote Work

Be Safe Hazard Guideline 24: Hot and Cold Environments

### **Other**

Ausgrid Agreement

Ausgrid “Working Extended Hours Policy”

### **Legislation**

*Work Health and Safety Act 2011 (NSW)*

*Work Health and Safety Regulation 2011 (NSW)*

*Heavy Vehicle National Law (NSW) 2013*



## 10 Version History

Document Control			
Custodian:		Manager - Management Systems and Reporting	
Approval:		Manager - Health and Injury Management	
Authorisation:		General Manager - Health Safety and Environment	
Version History			
#	Amendment	Amended by	Date
1.0	Initial publication	PCC - Subcommittee	July, 2014



## 11 Forms

Form Name	Document Number
Fatigue Risk Assessment (Individual)	Be Safe HG-16.1F
Branch Fatigue Management Plan	Be Safe HG-16.2F

**Appendix 1 - Signs and Symptoms of Fatigue**

Signs and Symptoms of Fatigue		
Physical	Mental	Emotional
Yawning	Difficult concentrating on a task	More quiet than usual
Heavy eyelids	Lapses in attention	Lacking energy
Eye-rubbing	Difficulty remembering what you are doing	Mood changes, decrease tolerance
Head drooping	Failure to communicate important information	Emotional outburst, aggressive, rage
Micro sleeps	Failure to anticipate events or actions	
Blurred vision	Accidentally doing the wrong thing (error)	
Headaches	Accidentally not doing the right thing (omission)	

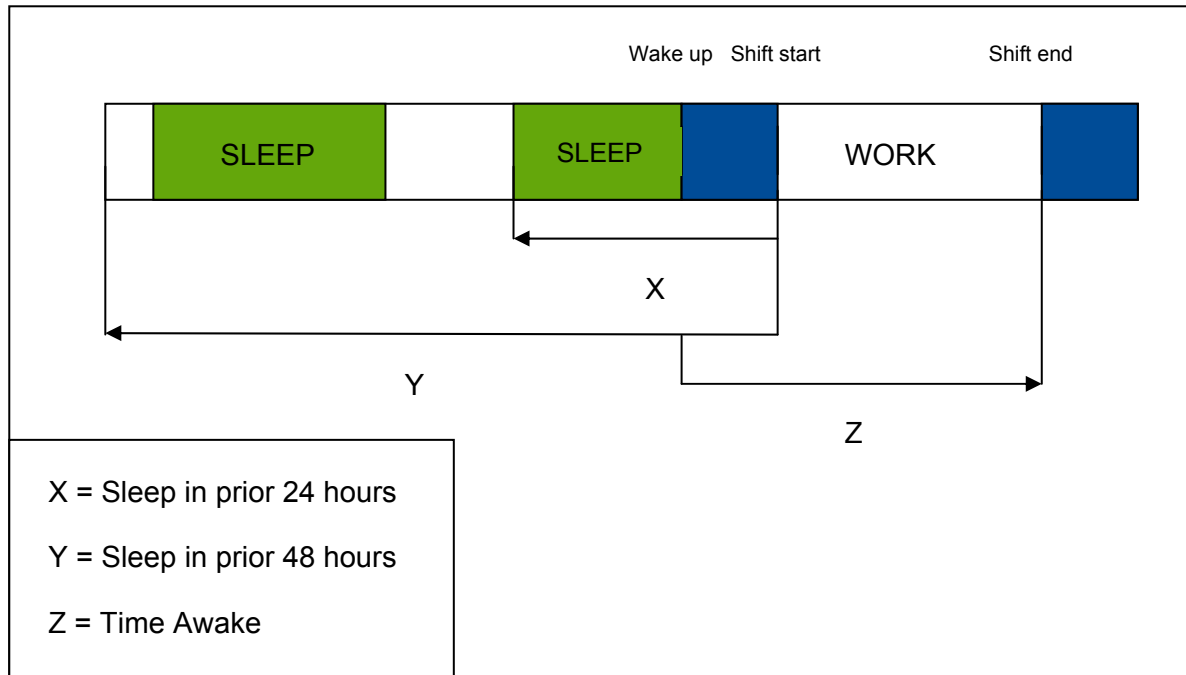
1. Add up how many of the above symptoms you have circled in total: \_\_\_\_\_
2. See Appendix 3 - Risk Score Chart – for risk level.

**Appendix 2 - Prior Sleep Wake (PSW) Model**

The PSW Model is a means for determining individual fatigue risk levels based on the amount of sleep obtained in the prior 24 and 48 hours.

The basis of the model is minimum sleep of:

- 5 hours in the previous 24 hours
- 12 hours in the previous 48 hours



As prior sleep decreases and prior wake increase the likelihood of fatigue also increases.

In general:

- X** should be greater than the threshold of **5** hours.
- Y** should be greater than the threshold of **12** hours.
- Z** should be less than **Y**.

**Step 1**

**X: Sleep in previous 24 hours:** .... hours (add 2 points for every hour below 5 hours) ..... points.

**Step 2**

**Y: Sleep in previous 48 hours:** .... hours (add 2 points for every hour below 12 hours)..... points.

**Step 3**

**Z: Time awake to end of Work:** .... hours.

(add 1 point for every hour of Z beyond Y) ..... points.

**Sum Total of points ..... points.**

**Step 4**

Take the total of points (.....) and refer to Appendix 3 – Risk Score Chart – for risk level.



**Appendix 3 - Risk Score Chart**

Risk Score Chart		
Score	Risk	Response/action
0	Negligible	Remain with working existing arrangements unless higher level hazards are present.
1 – 4	Low	Report to manager/supervisor and consider undertaking appropriate control measures. Self-monitor for symptoms, team monitoring by colleagues/supervisors and consider task rotation. Consider whether a fatigue risk assessment should be undertaken due to identified physical/psychological symptoms of fatigue being present.
5 – 8	Medium	Report to manager/supervisor and document through fatigue risk assessment. Undertake approved control measures in accordance with Branch Fatigue Management Plan. Organise supervisory checks and consider task rotation. Considering sharing an overtime shift between two workers (one to complete first half and the other to complete the latter half). Complete symptom checklist and assign to a new task.
9 or more	High	This is unacceptable for day-to-day work and will not be tolerated at Ausgrid. Do not engage in any safety critical work and do not recommence until fit for work. Emergency Situation – Only in the most extreme cases a level 4 manager may approve additional or variations in control measures that defer from the Branch Fatigue Management Plan.

**The above response/actions should be considered in line with Appendix 1 as the above list is not exhaustive.**

Score: The higher the number from the fatigue assessment determined from:

- a) the “Signs and Symptoms of Fatigue” table (*Appendix 1*); or
- b) the “Prior Sleep Wake (PSW) Model” (*Appendix 2*).

Risk: The level designated to identify the severity and prioritise what needs to be addressed.

Response/action: The appropriate course of action to address the level of risk.