

Safety, health and environment requirements for contractors

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1 Introduction

1.1 Commitments

Western Power is committed to continually improving the safety and health of its employees and suppliers, reducing the risk its assets and activities present to the community as well as sustainable environmental management.

Western Power has legal responsibilities to ensure contractors are competent to manage the safety, health and environment (SHE) aspects of their work and provide all relevant information concerning those SHE matters under the control of Western Power necessary to enable the supplier to carry out their work safely. All suppliers are reminded that they also have legal responsibilities to organise and carry out their work in such a way as to ensure the safety and health of anyone who may be affected by their work and to minimise their impact on the environment.

1.2 Scope

This document primarily applies to contractors that provide an operational service, i.e. a ‘Contractor’ that undertakes physical work for Western Power, rather than a supplier that provides professional services such as designs or reviews, or simple supply of goods and materials. Notwithstanding this, it also applies to those suppliers of goods and materials that deliver to locations where SHE risks are present, such as substations or in proximity to the network, or suppliers of professional services who inspect or do minor works on site. These suppliers will be hereon referred to as ‘contractor(s)’.

For the avoidance of doubt, where this document places an obligation on a “Contractor”, the Contractor must also ensure that each of its personnel, subcontractors and subcontractor personnel also comply with the obligation.

1.3 Safety, Health and Environment requirements for contractors

This document describes Western Power’s general SHE requirements, additional requirements when working on or near the network undertaking Prescribed Activities in accordance with the *Electricity (Network Safety) Regulations 2015* and details how Western Power evaluates the competence of potential Contractors to adequately manage SHE risks and deliver safe outcomes. The requirements are to be applied in a manner appropriate to the work being undertaken and should not be considered as a substitute for specific arrangements necessary to work safely in particular situations or to a contractor’s legal requirements.

The document has been developed to operate with Western Power’s suite of contracts. However, if there is any inconsistency between this document and the contract, the terms of the contract prevail. Contractors must ensure that they have current versions of any relevant Western Power information, including this document and others referenced in the terms and conditions of the contract, before commencing work.

1.4 Western Power’s SHE Management System Documents

Throughout this document, additional references are made to various procedures, work instructions, manuals and guidelines within Western Power’s SHE Management System (the ‘WP SHE Management System Documents’). A comprehensive list of the Western Power SHE Management System Documents is provided in Appendix A. Contractors must comply with, and ensure their personnel comply with, the Western Power SHE Management System Documents listed in Annexure A. The WP SHE Management

System Documents are available in the 'Depot Pack'. Any Contractors who cannot access the Depot Pack or who otherwise have questions in relation to these requirements must immediately contact their Western Power representative.

2 General requirements

2.1 Safety, health and environmental management systems

Contractors are primarily responsible for the SHE management of their work including that undertaken by all tiers of subcontractors working for them. Contractors must comply with their obligations under the *Occupational Safety and Health Act 1984* (WA) (and any legislation made for the purposes of modernising this Act), *Environmental Protection Act 1986* (WA) and all other relevant legislation and requirements. Where no specific legal requirements exist, which specify how a Contractor is to discharge its SHE obligations, Contractors must, as a minimum, comply with guidance issued under relevant Australian Standards, Codes of Practice or recognised Industry Standards.

To ensure compliance with SHE legislation and to minimise SHE risks, it is expected that all Contractors will have an established SHE Management System that aligns to recognised standards such as *AS/NZS 4801:2001 Occupational health and safety management systems* and *AS/NZS ISO 14001: 2016 Environmental management systems*.

Contractors are responsible for ensuring the requirements in this document are met throughout their engagement with Western Power and incorporated into their SHE Management System. Work must also meet the requirements of any other SHE arrangements stated in the contract terms and conditions as well as the WP SHE Management System Documents. It is expected that Contractors will align their own SHE Management System with Western Power's SHE Management System to the extent that it is relevant to the work being conducted. This however does not limit the Contractor's responsibility to ensure safe work arrangements and comply with all SHE legislative requirements.

2.2 Roles and responsibilities

Western Power requires each Contractor to demonstrate that it is competent to manage the SHE risks associated with the work under contract. This involves a process to ensure the appropriate selection, management, monitoring and review of Contractors.

Western Power will:

- provide Contractors with details of project or site-specific SHE risks that Western Power is aware of during the tender process or when issuing work, unless it is stated in the contract or otherwise that Contractors are responsible for identifying these
- inform Contractors of any change in the scope of works
- monitor Contractor compliance with contract terms and conditions, the SHE Management Plan and the requirements set out in this document
- review SHE performance throughout the term of the contract and, as required, provide feedback to the Contractor
- provide relevant Western Power SHE Management System Documents
- provide access to the SHE Management System via the Depot Pack where required

Contractors must:

- be competently resourced to complete work under contract prior to acceptance
- provide a tender submission that meets the requirements of the request for tender or proposal and the requirements in this document

- comply with all aspects of SHE legislative requirements and the contract terms and conditions
- comply with Western Power's SHE Management System Documents, contract terms and conditions and scope of work
- ensure their personnel (including subcontractors) have access to and a thorough understanding of all relevant Western Power SHE Management System Documents.
- identify and manage SHE risks associated with their work
- prepare a site-specific SHE Management Plan that meets the requirements of this document and (as relevant) the *Occupational Safety and Health Regulations 1996* (WA) prior to the commencement of work under the contract, and implement such plan(s)
- ensure that site-specific requirements, for example land access requirements, approval conditions or Environmentally Sensitive Area (ESA) procedures, have been obtained prior to undertaking work and incorporating these into the Contractor's SHE Management Plan
- maintain a list of all their employees (including subcontractors) and their competencies and make this list available when requested
- select, manage, supervise, monitor and review subcontractors appropriately
- report all SHE incidents to the Western Power Incident Hotline within 60 minutes of the incident
- report all complaints from the public to the Western Power Representative
- communicate all Western Power SHE bulletins to employees including any subcontractors
- provide SHE data to Western Power at the end of working day two in accordance with the terms and conditions of the contract
- participate in any consultation meeting required to enable Western Power to comply with its duties under SHE legislation.

2.2.1 Span of control

Span of control is the ratio of supervisors and SHE professionals to crew personnel. The ratio may vary dependent on the scope of works, number of work fronts, shift times and risk profile of the individual contractor. Therefore, the ratio must be agreed with Western Power during contract negotiations if different to this document. The determined ratio must be complied with throughout the term of the contract.

The number of supervisors, SHE professionals and administrative support staff required is presented in the table below. A supervisor is defined as a person who periodically supervises work on site but is not part of the work crew. Minimum qualifications for SHE professionals must be tertiary level qualifications in safety, health or environment (i.e. Certificate IV, Diploma, Bachelor degree).

The need for specialist environmental professionals must be agreed on a case by case basis with Western Power where there is the potential for significant impact on the environment. In this case, the minimum qualifications must be tertiary level qualifications in environmental management and, or science.

Where the Contractor nominates to subcontract any part of the works, the Contractor must ensure the minimum span of control for supervision and SHE professionals is maintained, whether by the subcontractor, Contractor or a combination of both.

Table 1: Span of control minimum requirements

No. of site personnel	Supervisors (minimum ratio of 1:15)	SHE professionals (minimum Certificate IV in Work Health & Safety)	Administrative Support
0-19	1-2	Nil, with other arrangements to be agreed with Western Power, such as access to SHE consultants or some SHE training for internal management	Shared resource
20-79	2-6	Manager and 1 adviser	Shared resource
80-179	6-12	Manager and 2 advisers	Full time admin support
180-259	12-18	Manager and 3 advisers	Admin support adequate for site team
260-339	18-23	Manager and 4 advisers	Admin support adequate for site team
340+	Minimum ratio of 1:15	As agreed with Western Power Representative	Admin support adequate for site team

2.2.2 Subcontractor management

The use of subcontractors must be agreed with the Western Power Representative during the tender process or prior to undertaking the works. The Western Power Representative will require details of these companies, including the work they will undertake, and the duration, number and competencies of employees (both contractor and sub-contractor) prior to commencing work under contract.

Contractors are responsible for the appropriate selection, management, supervision, monitoring and review of their subcontractors and Western Power may request evidence to demonstrate this. Contractors must also provide this document and other relevant documentation and information to any subcontractors they utilise.

Western Power will only allow contractors to subcontract work where the contractor has been assessed as having a suitable and sufficient subcontractor SHE management system in place.

2.2.3 General standards of behaviour

Western Power places a high importance on our public image. Consequently, contractors are expected to act as though they are ambassadors for Western Power and ensure their employees (including subcontractors) behave and dress professionally and in accordance with SHE standards at all times as well as maintaining high standards of housekeeping.

2.2.4 Public complaints

Western Power is a customer-orientated business and takes all public complaints seriously. Such complaints may include not notifying a landholder before accessing their land, driving on crops, noisy operations, dust emissions or unsafe driving.

Contractors are required to have a procedure for recording public complaints. Any complaints received by contractors when performing work under contract from a member of the public or a customer must be reported to the Western Power Representative, who will determine the process for resolving the complaint.

2.3 Risk management

The identification of hazards and the assessment and management of associated risks in the workplace is a key process to reduce SHE risks and is a legislative requirement. Contractors must have an appropriate risk management process to ensure SHE hazards are identified, and controls are implemented to ensure risks are reduced to as low as reasonably practicable, prior to and during the course of the work. As a minimum, this must include a SHE risk register with a list of hazards and associated controls.

Risk is an uncertain event or condition that, if it occurs, will effect our ability to successfully execute and achieve our operational objectives. Risk is measured in terms of consequence (impact on objectives) and likelihood (probability of occurrence). The risk rating determines the level of controls to be implemented against the hierarchy of controls.

The hierarchy of controls are:

- elimination
- substitution
- engineering
- administration
- personal protective equipment (PPE).

Elimination and substitution are better controls than administration and PPE since they result in a greater level of risk reduction and are to be considered first and used wherever reasonably practicable.

It is recognised that contractors will operate different risk assessment and recording methodologies, however all risk assessment processes are to meet the requirements outlined in *ISO 31000:2018 Risk Management*.

Where necessary, Western Power may review and make recommendations regarding the suitability of contractor risk assessments and safe work method statements (SWMS). Western Power does not 'approve' SWMS or other contractor risk management documents and the responsibility to eliminate or reduce risks to as low as reasonably practicable is the contractor's responsibility.

2.4 Training and competency

Contractor personnel must have the required competencies, authorisations, qualifications, skills and SHE hazard and risk management awareness for all work undertaken. Contractors must provide their personnel with suitable and sufficient information, instruction, training and supervision which is specific to the work undertaken and addresses the SHE risks that will or may be encountered.

Registers, records of training and certificates of competence of all contractor and subcontractor staff must be maintained by the Contractor and provided to the Western Power Representative prior to starting the work under contract and kept readily available for inspection and audit purposes.

2.4.1 Inductions

Effective induction ensures that individuals understand the SHE systems and processes that apply to a particular company and, or site. Contractors must provide all their personnel, subcontractors and visitors with a suitable and sufficient SHE induction, and, or a site-specific induction before starting work. The detail in the induction will vary according to the complexity of the work. Records of inductions must be kept and made available to Western Power upon request.

Contractors must provide inductions to Western Power employees working or visiting a site under the contractor's control. Similarly, contractors are required to complete a Western Power induction if working at a site under Western Power's control.

2.4.2 Authorisations

Contractors must ensure that all personnel (including subcontractors) working on behalf of Western Power have the necessary authorisations, licences or permits that are current and appropriate for the work to be undertaken.

Any person working for Western Power on a construction site (including performing maintenance) requires a Network Authority Card (NAC). Each card must be under the name of the relevant primary contractor company. The instructions on how to obtain NACs are available from the Western Power Network Authorisation Team via the Western Power Representative.

Contractors must comply with the *Worker Authorisation Procedure (EDM 27980613)*.

2.5 Communications

Clear and effective SHE communication improves knowledge and understanding that prevents risk behaviours and enhances safe work practices.

Effective communications with contractor personnel (such as tool box talks) must be used to maintain high standards of SHE awareness during works, such as advising personnel of changing circumstances as a project progresses. Discussions must be led by a person competent on relevant topics.

Any Western Power specific information provided to the contractor by Western Power, such as updates to this document or SHE bulletins containing learnings from incidents, must be disseminated by the contractor to relevant personnel including subcontractors.

Contractors must record daily pre-job briefings and tool box discussions, keep copies for the life of the contract and make these available upon request. Additionally, Contractors must meet all legislative obligations to consult, cooperate and coordinate work under contract with other parties. If required, the contractor must participate in consultation meetings with Western Power and other contractors performing work on behalf of Western Power.

2.6 Fitness for work

Contractors are required to have processes in place to ensure personnel (including subcontractors) are fit for work each and every working shift.

An individual is "fit for work" when the individual is in a satisfactory physical, mental and emotional state to perform assigned tasks competently and in a manner which does not compromise or threaten the safety and health of themselves or others. An individual may be unfit for work for a variety of reasons including the adverse effects of fatigue, stress, alcohol or other drugs and a range of physical and mental health issues.

2.6.1 Drugs and alcohol

The Contractors' personnel must be free from alcohol and illicit drugs at all times whilst undertaking work.

To ensure a safe working environment, all Contractors must have and implement their own procedures for testing and managing their employees that includes:

- pre-employment testing
- for cause testing, noting that Western Power may require for cause testing if, during the course of carrying out work for Western Power, the personnel
 - have been involved in an incident

- have been involved in a motor vehicle accident
- are observed displaying unusual or dangerous behavior that may place people and/ or property at risk
- are observed using drugs or alcohol at work
- random testing, ensuring adequate coverage of personnel using a risk-based approach (minimum of once per year per employee) testing methodologies, which must be by breath analysis for alcohol and a urine screen for other drugs that complies with *AS4308:2008 Procedures for specimen collection* (note that oral-based drug screens are not acceptable)
- immediately standing down individuals who return a non-negative result that is not commensurate with declared medication until their sample is confirmed to be commensurate with declared medication, or is under the relevant cutoff as defined by *AS4308:2008 Procedures for specimen collection*
- arranging safe transportation for any individual stood down
- not permitting an individual to return to work following a non-negative result, until the individual is tested and confirmed to be commensurate with declared medication, or under the relevant cutoff as defined by *AS4308:2008 Procedures for specimen collection*
- ensuring that their testing procedures include a requirement for employees to provide written consent for any test results to be reported to Western Power, if required
- reporting all positive test results including the name of the individual and date of the positive result to the Western Power Authorisations Team within 10 business days of the positive result (networkauthoritycard@westernpower.com.au)
- not permit an individual who records two non-negative results within a twenty-four-month period, to continue to undertake any work, now or in the future, on behalf of Western Power.

The Contractor must ensure that personnel taking prescribed or over the counter medications, herbal or natural remedies, additives or supplements are to discuss any actual or potential safety or fitness for work concerns with their employer prior to commencing any work and;

- for prescribed or over the counter medications they are aware of the details of their prescription, the name of the medication and disclose this to the collector when participating in alcohol and other drugs testing; and
- for herbal or natural remedies, additives, supplements, e-cigarettes or any other product or treatment they are aware of the name, contents or ingredients of the product or treatment and disclose this to the collector when participating in alcohol and other drugs testing.

The Contractor must ensure that its personnel have a Blood Alcohol Concentration (BAC) of 0.00 at all times when undertaking work. A positive result will be recorded if the breathalyser used for testing complies with *AS 3547:1997 Breath alcohol testing devices for personal use* and records a BAC above 0.00.

For other drugs, a positive result will be recorded if:

- the instant urine test result is non-negative for one or more drugs and the confirmatory test result shows a level of the drug(s) above the cut off levels set out in *AS/NZS: 4308:2008 Procedures for specimen collection*; or
- the individual has refused to declare a prescribed drug they are taking and a positive result for a drug (not limited to illicit drugs) is obtained.

A positive result will not be recorded if the test result is commensurate with a drug declared by the individual, legally prescribed by a doctor for the individual and is being consumed by the individual in accordance with the prescribing doctors, or manufacturers, instructions.

2.6.2 Injury management

All Contractors must maintain suitable and sufficient workers compensation insurance, as required in the contract and to comply with all appropriate legislative requirements.

Contractors must ensure that injured or ill employees with medical restrictions are supported in a safe return to their original job, where possible. This must include early intervention and return to work programs, such as:

- real-time management of incidents to care for those people involved or affected
- providing employees with quality medical care
- communication between the contractor supervisor, employees and medical professionals regarding return to work expectations, including phased return to work plans
- job modifications where possible to accommodate injured employees or the identification of job alternatives, whether permanent or temporary.

2.6.3 First Aid

Contractors must provide first aid facilities and services as required by the *Occupational Safety and Health Act 1984* (WA), including:

- conducting a risk assessment to determine first aid facilities, services and number of first aiders in accordance with the *Worksafe Code of Practice: First Aid Facilities and Services 2002*
- providing first aiders with the minimum qualification 'Apply First Aid' (National Training Code HLTFA311A)
- as a minimum, one first aider must be on duty at all times in the vicinity of high risk activities being undertaken
- first aiders must be clearly identified through notices, signage or clothing to other employees in the vicinity and should be identified as part of the risk assessment for operational activities
- new employees must be informed of their designated first aiders as part of their induction.

2.6.4 Fatigue

Contractors are required to have processes and procedures to manage worker fatigue. It is particularly important to identify fatigue risks which might arise when safety critical tasks are being carried out, such as tasks where the consequences of a mistake or error in judgment could result in serious injury.

Contractors must comply with the following fatigue management requirements when working for Western Power:

- a maximum of 16 hours is worked in any 24-hour period, including any travel time to and from the depot, worksite, home, with such 16 hour shifts only being during unplanned or emergency response situations rather than the norm
- a break of at least 10 hours is required between shifts, and a minimum of 30 hours break in a 72-hour period
- break times start and finish from home, not the depot or worksite
- at least two full days (24 hours per day, either concurrently or individually) off in a 14-day period, with employees not on call during these two days
- maximum average weekly working hours for planned work should not exceed 60 hours per week over four weeks

- for planned work, adequate notice including a minimum of 24-hour break must be provided before altering between day / night shifts
- shifts cannot be split to achieve fatigue compliance.

2.7 Inspections

Contractors are required to undertake regular SHE inspections of sites under their control. Sites requiring inspections may include but are not limited to depots, temporary depots or laydown areas, substations and construction sites. Refer to Section 3.14.1 for inspection requirements of vehicles, plant and equipment. The frequency of these inspections should be based on the risk to personnel, visitors and members of the public. These must be documented, corrective actions recorded and tracked to completion, copies kept for the life of the contract and copies made available to Western Power upon request.

Contractors must allow Western Power Representatives unrestricted access to undertake periodic SHE inspections of Contractor sites. Co-operation from Contractors is required for external inspections as well as joint inspections between Western Power and Contractors where there are multiple parties on the same site.

Contractors are required to carry out all reasonable requests for improvement deemed necessary from these inspections.

2.8 Incidents and emergency response

2.8.1 Incidents and near misses

An incident is any undesirable, unplanned event which had the potential to (a near miss), or did lead to (an accident), a loss to people, the environment, the network or property. Examples of incidents include injuries to workers or the public, making contact with an underground service or driving on native vegetation without approval.

If Contractors are involved in an incident when undertaking work for Western Power, they must call the 365 days 24/ 7 "Western Power Incident Hotline 1300 CALL WP (1300 225 597)" as soon as practicable, but within 60 minutes, and inform the Western Power Representative. This requirement forms a specific term in all contracts and as such, contracts may be terminated if it is found that a Contractor decides to not report an incident. Contractors are also required to report relevant incidents to the appropriate regulatory authorities in line with their statutory duties.

2.8.2 Hazards

A hazard is a source of potential harm. Reporting hazards is critical for ensuring that risks are eliminated or reduced prior to an incident occurring. It is the duty of Contractors to reduce the risk of any hazard associated with their work. Those hazards that cannot be controlled and are the responsibility of Western Power must be reported to the Western Power Representative or Western Power Incident Hotline 1300 CALL WP (1300 225 597). All emergency faults are to be reported via the Customer Service Centre 131 351.

2.8.3 Investigations

Western Power requires all SHE incidents (accidents and near-miss), involving employees, Contractors and the public to be reported and appropriately investigated.

All incidents are to be investigated by the Contractor concerned using their own incident investigation procedure which must address issues such as securing the site, appointing a suitable person to lead each investigation, recording evidence, and recording, tracking and completing corrective actions. The

Contractor's procedure must also address the specific requirements contained within the *Incident Management Procedure (EDM 34255745)*.

The Western Power Representative may oversee the investigation and ensure it is completed to an appropriate standard and will require a copy of the investigation report within the timeframes detailed in the contract. In certain cases, when Western Power is undertaking a joint or complementary investigation the *Western Power Incident Management Procedure (EDM 34255745)* will be used and the Western Power Representative will require access to information relating to the incident as detailed in the contract terms and conditions. Corrective actions will also be recorded in Western Power's incident management system. Examination of incidents will, in any event, form part of the normal process of Contractor performance reviews undertaken by Western Power.

Contractors must comply with the relevant sections of the *Incident Management Procedure (EDM 34255745)*.

2.8.4 Emergency response

The Contractor must have emergency plans in place to address foreseeable safety, health and environment emergency situations where the Contractor is in control of a site. These plans should address issues such as rescue plans, emergency contacts and communication, training and responsibilities, first aid, visitors, nearby hospitals, evacuation, muster and alternative muster points, equipment and response to fires, bombs (including unexploded ordinances), severe weather, injuries, gas leaks and large spills. Where Contractors are working on a site under Western Power control, they will be provided with a site induction in line with Western Power's emergency response procedures before they start work.

In periods of adverse weather, Western Power may issue 'weather warnings' or declare 'system emergencies' or 'alerts'. During such times work on the network may be temporarily suspended. In certain circumstances Contractors might be asked to provide assistance to restore electricity supplies. In all cases Contractors continue to be responsible for the safety, health and welfare of their staff.

3 Undertaking work

In addition to the requirements contained in this Section 3, the Contractor must comply with Western Power's SHE Management System Documents listed in Appendix A. All documents listed in Appendix A are available in the 'Depot Pack' or from your Western Power representative.

3.1 Working on or near the network

Work on the network (i.e. on or in proximity to conductors or cables) is considered a Prescribed Activity under the *Electricity (Network Safety) Regulations 2015* and is covered by Western Power's SHE Management System including the Electrical System Safety Rules (ESSR) (EDM 41392645), this document and in Appendix A.

A Prescribed Activity is an activity carried out in the course of the design, construction, commissioning, operation, maintenance or decommissioning of the Western Power network. However, if the Prescribed Activity is carried out in the course of the construction, commissioning, maintenance or decommissioning of the network, the activity is not in connection with the network unless it is carried out within 6 metres of the network.

The ESSR outlines the minimum electrical safety standards for personnel working on, near or in the vicinity of Western Power's electrical network and associated apparatus and must be read in conjunction with

other relevant Western Power SHE Management System Documents. Where applicable, Contractors must comply with the ESSR and have the appropriate competencies (including information, instruction, training, supervision and authorisation) to perform the work safely.

3.2 Golden Safety Rules

Western Power has identified nine activities that are most likely to result in serious harm.



The Golden Safety Rules were developed to reduce the risk associated with carrying out these activities. These rules outline the minimum safety requirements and critical controls required to ensure the safety of our workforce.

Every person performing work for Western Power (including the Contractor's personnel) has the authority to stop work if the work is unsafe or the minimum safety requirements are not in place. Contractors must comply with the *Golden Safety Rules (EDM 41205405)*.

3.3 Interface with the network

When Contractors are required to work or attend to faults at the interface between the Western Power's network and low voltage customer installations, they may encounter damaged or degraded customer electrical assets.

Regardless of ownership, if the asset at the interface is identified as being non-compliant, damaged or degraded there exists a duty of care to keep risks as low as reasonably practicable.

Contractors must comply with the *Management and assessment of private low voltage customer electrical assets procedure (EDM 32264496)*.

3.4 Electrical permit to work

Western Power uses a permit to work system to control and authorise access to the network to undertake approved works. Work permits are issued by persons with relevant competencies and authorisations in accordance with specific requirements of each work permit. The purpose of the work permit is to assist in the management of risks associated with working on the network.

Contractors must comply with the *Electrical Permit to work procedure (EDM 34141096)*.

3.5 High Voltage live work

The potential consequence of the risks associated with working live on High Voltage (HV) electrical apparatus can be catastrophic. Contractors must, so far as reasonably practicable, control the risks associated with working live, when it is not practicable to work de-energised.

Contractors must comply with *Australian Standard 5804 -2010 High-voltage live working* as well as with the *High Voltage Live Work Manual (EDM 34059310)*, *High Voltage Live Work Procedure- Distribution insulated stick (EDM 33621740)*, *High Voltage Live Work Procedure- Transmission insulated stick (EDM 31522855)* and *High Voltage Live Work Procedures- Glove and Barrier (EDM 33620832)*.

3.6 Distribution commissioning guideline

The *Distribution Commissioning Guideline (EDM 34137510)* is intended for use when undertaking testing and commissioning activities of electrical apparatus on Western Power's distribution network. The Guideline provides instructions for commissioning using the various Distribution Commissioning Forms (DCF).

Contractors must comply with the *Distribution Commissioning Guideline (EDM 34137510)*.

3.7 Service Connection Test Guidelines

The service connection test guidelines are in place to assist personnel who are trained and authorised in service connection testing to perform service connection tests on installations where a meter has been added, replaced, decommissioned or being disconnected/reconnected. Each guideline has a corresponding form.

All documents are referenced against *Australian Standard 4741-2010 – Testing of connections to low voltage electricity networks* and support the *Management and Assessment of low voltage electrical installation assets procedure (EDM 32264496)*.

All guidelines and forms are listed in Appendix A and must be complied with by Contractors.

3.8 Helicopter service operators

Western Power engages helicopter service operators to carry out aerial works and patrols of its overhead electrical network.

Contractors (i.e. helicopter service operators) must comply with the *Helicopter Management Procedure (EDM 27756216)*. Nothing diminishes the duties of the helicopter service operators or their pilots to comply with the obligations under Australian aviation legislation.

3.9 Personal protective equipment

The use of personal protective equipment (PPE) is the last line of defence in the hierarchy of risk controls for controlling risks to safety and health. PPE must not be relied on as the primary means of risk control until the options higher in the list of control priorities, such as elimination, have been exhausted.

Contractors are responsible for identifying the need for PPE (including clothing), selecting appropriate items and enforcing its correct use when conducting work for Western Power. Condition checks on PPE need to form part of the Contractor's normal inspection regime. Contractors must also provide information, training and supervision on how and when personal protective equipment must be used and maintained.

There are however, specific Western Power requirements for the use of PPE in certain environments. The minimum PPE that must be worn when carrying out operational, construction or maintenance activities are:

- 100% cotton high-visibility clothing
- minimum 6.5 Cal rated clothing if working within 3 metre danger zone of live electrical apparatus
- long trousers and a long-sleeved shirt or overalls buttoned to the wrist
- protective foot wear (safety boots or shoes relevant to the risk and working conditions)
- medium impact eye protection, if relevant for the task
- head protection, if relevant for the task.

Gloves must comply with *AS/NZS 2225:1994 Insulating gloves for electrical purposes, I.S EN 388:2016 Protective gloves against mechanical risks* and *AS/NZS 2161.1:2016 Occupational protective gloves against chemicals and micro-organisms*.

Safety helmets must comply with *AS/NZS 1801:1997 Occupational Protective Helmets*.

Eye protection must comply with *AS/NZS 1337.1:2010 Personal eye protection – Eye and face protectors for occupational applications* and *AS/NZS 1337.6:2012 Personal eye protection*.

Face protection must comply with *AS/NZS 1337.1:2010 Personal eye protection – Eye and face protectors for occupational applications*.

Hearing protection must comply with *AS/NZS 1270:2002 Acoustics – Hearing protectors*. Hearing protection must be worn for the appropriate decibel (dB) noise level that is to be encountered.

Respiratory protection must comply with both *AS/NZS 1715:2009 Selection, use and maintenance of respiratory protective equipment* and *AS/NZS 1716:2012 Respiratory protective devices*.

Safety footwear must comply with both *AS/NZS 2210 Occupational protective footwear* and:

- must be lace up (no elastic boots); and
- must provide ankle support.

Table 2: PPE level definition table

Level 0 PPE	Level 1 PPE	Level 2 PPE	Level 3 PPE	Level 4 PPE
<ul style="list-style-type: none"> • safety footwear • gloves relevant to task 	<ul style="list-style-type: none"> • safety footwear • gloves relevant to task • hi vis FR long sleeve shirt • long trousers OR overalls 	<ul style="list-style-type: none"> • Level 1 PPE • overalls • safety glasses • face shield 	<ul style="list-style-type: none"> • Level 1 PPE • FR switching jacket • FR switching trousers • safety glasses • face shield 	<ul style="list-style-type: none"> • Level 1 PPE • FR switching jacket • FR switching trousers • safety glasses • FR hood

Table 3: Minimum PPE when working on electrical equipment

All Western Power Operations						
Type of electrical equipment	Personal protective equipment					
	PPE level	Level 0	Level 1	Level 2	Level 3	Level 4
	Material/flame retardant (FR) CAL rating	100% cotton	6.5	13	37	37
	Outside 3 metre danger zone of electrical apparatus	✓				
	HV O/H equipment		✓			
	LV O/H and underground equipment		✓			
	LV-pillar and kiosk insulated live connections		✓			
	LV-pillar and kiosk exposed live connections			✓		
	Transformer LV frame up to 315 kVA air insulated			✓		
	Transformer LV frame greater than 315 kVA air insulated				✓	
	HV RMU SF6 insulated		✓			
	HV RMU air insulated				✓	
	HV RMU oil insulated					✓
	Terminal and Zone substation outdoor equipment, air insulated		✓			
	Zone substation indoor equipment (Gas and vacuum)			✓		
	Zone substation indoor equipment (Oil)					✓

3.10 Journey and transport management

Due to the extensive distances covered by the Western Power network, driving is one of the highest risks facing our workforce and Contractors. Contractors must have management arrangements to control the risk presented by driving both on metropolitan and country roads. Contractors must implement journey management principles in their procedures, including:

- consider alternatives to long distance driving (e.g. teleconferencing or travel by plane instead)
- long distance trips are planned appropriately considering the risk factors and make contingency arrangements such as overnight accommodation
- ensure appropriate controls to manage fitness for work and fatigue, such as rest breaks, rotation of drivers and self-assessment on fitness to drive, are identified prior to starting the journey
- provide suitable communications and safety equipment for remote area driving and maintain regular contact with personnel throughout and at journey completion
- ensure all vehicles are fit for purpose and inspected prior to the journey
- ensure drivers have the appropriate licences and skills to operate the vehicle and that they drive safely, courteously and within federal and Western Australian road traffic legislation.

Commercial drivers (i.e. anyone who holds a LR or higher class of driver's licence) must comply with the following additional requirements:

- be certified fit to drive a commercial vehicle by a medical practitioner every three years
- take all breaks in accordance with the *Occupational Health and Safety Regulations 1996 (WA)*, and record these in the vehicle logbook
- do not sleep or rest overnight in the cab of a vehicle unless it is specifically designed for that purpose.

3.11 Lone and remote working

The nature of some works conducted can result in working or travelling alone or to remote areas. The risk for people who work alone, remote or both, may be increased because of difficulty contacting emergency services when required. Emergency situations may arise because of the sudden onset of a medical condition, accidental work-related injury or disease, attack by an animal or reptile, exposure to the elements, or by becoming stranded without food or water. The consequences may be very serious.

Contractors must ensure that personnel who are required to conduct work tasks must be provided with effective means of communication to call for help in the event of an emergency. The selection of communications equipment must consider usability, reception coverage and response times e.g. mobile phone, satellite phone, EPIRB, two-way radio.

To ensure reasonable foreseeable hazards are identified, and appropriate controls are in place, the Contractor must ensure that a risk assessment is completed prior to mobilisation. This risk assessment must include a plan of the route taken and determine the communication methods to be used and include consideration of any site-specific safety and health management plans.

3.12 Smoke-free workplaces

All Western Power operational and non-operational sites, including offices, depots, vehicles, substations and any other place where a Contractor works while engaged by Western Power, are designated as no-smoking areas. All Contractors who wish to smoke must do so away from the work site and dispose of associated waste appropriately.

Contractors must comply with the *Fire precautions work instruction (EDM 43657515)*.

3.13 Site management

Contractors who have direct control of a site are responsible for the operation and management of that site. In the case of depots, substations, field operations and construction sites that are under Western Power's direct control, the site coordinator / manager will be a Western Power Representative.

Where a site has both Western Power and Contractors working together, the overall site management responsibility must be established before work commences, depending on mutual consultation between both parties or as agreed in the contract. The decision to take overall responsibility for control should be based on risk, competence and understanding of the assigned task and scope of work.

Site coordinators or managers are responsible for, but not limited to, ensuring:

- workers and visitors are inducted and informed of the relevant SHE hazards, risks and controls for the site
- amenity and welfare provisions are in place such as toilet, drinking and first aid facilities
- daily pre-job briefs and risk assessments are conducted before the work commences and whenever conditions change
- the site is secure with safe access, egress and emergency procedures
- roles and responsibilities are assigned

3.13.1 Site security

When controlling a worksite, Contractors must have processes in place to identify hazards and apply appropriate risk controls to prevent injury or harm to the workforce, visitors and the public. Essential controls include but are not limited to:

- ensuring that Western Power assets and materials such as power poles, conductors and electrical apparatus are secured by appropriate barricades to prevent a risk to the public and vehicles from unauthorised and inadvertent access
- appropriate signage to inform workers, visitors and the public of potential hazards and site entry requirements
- traffic management (see Section 3.13.2 for further detail)
- ensuring vehicles, plant and equipment are stored securely
- controlling site access by implementing site inductions and signing onto the daily job risk assessment plans, such as Risk Assessment (RA), for all personnel, new arrivals and visitors.

3.13.2 Traffic management

Contractors that are required to provide traffic management will be responsible for designing and obtaining authorisation for their own Traffic Management Plans (TMPs) and Traffic Control Diagrams (TCDs). The contractor must ensure documentation/processes are current and are annually reviewed and approved by a Main Roads WA (MRWA) Advanced Worksite Traffic Management (AWTM) accredited person.

Contractors must:

- ensure they have appropriate and current qualifications, training and accreditation to perform traffic management duties
- ensure they only engage approved MRWA traffic management companies as defined by the State Road Traffic Management Company Registration Scheme

- ensure they provide personnel with current qualifications, training and accreditation to perform traffic management duties
- ensure work does not commence until the appropriate TMP and TCD are available on site
- stop work if the traffic management is inadequate or unsafe
- ensure that traffic management does not result in greater obstruction to vehicle or pedestrian traffic than is reasonably necessary
- obtain appropriate approval from MRWA for TMPs
- meet notification requirements to MRWA or local governments relating to traffic management
- upon request of Western Power, provide copies of the TMP and TCD relevant to the job they are engaged to control on behalf of Western Power,

Additionally, Contractors must comply with the Traffic Management for Works on Roads Code of Practice (WA) when working near public roads. Additional approval requirements may apply when working near/ on freeways or national routes or in certain local government areas.

3.13.3 Temporary depots and laydown areas

A temporary depot or laydown area means any site used for the storage of materials or waste to support the delivery of a Western Power project. Laydown areas are defined as any storage area required for up to four weeks and temporary depots are for any duration longer than that.

Where Contractors set up temporary depots or laydown areas they are required to use a risk assessment approach to ensure appropriate sites are chosen and sufficient management controls are in place to, so far as is reasonably practicable, minimise safety, health and environmental risks. Appropriate locations will minimise risks to the public, surface water, public drinking water areas and native vegetation, among others. Examples of controls that will be required in the management of a temporary depot or laydown area include but are not limited to:

- site security measures to prevent public access, such as fencing
- prevention of oil and chemical leaks or spills, with spill kits available
- secure storage of treated wood poles off the ground
- segregation of waste and appropriate drums and bins for different waste types.

Additionally, for temporary depots, Contractors must agree the proposed location and arrangements with the Western Power Representative prior to establishing the site. A site inspection may be conducted by a Western Power Representative to ensure compliance with relevant legislation and Western Power requirements before use.

Contractors must ensure a formal agreement is in place with the landowner. In addition, Contractors are required to complete a pre and post site inspection to ensure any property damage caused (e.g. oil spill, gate damaged) as a result of the Contractor's work is recorded and rectified prior to returning the site to the owner.

3.14 Vehicles, plant and equipment

All Contractors' vehicles, plant and equipment used to perform work for Western Power must be fit for purpose, have an electrical test certificate and a high voltage or low voltage rating plate where applicable (e.g. elevated work platforms), compatible with the risks of the work being undertaken, and designed and manufactured to meet relevant legislative requirements and Australian Standards.

3.14.1 Service, maintenance and inspections

Contractors must have processes in place to ensure all vehicles, plant and equipment are serviced and maintained as required by established standards and manufacturers' specifications. Pre-use checks and inspections on vehicles, plant and equipment are mandatory before mobilisation and/ or prior to work commencement, and any faults must be recorded and repaired.

Operators of such equipment must complete inspection records as required and use an appropriate log book to record inspection, services and faults. Contractor log books, qualifications, maintenance records, inspection certificates and licences may be checked by Western Power at any time and must be provided on request.

3.14.2 Operating vehicle, plant and equipment

Contractors who drive vehicles or operate plant on Western Power sites must have undergone appropriate training and hold the appropriate licence for the type of vehicle, plant or equipment. Contractors must check licences at least annually or have a system in place to ensure that licences remain valid.

The manufacturer's safety devices must be used by all operators of vehicles, plant and equipment and must not be tampered with (e.g. stabiliser/ boom limit and 'deadman' switches). Suitable chocks should be used for all heavy vehicles where the vehicle is unattended or there is a risk the vehicle could move on its own. Suitable interlocks are required on cranes to ensure that all outrigger legs are retracted, the lifting arm of the crane is stored and the Power-Take-Off is disengaged before they are driven.

3.14.3 Electrical equipment and instruments

Electrical equipment must be tested and tagged in accordance with *AS/NZS 3760:2010 In-service inspection and testing electrical equipment*, while insulated tools and equipment must be tested and tagged in accordance with *AS 5804.2&3:2010 High voltage live working*. Results must be recorded.

3.15 Working at height

Western Power has identified working at height as a critical risk and therefore requires strict arrangements to be in place. If there is any risk of a person falling, a risk assessment must be completed, and steps taken to eliminate or minimise the risk of the fall through the application of the control measures in order of priority based on the risk hierarchy of controls.

Where there is a risk of falling two or more metres, the risk assessment process must include the development of a SWMS in addition to the JRA. Contractors must document fall prevention strategies, such as permanent attachments, relevant to the work they are conducting on behalf of Western Power. This includes the management of exclusion/ drop zones underneath work being undertaken at height should items fall to the ground.

Contractors must comply with the *Working at Heights Procedure (EDM 34292997)*.

3.16 Lifting Operations

Lifting operations are known as a high-risk activity, therefore require strict controls in place to protect both the workers and the public. This includes, but is not limited to, using trained and competent persons to carry out lifting operations, inspections of plant, lifting gear and lifting points, establishing exclusion zones and clear communication protocols.

Lifting operations are defined as all work activities that involve the raising or lowering of loads or moving a load horizontally.

Contractors must comply with the *Lifting Operations Procedure (EDM 43683854)*.

3.17 Confined spaces

Work in confined spaces must be effectively planned and risk assessed before starting work.

Potential risks within confined spaces are the build-up of asphyxiant gases and the development of explosive or flammable atmospheres. Contractors are responsible for the supply of all safety equipment necessary to perform work in confined spaces, including air quality monitoring equipment, breathing apparatus, harnesses, having a competent rescue person available and other escape equipment.

Contractors must comply with *Confined Space Procedure (EDM 43680274)*.

3.18 Excavation, trenching and dewatering

Excavation work is defined as activities that involve the removal of soil or rock to form an open face, hole or cavity using tools, machinery or explosives. Trenching and directional drilling are types of Excavations. Due to the nature and location of our underground assets, trenching and excavation poses a high risk to our workforce during day to day operations, particularly when excavating adjacent to buildings and structures. Other environmental and property risks are also created through excavation and dewatering in high risk areas of acid sulfate soils or dewatering other sources of water.

Contractors must comply with the *Excavation, Trenching and Dewatering Procedure (EDM 43740956)*.

3.18.1 Contaminated sites

The *Environmental Protection Act 1986 (WA)* requires Western Power to prevent pollution and the *Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)* stipulates that discharging oil (and other contaminants) into the environment is an offence. Section 11(4) of the *Contaminated Sites Act 2003 (WA)* requires Western Power as owner and/or occupier of land to report and appropriately manage any site that is known or suspected to be contaminated to the Department of Water and Environmental Regulation (DWER).

A site is deemed to be 'contaminated' if a substance is present on the site above background concentrations that presents, or has the potential to present, a risk of harm to human health or the environment.

Contaminated sites can be encountered as a result of previous or current land use and from activities within or in the vicinity of the working area. Contaminated material may include soil contamination, groundwater contamination (underground water), waste water contamination (e.g. sewer) or contaminated fill.

Table 4: Common types of contamination from Western Power operations and likelihood of occurrence

Location	Types of Asset	Possible contaminants	Likelihood of Occurrence			
			Hydrocarbons	PCBs	OCPs	Asbestos
Substations	Transformers	Hydrocarbons (oils), Polychlorinated Biphenyls (PCBs)	L	P		
	Capacitors	Hydrocarbons (oils), PCBs	P	P		
	Oil-filled cables	Hydrocarbons (oils)	L			
	Building materials and insulation	Asbestos in soil			P	L
Depots	Underground storage tanks	Hydrocarbons (diesel)	L			
	Pole mix storage, pole treatment and treated pole storage	Organochlorine Pesticides (Aldrin, dieldrin, pentachlorophenol), Copper Chrome Arsenate (CCA), Hydrocarbons (diesel, creosote, tar treatment)	L		L	
	Building materials and insulation	Asbestos in soil				P
	General storage and waste	Redundant transformers; waste burial	P	P	P	P
Padmount Transformers	Transformers	Hydrocarbons (oils), Polychlorinated Biphenyls (PCBs)	L	P		

Key: L = Likely, P = Possible

Note: This table is provided for information purposes only and Contractors must still undertake a risk assessment before disturbing soil in brownfields locations.

3.18.2 Known contamination

Western Power completes desktop assessments for planned projects and will complete intrusive investigations where applicable. Western Power will provide relevant information from its investigations to the Contractor where contamination has been identified. If necessary, Contractors may need to develop a project-specific contaminated site management plan detailing the management strategy for handling, storage, transport and disposal of contaminated, or potentially contaminated, material. The plan must be provided to the Western Power Representative for review prior to work commencing and the Contractor must implement and monitor the plan.

The Department of Water & Environmental Regulation has a Contaminated Sites Database that provides information about known contaminated sites. The absence of a site classification does not mean that the site is free of contamination as unconfirmed sites are not available on the database. Consideration should still be given to the land use (e.g. ex-industrial, fuel storage or manufacturing land uses) and potential risks when planning work.

3.18.3 Unexpected contamination

If unexpected contaminated material is identified during works, Contractors are required to stop work, barricade the area, contact the Western Power Representative and the "Western Power Incident Hotline

1300 CALL WP (1300 22 55 97)", request the incident be escalated and await further advice from Western Power.

3.19 Land access, biosecurity and environmentally sensitive areas

Many Western Power assets are located on private land, Conservation Estate, near infrastructure or in Environmentally Sensitive Areas (ESAs). There are additional requirements when accessing these areas, which can include permits, approvals, notifications, and specialist supervision or equipment. Customers and private landholders must be treated with respect and courtesy when accessing their properties.

Contractors must comply with the *Site Access Work Instruction (EDM 41050794)*.

3.20 Protection of native plants and animals

The south-west of Western Australia is an international biodiversity hotspot with a large number of plant and animal species that are not found anywhere else. All native plants and animals are protected under legislation and Contractors can be prosecuted for breaches. Any harm to native animals or damage to native vegetation resulting from Western Power work must be reported as an environmental incident to "Western Power's Incident Hotline 1300 CALL WP (1300 2255 97)".

Contracts must comply with the *Vegetation and Fauna Management Procedure (EDM 43625014)*.

3.21 Aboriginal Heritage

Under the *Aboriginal Heritage Act 1972 (WA)* it is an offence to alter or in any way damage an 'Aboriginal heritage site' as defined in the Act (registered or unregistered), namely places and objects of cultural significance customarily used by or traditional to the original inhabitants of Australia or their descendants. Damage to 'Aboriginal heritage sites' without the necessary approvals may lead to prosecution.

Archaeological heritage relates to the physical remnants of their occupation of land. These take the form of artefacts such as stone tools or chippings from making them, scarred trees, man-made structures such as fish traps, cave paintings, petroglyphs (rock engravings), shell middens and the like. Anthropological (ethnographic) heritage relates to the culture and incorporates sacred sites such as ceremonial grounds, initiation sites, gathering sites, dreaming mythology and creation legends.

Maintenance of the network or the construction of new infrastructure can potentially disturb or destroy a site that is significant to Aboriginals. By being aware of this possibility and by investigating the nature of our impacts, these heritage sites may be avoided and the important relationship with traditional land owners maintained.

Western Power will undertake a desktop assessment for planned projects. Where required, Western Power will seek approval or develop alternative proposals for managing any Aboriginal heritage risk in consultation with traditional owners. Any relevant approval conditions or instructions will be provided to the Contractor to be complied with.

3.21.1 Maintenance and field work

Maintenance involving new earth works has the potential to impact on the values of Aboriginal heritage sites.

When conducting maintenance activities:

- All works that involve significant earth disturbance must be planned and conducted to avoid disturbance of Aboriginal Heritage Sites.
- If objects are found during earth works that are suspected of being of Aboriginal origin, works must stop immediately, and the discovery reported to the “Western Power Incident Hotline 1300 CALL WP (1300 225 597)” and the Western Power Representative by the onsite person in charge. A reasonable ‘no work zone’ must be established around the site to ensure the discovery will not be disturbed. Work may continue outside the ‘no work zone’.
- in some circumstances, permission must be obtained to photograph Aboriginal heritage sites and material; advice should be sought from your Western Power Representative prior to undertaking this activity.

In the case of suspected cultural material (not being skeletal remains, such as stone tools or culturally scarred trees), the following guidance should be followed:

- Works must stop immediately at that location, temporarily block off the relevant area, establishing a ‘no work zone’ and contact the Western Power Representative to arrange an Aboriginal Heritage Advisor from the Western Power Environmental Contract Services Panel.
- The Aboriginal Heritage Advisor will inspect the material and determine whether the material is cultural and constitutes a newly discovered heritage site.
- Work must not recommence until advised by the Aboriginal Heritage Advisor.

In the case of skeletal material:

- Works must stop immediately at that location, temporarily block off the relevant area, establish a ‘no work zone’ and contact the Western Power Representative to arrange an Aboriginal Heritage Advisor from the Western Power Environmental Contract Services Panel.
- The ‘skeletal material’ is to be inspected to determine if it is animal or human. This should be completed by the Aboriginal Heritage Advisor.
- If the bones are human, the WA Police must be contacted along with the Department of Planning, Lands and Heritage. No work may resume.
- Work must not recommence until advised by the Aboriginal Heritage Advisor.

3.22 Noise

Noise from construction and maintenance works are both a hazard to the workforce and can impact the lives of third parties.

3.22.1 Occupational noise

Contractors must ensure that noise levels on site fully comply with statutory requirements. Where possible, Contractors should use low noise (i.e. suitably damped, silenced or acoustically treated) equipment. Machinery used intermittently should be shut down or throttled back in the periods between work. Contractors are also responsible for providing and ensuring the use of suitable hearing protection by their employees and subcontractors.

Adequate risk controls must be in place to minimise adverse health effects relating to noise exposure. Controls must include the following:

- hearing protection must be worn when noise exceeds 85 dB (A) for longer than 8 hours
- monitoring to be conducted where the risk of exposure to noise exceeds 85 dB(A)

- signage indicating noise levels may exceed 85 dB(A) and mandatory type of hearing protection to be worn in area
- personnel at risk of being exposed to noise levels that exceed 85 db(A) must undergo a comprehensive baseline noise survey (audiometric test) as part of pre-employment medical assessment, with follow-up tests conducted every two years.

3.22.2 Environmental noise

All construction work undertaken by Contractors must comply with the *Environmental Protection Act 1986* (WA) and the *Environmental Protection (Noise) Regulations 1997* (the Noise Regulations).

The use of temporary or mobile generators deployed for planned maintenance or potential network peak management purposes is also subject to this requirement.

For work carried out between 7am and 7pm on any day which is not a Sunday or public holiday:

- The work must be carried out in accordance with control of noise practices set out in section four of *Australian Standard 2436-2010 Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites*; and
- The equipment used must be the quietest reasonably available.

For work outside the hours detailed above, noise levels must either:

- Comply with the levels outlined in the Noise Regulations, or
- Be carried out in accordance with section four of *AS 2436-2010 Guide to Noise and Vibration control on construction, demolition and maintenance sites*, including
 - The equipment used must be the quietest reasonably available and for fixed plant, should be positioned to minimise noise impacts to neighbours
 - Neighbours must be advised of the work to be done at least 24 hours before it commences;
 - The Contractor must demonstrate that it was reasonably necessary for the work to be done out of hours; and
- Contractors will need to provide a Noise Management Plan to be submitted to the applicable local government authority, when work:
 - Is performed outside the hours of 7am and 7pm, Monday to Saturday or on a public holiday;
 - Is performed in close proximity to residential areas;
 - Is likely to generate unreasonable noise.

The Noise Management Plan must be submitted at least four weeks prior to the commencement of works, including any accompanying documents required by the local government. The Noise Management Plan must be approved prior to commencement of works.

It is recommended that Contractors engage suitably qualified noise consultants for the preparation of Noise Management Plans.

3.23 Hazardous substances and dangerous goods

Hazardous substances can have an adverse effect on human health. Many hazardous substances are also classified as dangerous goods. Oils, chemicals and other hazardous substances are used by Western Power to operate and maintain the network (see subsections below for more details on common hazardous substances and dangerous goods at Western Power locations). Without appropriate controls, these present a hazard to the workforce and the environment.

Contractors must identify any substances which are classified as hazardous substances or dangerous goods. Contractors must have controls in place to protect personnel from adverse effects due to potential exposure to these substances, including making Safety Data Sheets available to all personnel in relation to the safe handling, storage, usage and transportation of substances.

3.23.1 Asbestos

Asbestos Containing Material (ACM) means any material, object or product that contains Asbestos, with the three common types being Crocidolite (blue), Amosite (brown) and Chrysotile (white). Asbestos is a naturally-occurring fibrous silicate mineral and considered a versatile product due to its ability to withstand heat, erosion and decay and its electrical, fire and water-resistant properties.

Asbestos is hazardous to human health when individual fibres within the material are allowed to escape into the air and inhaled. Fibres can penetrate the airways and tissues of the lung leading to illness such as Asbestosis, lung cancer and mesothelioma. Risk factors associated with these diseases include exposure duration, fibre type, genetic susceptibility and whether the individual is a smoker.

ACM has been identified at various Western Power locations, including buildings (e.g. roof sheeting, wall insulation, ducting, vinyl tiles, fire doors), network assets (e.g. gaskets, pillars, fuses, meter boards), fencing or contaminated soils.

Where Contractors undertake work that may disturb asbestos containing materials, asbestos registers must be consulted before work takes place and suitable SWMS developed that include asbestos specific controls. The register is available from your Western Power Representative.

If ACM is accidentally disturbed or discovered, work should stop immediately. The contractor must inform the Western Power Incident Hotline on 1300 2255 97 and the Western Power Representative. No attempt should be made to remove the material without approval from Western Power.

Exposure to ACM may warrant the implementation of health surveillance as defined under the *Occupational Safety and Health Regulations 1996* (WA).

3.23.2 Polychlorinated biphenyls

Polychlorinated biphenyls (PCB) were historically used as insulators in transformers, capacitors, streetlight choke boxes and other electrical equipment prior to 1980. There is a potential for the presence of PCB when dismantling or servicing these items, or when involved in cleaning up spills or leaks. Due to the risk of PCB in modern transmission and distribution capacitors, this plant type must be treated as suspected of containing PCB regardless of age.

Contractors must appropriately manage PCB and equipment suspected of containing PCB to prevent exposure to workers and the environment.

3.23.3 Sulfur hexafluoride

Sulfur hexafluoride (SF₆) filled equipment (such as switchgear and control gear), cylinders, evacuation and refilling devices, vehicles used for transporting SF₆ and buildings containing SF₆ filled equipment must be clearly identifiable and compliant with dangerous goods legislation.

Contractors involved in the handling, transport or storage of SF₆ or SF₆ equipment must be trained and competent and must comply with *Australian Standard International Electrotechnical Commission 62271.4:2015 High-voltage switchgear and control gear - Handling procedures for sulfur hexafluoride (SF₆) and its mixtures*.

3.23.4 Electric and magnetic fields

The Australian Radiation Protection and Nuclear Safety Agency has established guidelines for public and occupational exposure to electric and magnetic fields (EMF). Western Power designs and operates its network assets to comply with the relevant guidelines for human exposure.

All Western Power radio systems are also licensed and operate at the frequency and power levels stipulated in the licence. This equipment is located on radio mast towers and on certain operational and non-operational buildings.

There are national and international guidelines (i.e. International Commission on Non-Ionizing Radiation Protection) for the level of occupational exposure to EMF emissions. Contractors must implement suitable arrangements to ensure exposure to EMF is within these guidelines.

3.24 Waste

Contractors are required to follow the 'refuse, reduce, reuse and recycle' hierarchy when managing waste associated with their work in combination with any health and safety risks that may apply. Additionally, waste must always be kept in a secure location to avoid potential escape causing littering or pollution.

Specific requirements are provided under the *Public Health Act 2016 (WA)* for the provision of waste management as it relates to public health. Under the *Environmental Protection Act 1986 (WA)* Contractors are required to ensure that pollution is prevented or minimised and contamination to the environment in which it operates is prevented or managed. Contractors are also required to comply with the *Environmental Protection (Controlled Waste) Regulations 2004 (WA)*, including providing copies of all tracking forms and receipts for any controlled waste disposal of Western Power assets.

Asbestos is a special type of controlled waste and separate requirements apply to its disposal, including wrapping and labelling prior to disposal at a licensed landfill.

3.24.1 Wood poles

Western Power encourages the reuse of redundant and untreated wood poles wherever possible, however, if Contractors are planning to make redundant wood poles available to third parties, this must be done in a manner that manages the associated risks and is approved by the Western Power Representative. For example, CCA treated wood poles cannot be reused, and untreated wood poles cannot be used for structural purposes. Pole butts must always be disposed at an approved landfill site and cannot be reused under any circumstances.

4 Contract and contractor management

Western Power places high importance on the selection and management of Contractors. The process that Contractors can expect to go through from a SHE perspective is outlined below.

4.1 Pre-award

Western Power will evaluate the capability of all Contractors to adequately manage SHE associated with the proposed scope of works.

Contractors will be required to complete a questionnaire and provide evidence of how SHE issues are to be managed and demonstrate compliance with the requirements outlined in this document. Western Power may request further information or conduct field audits during the evaluation period to assist in making this determination.

Western Power may also utilise third parties to undertake this “SHE pre-qualification evaluation” on our behalf, at the cost of the Contractor. This process may be undertaken on an annual basis with annual fees applicable, to continue working for Western Power. Contractors with SHE arrangements that are deemed to be unacceptable at this stage will not be awarded contracts with Western Power. Additionally, Contractors who allow their SHE pre-qualification to lapse during the contract may not be allocated any future work.

4.2 Pre-start

Following award of the contract, but prior to conducting any work for Western Power, Contractors may be required to prepare a Contractor SHE Management Plan(s) specific to the scope of works. Where the work is of a general, ongoing nature (such as distribution maintenance or facilities management), this may be a once-off management plan that addresses key risks encountered at all sites and contains a process of managing site-based risks. Where the work is project-related, a site-specific management plan will need to be developed by the Contractor prior to each project.

Contractor SHE Management Plans must address all the issues relevant within this document, including:

- nature of the project and the scope of works
- the people or roles with specific SHE responsibilities and how those roles are coordinated
- SHE arrangements and rules specific to that site or scope of work, and each phase of the work (i.e. pre-construction, construction and post-construction)
- SHE hazards and risks present at the site or applicable to the scope of work, and the controls in place to minimise those risks
- SWMS applicable to the site or scope of work
- communication of SHE arrangements to all persons on site, including visitors
- SHE induction training that will take place
- arrangements for managing SHE incidents
- SHE inspection and audit frequency
- amenity, welfare and emergency response arrangements.

As per the conditions of the contract, the Western Power Representative will review and accept the management plan prior to any work commencing.

4.3 Monitoring and Review

Western Power will periodically monitor and review the SHE performance of Contractors. Mechanisms for this may include:

- Key Performance Indicator reports or incident investigation reports from Contractors
- inspecting work on site
- evaluating compliance with Western Power requirements and quality standards
- audits of Contractor SHE management systems and work on site.

Contractors are responsible for any costs associated with implementing corrective actions or improvements which have been identified as not meeting the requirements in this document.

The appointed Western Power Representative, or a person authorised by Western Power, will have the authority to stop any Contractor working if, in their opinion, this is necessary in the interests of SHE.

4.4 Performance and reporting

In addition to reporting statistics regarding work completed, Contractors are required to report SHE performance on a monthly basis as described in the terms and conditions of their contract, which will depend on the type of work conducted. The reporting requirements may include providing the following information one month in arrears (i.e. by the end of the following month) via a form or system as advised by your Western Power Representative:

- the total number of hours worked including overtime and subcontractors (i.e. Western Power office, depot, or field location including travel)
- number of inspections conducted
- total fuel used categorised by fuel type (unleaded, diesel, liquid petroleum gas) and category of use (transport purposes or stationary energy purposes)
- drug and alcohol testing statistics.

5 Content owner

Title	Business Unit
Assurance Manager	Safety, Environment, Quality and Training (SEQT)

6 Approval history

Version	Date	Amendment
1	04/06/15	New document created under the SHE Management of Contracts Procedure
2	30/09/15	Document level changed from procedure to guideline. References to SHE standards within the document changed to procedures.
3	03/01/2018	Major review with more detail around WP procedural requirements. Added span of control. Section 1.4 Work Practices Project Phase 3 changes
4	27/09/2018	Major review with specific references to mandatory procedures. Appendix A added with all mandatory documents.

7 Content Approver

Version	Approver	Date Approved	Comments
1	Richard Gough, Head of Safety, Health and Environment	04/06/15	First issue
2	Claire Royston, Head of Safety, Health and Environment	30/09/15	Document level changed from procedure to guideline.
3	Don Ogilvie, Acting Head of Safety, Environment, Quality and Training	03/01/2018	Major review.
4	Claire Royston, Head of Safety, Health and Environment	27/09/2018	Major review.

Appendix A: List of Western Power SHE Management System Documents

The Contractor must comply with each of the Western Power SHE Management System Documents listed in this Appendix.

Document Classification	Document Title	EDM Number
Standard	Electrical Systems Safety Rules (ESSR) 2016	41392645
Standard	Golden Safety Rules	41205405
Procedure	Confined Space	43680274
Procedure	Electrical Permit to Work	34141096
Procedure	Excavation and Trenching	43740956
Procedure	Helicopter Management	27756216
Procedure	High Voltage Live Work Procedure- Distribution insulated stick	33621740
Procedure	High Voltage Live Work Procedure- Transmission insulated stick	31522855
Procedure	High Voltage Live Work Procedure- Glove and Barrier	33620832
Procedure	Incident Management	34255745
Procedure	Lifting Operations	43682860
Procedure	Management and Assessment of Low Voltage Customer Assets	32264496
Procedure	Vegetation and fauna management	43625014
Procedure	Worker Authorisation	27980613
Procedure	Working at Heights	34292997
Guideline	Distribution commissioning	34137510
Guideline	Noise Compliance Requirements for Distribution Transformers	31178895
Guideline	Safety Health and Environment requirements for contractors	34193785
Guideline	SCT - New/Replacement Meters in Multiple Master Meter Panels - Metrel	34193718
Guideline	SCT - Customer Mains - Metrel	34193671
Guideline	SCT - Metrel	34193741
Guideline	SCT - Multimeter - Customer Mains	34193684
Guideline	SCT - Multimeter - Meter Panel Replacement	34193698
Guideline	SCT - Multimeter - Meters in Multiple Master Meter Panels	34193730
Guideline	SCT - Unmetered Supply - Metrel	34192946
Guideline	SCT - Multimeter - Meter Replacement	34193709
Manual	High Voltage Live Work Manual	34059310
Manual	Switchgear Instruction Manual 1	23792120
Manual	Switchgear Instruction Manual 2	24256725
Work Instruction	Applying Low Voltage Shorts and Earths	41880366
Work Instruction	Assessing a Stored or Onsite Wood Pole	41885522
Work Instruction	Controlling Damaged or Faulty Customer Installation Assets in Public Areas	41886099
Work Instruction	Customer Installation Assets at the Network Interface	41899675
Work Instruction	Customer Requested Appointment	41853904
Work Instruction	De-energising a SWER Transformer for Service Core Replacement	41891333
Work Instruction	Depot Pack Contractor Access and Installation	44678992

Work Instruction	Disconnecting a Service Prior to a Building Demolition	41886102
Work Instruction	Disposing of Controlled and General Waste	43074732
Work Instruction	Earthing Cable Screens in HV Switchboards Fitted with Frame Leakage Protection	41854953
Work Instruction	Erecting Poles through Energised LV Conductors	41895833
Work Instruction	Escorting a Restricted Access Vehicle	41890235
Work Instruction	Extinguishing Pole Fires	41890826
Work Instruction	Fire Precautions	43657515
Work Instruction	Hazardous Substances and Dangerous Goods	41139433
Work Instruction	High Power Tools	43610967
Work Instruction	Identifying and Proving Status of Cables	41857364
Work Instruction	Induced Voltages in Isolated Conductors/Apparatus	41854206
Work Instruction	Inspecting, Maintaining and Replacing Powerwatch Security Lighting on Steel Streetlight Columns	41854215
Work Instruction	Inspecting, Maintaining and Replacing Powerwatch Security Lighting on Wood and Concrete Poles	41908685
Work Instruction	Installing and Testing Unmetered Supply Services	41855230
Work Instruction	Installing Portable Earths on Drop-out Fuses	41872964
Work Instruction	Insulator Washing and Siliconing	43659740
Work Instruction	Key site responsibilities	41862632
Work Instruction	Land restoration management	31147883
Work Instruction	Laying, Pulling and Bedding Cables	41855257
Work Instruction	Lineworkers and HV Live Workers Performing Vegetation Management	41856061
Work Instruction	Maintaining and Replacing Down Earth Assemblies	41862205
Work Instruction	Maintaining Batteries, Battery Chargers and DC/DC Converters	41826497
Work Instruction	Maintaining Damaged or Faulty Steel Streetlight Poles	41855137
Work Instruction	Maintaining Overhead Service Cables	41891561
Work Instruction	Maintaining return wires	41872758
Work Instruction	Major Planning Interruptions	41893728
Work Instruction	Managing Environmentally Sensitive Areas	29557965
Work Instruction	Minor Planned Interruptions	41857782
Work Instruction	Network Asset Inspection using a Remotely Operated Camera	29826863
Work Instruction	Network Incident Evidence Retention	43632947
Work Instruction	Obtaining Environmental and Land Access Approvals	43027773
Work Instruction	Pole Assessment and support prior to altering the load	41867151
Work Instruction	Portable Earthing and Shorting Equipment	41895845
Work Instruction	Reinforcing Wood Poles	41862066
Work Instruction	Removing Abandoned Cables or Preparing Cables for Abandonment	41857864
Work Instruction	Removing Embedded Poles and Legacy Reinforcement	41869291
Work Instruction	Removing Pitch from Cable Boxes	41861703
Work Instruction	Replacing a Meter Panel	41888335
Work Instruction	Replacing Fuses using Rezap Fault Master or Kelvatek Fusemate	41856960
Work Instruction	Revenue Meter Communications Equipment	43633306
Work Instruction	Revenue Meter Maintenance, Removal and Replacement	43635644
Work Instruction	Sealing Revenue Meters, Fuses and Terminal Blocks	41890669
Work Instruction	Secondary Isolations	41855140

Work Instruction	Service De-energisation/Re-energisation and Disconnection / Reconnection	41885504
Work Instruction	Site Access	41050794
Work Instruction	Temporary Pole Support Device	41866246
Work Instruction	Using a Vehicle Winch to repair a Conductor	41872278
Work Instruction	Using Tags	41848067
Work Instruction	Working Near Gas Mains and Petrol Stations	41854870
Work Instruction	Working on Existing Cables and Moving Earth Electrodes near Telstra Pits	41860795
Work Instruction	Working on Pillars and separating Schneider Electric RM6 RMU Kiosk from support stand	41895363
Work Instruction	Working on Substation Earthing	46201164
Form	1.1 - High voltage overhead powerlines - DCF	21584553
Form	1.2 - Low voltage overhead lines - DCF	22138998
Form	1.3 - Low voltage aerial bundled conductor - DCF	21583726
Form	1.4 - High voltage aerial bundled conductor and Hendrix spacer cable - DCF	23994096
Form	2.1 - High voltage XLPE cable - DCF	21540116
Form	2.2 - High voltage mixed cable - DCF	21535022
Form	2.3 - HV paper-insulated belted cable - DCF	21944117
Form	2.4 - HV paper-insulated screened cable - DCF	21951092
Form	2.5 - Low voltage XLPE cable - DCF	21536808
Form	2.6 - Low voltage cable with/without pillars - DCF	21635344
Form	2.7 - Steel standard streetlights - DCF	33981562
Form	2.8 - SPUDS single-phase to three-phase pillar - DCF	27007034
Form	2.9 - Pole to pillar - DCF	34034804
Form	3.1 - MPS distribution transformer - Commissioning - DCF	24253324
Form	3.1 - MPS distribution transformer - Decommissioning - DCF	29854219
Form	3.2 - Non-MPS distribution transformer - Commissioning - DCF	24981587
Form	3.2 - Non-MPS distribution transformer - Decommissioning - DCF	29855006
Form	3.3 - Single-phase transformer (pole- mounted/pad-mounted) - DCF	23932817
Form	3.4 - Three-phase pole-mounted transformer - Commissioning - DCF	24238157
Form	3.4 - Three-phase pole-mounted transformer - Decommissioning - DCF	30562085
Form	3.5 - SWER isolation transformer (pole- mounted) - DCF	24293616
Form	3.6 - SWER isolation transformer (ground- mounted) - DCF	25344754
Form	4.1 - Earthing system resistance testing (all equipment) - DCF	21631145
Form	4.2 - Nu-Lec load break switch/sectionalizer - DCF	21734095
Form	4.3 - Nu-Lec pole-mounted automatic control recloser - DCF	21543658
Form	4.4 - Pole-top switch - DCF	21640904
Form	4.5 - Pole-mounted capacitor bank - DCF	21638217
Form	4.6 - High voltage single-phase underground rural supply fuse switch DCF	21823418
Form	4.7 - Voltage regulator (closed Delta connection) - DCF	22105433
Form	4.8 - Voltage regulator (Star connection) - DCF	24601112
Form	4.9 - High voltage ring main switchgear - DCF	21611007
Form	4.10 - Low voltage kiosk - DCF	21613761
Form	4.11 - NOJA pole-mounted automatic control recloser - DCF	32271371
Form	10 day - 4 week Department of Parks and Wildlife Notification Form	34324792

Form	Service Connection Test – Metrel – Customer Mains	13298795
Form	Service connection test - Metrel	34284463
Form	Service Connection Test – Metrel – Unmetered Supply	13298813
Form	Service Connection Test – New/Replacement Meters in Multiple Master Meter Panels - Metrel	13298863
Form	Service connection test Customer Mains - Multimeter	13814745
Form	Service connection test Meter Panel Replacement - Multimeter	34193698
Form	Service connection test Meter Replacement - Multimeter	13815071