Working At Heights Procedure

WNH Q26 - Revision 2.0

Effective from October 2025

Revision History

Rev	Reason for Revision	Date	Prepared	Reviewed	Approved
1	Initial Release	07/2024	Alistair Mason	Chris Sims	Jie Yao
2	General review and update	10/2025	Alistair Mason	Robert Barbour	Robert Barbour (GM Delegate)

Contents

1.0 This Document

1.1 Purpose

The purpose of this procedure is to outline the expectations of Woolnorth Renewables (WNR) regarding any work activities being conducted where there is a risk of a fall from heights. Correct use of this procedure will ensure that higher levels of personal safety are achieved through appropriate use of risk control techniques and equipment.

1.2 Scope

This procedure applies on all WNR worksites and shall be implemented by all personnel engaged by WNR for activities at these worksites. This procedure is designed to be complementary with the Accessing and Working in Wind Turbine Generators Procedure (WNH Q28). In any event of contradictory statements/requirements between WNH Q28 and this procedure, WNH Q28 shall be followed where the work being conducted falls within its scope (WNH Q28).

2.0 Training

2.1 General

All individuals that are involved in a task where there is a risk to health and safety associated with a fall by a person from one level to another that is reasonably likely to cause injury shall hold a current (completed within the last 2 years) Statement of Attainment of a Nationally Accredited 'Work Safely at Heights' training course or equivalent. Such tasks may include switchyard maintenance, working in an elevated work platform and building maintenance (roof access).

2.2 Wind Turbine Generator Vertical Access

- To access a Wind Turbine Generator (WTG) on a WNR site you must be trained and authorised by WNR as a Restricted Area Worker.
- You shall hold a current (completed within the last 2 years) Statement of Attainment of a Nationally Accredited 'Work Safely at Heights' training course or equivalent.
- Ideally you will hold a current Statement of Attainment for an approved 'Wind Tower Rescue' course (or equivalent). At a minimum at least one individual of the work party shall hold a current qualification. Depending on the nature of the work being performed and the experience of each member of the work party, another person should be present at the site with this qualification to assist in an emergency situation. This should be considered in the risk assessment process and documented as required.
- The latest/most recent version of the Accessing and Working in Wind Turbine Generators Procedure (WNH Q28) should be referred to.
- Also note that all working at heights considerations regarding accessing and working in wind turbines is covered by WNH Q28. Requirements of this procure may not apply.

3.0 Working at Heights

Working at heights includes work that involves a risk of a person falling from one level to another that is reasonable likely to cause injury to the person or any other person. Work methods must be developed to minimise work at heights and the potential for dropped objects by applying the hierarchy of controls.

Work at heights must, as far as reasonably practicable, be planned so that any associated risks are eliminated. Where not practicable, workers must be protected from work at heights risks by using equipment which provides fall prevention/restraint (in the first instance). Where fall prevention cannot be achieved, then fall arrest/protection must be utilised.

No worker shall work at height alone, a minimum of two people is required when working at heights. Where a working at height risk cannot be controlled, that work shall not proceed until such time that adequate risk controls can be developed and implemented.

Where the potential for dropped objects is present, a drop zone shall be set up so that other workers access is prevented. The drop zone demarcation/control method should be proportionate/consistent with the level of risk. Lanyards and tool bags/buckets should also be adopted to stop drops.

Risk reduction must not be solely reliant on the use of PPE (e.g. a fall restraint or fall arrest system) to undertake the work safely. Defaulting to PPE is unacceptable unless there is clear evidence that other fall prevention measures (e.g. barricading, handrails) have been considered and are not practicable in the given work scenario.

3.1 Risk Management

A risk assessment (SWMS/JHA, Working at Heights Checklist) shall be conducted for any task that involves working at height above 2 metres or where there is the potential of being struck by a falling object.

The *WNH Q26.1 Working at Heights Checklist* is required when workers undertake any of the following activities:

- Work is being performed at height over in-service operational assets,
- the use of a fall arrest system is required (wind turbine ladder system use not applicable here),
- work at height where grid mesh or flooring is lifted, and
- work at height in a workbox suspended from a crane.

A SWMS (or equivalent) for working at height above 2 metres may replace the Working at Heights Checklist. The Accessing and Working in Wind Turbine Generators Procedure (WNH Q28) acts as a SWMS for general work associated with wind turbines.

The SWMS must address all relevant items as detailed in the Checklist.

The following requirements must be complied with when working at height:

a) PPE must be always utilised and workers must be equipped with arrest harness (with a shock absorbing lanyard, suspension trauma straps) and safety helmets are to be secured by chin straps,

b) tools and equipment must be secured from falling at all times, and

c) the risks to all workers must be identified and controlled. Examples of controls include, but are not limited to, barricading, safety signage e.g. 'Danger Persons Working Above / Falling Objects' and using a spotter.

Exception: The working at heights procedure will not apply for access and egress using portable ladders where workers are not required to be within two metres of a live edge, unless a risk assessment dictates otherwise. Ladders shall only be used for light work of short duration (see section 7.0).

3.2 Rescue Plans

Workers must have in place, a suitable and sufficient Working at Heights Rescue Plan or equivalent for all work at heights activities. The rescue plan must be reviewed, accepted, and signed by the Site Supervisor or Project Manager before starting the work at heights.

Rescue plans must include, as a minimum:

a) means and method of rescue,

b) identification of resources, competent persons and equipment (which must be readily available),

c) the steps to evacuate, if required,

d) means and detail of communications, and

e) location of first aid.

Workers must be able to demonstrate that rescue plans can be executed effectively, and the Site Supervisor, Person in Charge or Project Manager should be satisfied the rescue plan can be executed.

3.3 Overhead Work (Not Associated With a Wind Turbine) – Falling / Dropped Objects

Where there is a risk of an object falling from one level to another or more, the following controls must be implemented to eliminate or minimise the risk of harm:

a) Completion of an WNH Q26.1 Working at Heights Checklist (or SWMS or equivalent) before work starts to identify and eliminate the potential of dropped objects,

b) A delineated drop zone below works to restrict access (the drop zone demarcation/control method should be proportionate/consistent with the level of risk). Additional measures may also need to be implemented (e.g. safety observer) to effectively manage the zone,

c) A pre-climb check must be conducted to ensure there are no loose items such as keys, phone, pens etc. that may fall or be dislodged during the climb,

d) Use of tool lanyards and tool pouches to secure tools and equipment to the worker,

e) Use of suitable and appropriate containers (e.g. buckets) for storing materials and tools, and

f) Developing a safe system of work that ensures objects are otherwise removed from an elevated work area and that they are lowered in a controlled fashion – not dropped or thrown.

4.0 Temporary Work Platforms

A temporary work platform is a working platform, other than a permanently installed fixed platform, used to provide a working area for the duration of the work. Temporary work platforms used on WNR sites are as follows:

4.1 Elevated Work Platform (EWP)

Elevated Work Platforms (EWP) shall be operated in accordance with the *WNH Q20 Mobile Plant & Machinery Procedure* and *WNH Q28 Accessing and Working in Wind Turbine Generators Procedure.*

4.2 Workboxes and Work Platforms

The use of the workbox must be limited to those situations where it is necessary to elevate workers to carry out work where it is not reasonably practicable to use scaffolding or purpose-built in-situ platforms for work to be completed in an elevated position, such as external tower work or blade repairs.

A SWMS must be in place before using a workbox. The SWMS must include an Emergency Rescue Plan that takes into account the possible need and availability of emergency response resources such as the location of first aid, firefighting and rescue equipment required for emergency access/egress of the workbox.

The following safety precautions shall be observed when using a workbox or work platform to provide an elevated work area. These include ensuring the workbox or work platform:

- Is designed for the task and is securely attached to the crane, hoist, forklift truck or other mechanical device, and
- Is not suspended over people.

Workers should also ensure:

- There is an effective means of communication between any person in the workbox or work platform and the operator,
- The operator remains at the controls of the crane, hoist, forklift truck or other mechanical device at all times, and
- Lifting attachments and records are checked by a competent dogger/rigger before use.

4.2.1 Workboxes Suspended From Cranes

When using crane workboxes as an elevated work area, workers shall ensure that:

- The workbox is designed in accordance with AS 1418.17–1996: *Cranes (including hoists and winches) – Design and construction of workboxes,*
- The workbox is fitted with an anchor point capable of withstanding the fall forces specified in AS/NZS 1891.4:2009: *Industrial fall-arrest systems and devices – Selection, use and maintenance,*
- Where there is a risk of a person falling from height, the person must be attached to the anchor point by a lanyard and harness unless the workbox is fully enclosed,
- Workers remain within the workbox while they are being lifted or suspended,

- Except in an emergency, workers do not enter or leave the workbox when it is elevated unless the following conditions are met:
    1. A risk assessment has been completed that identifies that access and egress from the workbox in this manner is safe and that this means of access is safer than all other alternative means,
    2. The structural adequacy of the landing area has been established and the landing area is clear; and
    3. Where the landing is at the edge of a structure, the maximum gap between the workbox and landing does not exceed 100 mm, the workbox is secured to a suitable point on the landing, and access and egress do not take place unless a fall-arrest harness is properly worn and attached to a suitable anchorage on the structure.
- directions to the crane operator should be provided from the workbox by a person holding a dogging or rigging licence.

A crane used to elevate a workbox shall:

- Be fitted with the means to safely lower the workbox in an emergency or a power supply failure,
- Be suitably stabilised while the workbox is used, and
- Have 'drive up' and 'drive down' controls on both the hoisting and luffing motions and those controls should be used. No declutching allowing free fall is to be used while a workbox is in use.

Note: Workboxes must not be used in winds in excess of 10 m/s, or within 10km of electrical storm activity, snow, ice, sleet or other adverse weather conditions that could affect the safety of workers.

4.3 Scaffolds

Scaffold work above 4 metres is not generally conducted on WNR sites, however if it is required, it shall be undertaken by people holding the relevant class (Basic, Intermediate, Advanced) of scaffolding high risk work license as required by the WHS Regulations.

If required, refer to the relevant standards and guides for scaffolds and scaffolding work.

Note: Scaffolding **excludes** platform ladders and prefabricated mini scaffs. In all cases, people must be deemed competent in the use of this equipment.

4.3.1 Mobile Scaffolds

Where mobile scaffolds are used, the following safety considerations shall be observed:

- Ensure scaffold remains level and plumb,
- Is kept well clear of powerlines, open floor edges and penetrations,
- Is not accessed until casters are locked to prevent movement,
- Is not moved while anyone is on it, and
- Is accessed using an internal ladder, except for low height platforms where this is not reasonably practicable.

5.0 Work Positioning and Fall Arrest Systems

5.1 Anchor Points

WNR wind turbines are fitted with Free fall – arrest anchorage points. Other dedicated anchor points are fitted across various plant, equipment and buildings. Where possible, anchorage points should be used as a work positioning system, allowing the worker to work in fall restraint (i.e. Positioned and safely supported at a location in such a way that a fall is prevented).

Restraint technique shall be used in situations where a worker is required to complete a task near an open hatch, removed floor plates or mesh and on a nacelle roof. The restraint technique should control the workers movement by physically preventing them from reaching a position at which there is a risk of a fall. The technique involves the use of a harness that is connected by a lanyard to a designated anchorage point and must be set up to prevent the wearer from reaching an unprotected edge.

5.2 Fall Arrest Anchorage Lines/Rails

All WNR wind turbines contain a vertical ladder systems which are fitted with fall arrest anchorage lines or rails. These are designed to stop a worker falling an uncontrolled distance and reduce the impact of a fall. These systems are used in conjunction with harness, lanyard/self-retracting lanyard (SRL) and cable/rail runners.

Wind turbines at Bluff Point Wind Farm are fitted with a roof rail that is intended to be used for fall protection. WNH Q28 specifies how this rail is to be utilised and what additional equipment is required to be used in conjunction with it.

5.3 Safety Measures

When using work positioning and fall arrest systems, the following key safety measures shall be observed:

- Before using a system, visually inspect for signs of damage or wear and that the last inspection sticker is in date. If damaged, worn, or overdue for inspection do not use, tag out and report to team leader or site supervisor.
- Personal height safety equipment such as harnesses, lanyards and cable/rail runners must be inspected before each use and not be past their next inspection date or remove from service date.
- Workers using a fall arrest system should wear a safety helmet secured by a chin strap to protect them in a fall,
- Minimise fall distance by using adjustable lanyards or Self-Retracting Lanyard (SRL),
- Use double lanyard or SRL to allow permanent attachment when transferring from one anchor to another, and
- Ensure that when attaching to an anchorage line/rail system that the locking device/runner is connected in the correct orientation and test before ascending/descending.

6.0 Portable Ladders

Ladders are primarily a means of access and egress. The use of portable ladders on WNR sites as working platforms is to be actively discouraged and preference must be to use purpose-built equipment such as platform ladders, mobile scaffolds or Elevated Work Platforms (EWPs).

If work must be carried out with a portable ladder, proper planning beforehand, including the development of a risk assessment and consideration of adequate risk controls, such as fall protection and providing the necessary supervision, must be implemented to ensure risks are reduced to AFARP.

All portable ladders shall comply with the relevant Australian Standards, be fit for purpose and be industrial rated with a minimum load rating of 120kg.

The following safe work practices apply:

- Ensure ladder is in good condition before use,
- Never use metal or metal reinforced ladders when working on or near live electrical installations,
- Placing ladders at a slope of 4:1 (the distance between the ladder base and the supporting structure should be about 1 metre for every 4 metres of working ladder height), and
- Where possible ladders should be secured and the ladder must extend at least one metre above the stepping-off point on the working platform,
- Only one worker is on a ladder at any one time,
- When ascending or descending the ladder, always face the ladder and always maintain three points of contact,
- When working on a ladder, always work within easy arm's reach and remain centered between the stiles, maintaining three points of contact or two points when securely harnessed,
- A tool pouch, shoulder bag or haul bag must be used to carry tools,
- Only undertake light work while on the ladder,
- When using a portable or fixed ladder as a working platform and a fall of more than 1.8 metres is possible, use a fall-restraint or arrest system,
- Work within the vertical plane of the ladder and do not attempt to 'walk' or move a ladder while a worker is on the ladder,
- No worker is to stand higher than 900 mm from the top of a ladder,
- Do not erect portable ladders on elevated walkways, scaffolding or elevated work platforms to gain extra height, and
- Do not use ladders for hot work such as welding or oxy acetylene cutting.

Note: Under no circumstances should ladders be placed against HV bushings (porcelain or polymeric). All HV and bushings should be accessed by travelling crane, scaffold, or similar means, which does not contact or lean on the bushing or place any strain on the bushing or gasket sealing face. This could lead to failure of the bushing, or gaskets causing leakage of the insulating medium.

7.0 Personal Working at Heights Equipment

7.1 General

All personal fall prevention or arrest equipment shall comply with AS/NZS 1891.3:2020: Personal equipment for work at height - Manufacturing requirements for fall-arrest devices. Equipment shall be fit for the intended purpose and shall be compatible with the specific requirements of the work and the Rescue Plan/SWMS.

7.2 Harnesses

A full body harness shall be worn and must be the correct size and correctly adjusted/fitted to the user. All harnesses used on WNR sites shall be fitted with suspension trauma straps. Workers shall attach the fall restraint/arrest system to the rear dorsal D attachment point or the chest connection, which will provide the best protection for the situation. Consideration should be given to the potential fall distance, potential impact with a structure, body position after a fall and the need to interact with equipment like rope-grabs.

Suspension intolerance shall be considered and used as determined by the Rescue Plan. To prevent suspension intolerance occurring because of an arrested fall, workers should ensure that:

a) Workers never work alone when using a harness as fall protection,

b) Workers use a harness, which allows legs to be kept horizontal,

c) Where the rescue is likely to take more than five minutes the harness and connection point used should allow the suspended worker to raise their legs to near horizontal, harnesses shall be fitted with suspension trauma straps to allow suspended worker to place wight on their legs.

d) Workers are trained to do the following when they are hanging in their harness after a fall:

- Move their legs in the harness and push against any footholds, where these movements are possible. In some instances, the harness design and any injuries received may prevent this movement,
- Move their legs or legs and body to a near horizontal position, where these movements are possible.

7.3 Lanyards

There should be a minimum of slack in the fall arrest lanyard between the user and the attachment point. Where possible, the anchorage point selected shall be as high as the selected equipment permits. The maximum length of lanyards shall be two (2) metres. Shock absorbing lanyards shall not be used in conjunction with inertia reels.

All harnesses shall have lanyards attached that comply with AS 1891.5:2020 Personal equipment for work at height - Manufacturing requirements for lanyard assemblies and pole straps. Karabiners are the preferred system to be used with lanyards. The use of double action scaffold hooks for tie-off is also permitted.

When working in wind turbines there are many circumstances where it is not possible to maintain 100% tie-off using a single lanyard, therefore the use of a double lanyards is required. Double lanyards are easy to misuse, the following safety measures shall be followed,

- No back hooking,
- Double lanyards should not be passed around the body or passed through the legs, and
- The chest connection should never be higher than the highest attachment point.

7.4 Equipment Inspections

Documented inspections/services and tagging by a height safety equipment inspector shall be carried out either every 6 or 12 months (in accordance with Table 9.1 of AS/NZ 1891.4 2009), inclusive of all Work at Heights equipment, including, but not limited to harnesses, lanyards, static lines and inertia reels. All inspection records / information shall be recorded in registers. In addition, all personal equipment will be inspected prior to and on completion of use by the user.

There shall be a full service of the item as recommended by the manufacturer, or every 12 months. Each fall-protection device shall have a service label or tag for recording the last date on which it was fully serviced.

Damaged or defective equipment shall be withdrawn from service and either destroyed or affix an 'Out of Service' tag for repair by a Competent Person. Equipment that has been used to arrest a fall shall be immediately removed from service. Such equipment shall be kept available only for the purposes of completing an Incident Investigation.

8.0 Accountabilities

General

Officers of WNR shall ensure that, As Far As Reasonably Practicable (AFARP), hazards are identified and where they cannot be eliminated, will be controlled. This shall include documenting hazards, processes to identify hazards relevant to WNR business and tasks it undertakes and lastly communicating hazards to the workers of WNR.

All workers of WNR shall ensure that:

- they understand the requirements of this procedure,
- ensure their activities are in compliance with this procedure,
- can access this procedure, and
- support the implementation of this Procedure by providing feedback to peers and supervisors where improvements to task compliance or risk management can be made.

The HSE Manager for WNR is to ensure AFARP that this meets National and State legislative requirements and Standards and that this document is maintained as a part of the businesses HSE management system.

9.0 Definitions

EWP – Elevated Work Platform

SWMS – Safe Work Method Statement

AFARP – As Far As Reasonably Practicable

HV – High Voltage

10.0 References

At the time of writing the following references were used for identifying the minimum standards for PPE required for operational activities on WNR work sites.

- AS / NZS 1891 Industrial Fall Arrest Systems and Devices series
- AS / NZS 4488.1:1997 Industrial Rope Access Systems – Specification
- AS 1657-2018 Fixed Platforms, Walkways, Stairways and Ladders – Design, Construction and Installation
- AS 2550.1–2011: *Cranes, hoists and winches – Safe use – General requirements*.
- Code of Practice: Managing the Risk of Falls at Workplaces 2018
- WNH Q20 Mobile Plant & Machinery Procedure
- WNH Q26.1 Working at Height Checklist
- WNH Q28 Accessing & Working in Wind Turbine Generators Procedure