

# **MOORABOOL WIND FARM PTY**

# **LTD**

# **Bushfire Mitigation Plan**

2024-2025

Electricity Safety (Bushfire Mitigation) Regulations 2023

DATE June 2024



#### **Document Control - MN-PM-PLN-0064**

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Revision 4.0	01-09-23	Update to new regulations, review general content	Camille Maclean	Kylie Hampel
Revision 5.0	20/10/23	Update to satisfy Energy Safe Victoria Requirements	Camille Maclean	Kylie Hampel
Revision 6.0	01/07/24	Draft Submission for ESV's Review for 2024/2025	Kelly Dubberley	Glenn Shillito
Revision 6.1	16/10/20 24	Updated as per ESV's Evaluation Matrix - Ref CM- 13613 / ESV- 20242307-001064	Darcie McNamara	Glenn Shillito



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# **Terms and Definitions**

Bushfire	Is an unplanned fire. It is a generic term that includes grass fires, forest fires and scrub fires.
Bushfire Protection Areas	Are areas that have been declared as general, medium or high fire risk by local governments and Planning VIC
Bushfire Safer Places	A Bushfire Safer Place is a place of relative safety. It may be used as a first resort for those people who have planned to leave high risk locations early on a bad fire day
Bushfire Survival Plan	Is a plan that enables the department sites to respond effectively to a day of high bushfire danger or a bushfire emergency.
Emergency Services	Means the Country Fire Authority CFA; State Emergency Service SES; Victorian Ambulance Service and Victorian Police responsible for coordinating / combating fires and other local emergencies.
Competent Person	Means a person who has acquired through training, qualification or experience the knowledge and skills to carry out the task.
Dynamic Risk Assessment	Means the continuous assessment of risk when there are rapidly changing circumstances in order to implement the control measures necessary to ensure an acceptable level of safety.
Employee	For this procedure, Employee refers to Goldwind Australia workers, Contractors and Service Providers.
Fire Ban Districts	Victorian Districts can be found on the CFA Fire Ban web site.
Fire Danger Rating	This forecast is issued by the Bureau of Meteorology each day and is an early indicator of the potential danger, should a bushfire start. The higher the Fire Danger Rating, the more dangerous the fire conditions are.
Hazardous bushfire risk area	The area assigned by the CFA under section 80 of the Act

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#### 1 Introduction

This Bushfire mitigation Plan has been prepared in response to the Electricity Safety (Bushfire Mitigation) Regulations 2023 - Reg 6 Prescribed Particulars for Bushfire Mitigation Plans-Specified Operators. It covers all aspects of the regulations for a small section of 33kV overhead transmission line crossing the Moorabool River East Brach that forms part of the Moorabool Wind Farm internal collector network. This line is owned and operated by Moorabool Wind Farm Pty Ltd. Goldwind Australia will act as the Warranty Operations and Maintenance Contractor during of the Wind Farm's operational life. There were no fires on site due to at risk line at MWF and no exemptions were requested from ESV or issued by ESV.

The Moorabool Wind Farm Pty Ltd consists of two sections the north Bungeeltap section of the project known as Stage 1 (MNWF) and the southern Ballark section of the project known as Stage 2 (MSWF). The project is located approximately 67 km west of Melbourne, 27 km east of Ballarat, 47 km north of Geelong and 5km south of Ballan. The MWNF project area encompasses rural land holdings with a total area of approximately 5,600 hectares extending approximately 16 km from north to south and approximately 7 km from west to east. A PowerCor (TOA) 132kV Overhead Transmission Line (OHL) asset connects the Stage 1 and Stage 2 sites to the Elaine terminal substation.

There were no fires on site due to the at-risk line at Moorabool Wind Farm and no exemptions were requested from ESV or issued by ESV.

The current approved plan can be found in the below website link below and selecting the current **Bushfire Mitigation Plan:** 

https://mooraboolwindfarm.com/project/managing-impacts/





Figure 0.1 Map of the Moorabool Wind Farm

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# 2 Reg 6 (a-d) Contact Details

(a) The name, address and telephone number of the specified operator is:

Name: Moorabool Wind Farm Pty Ltd

Suite 3, Level 21, 1 York Street, Sydney NSW 2000 Address:

ACN- 135829846

Telephone Number: 1800 019 660

Any reference made to Moorabool North – is in reference to a site name for Moorabool Windfarm Pty Ltd.

(b) The position, address and telephone number of the person who was responsible for the preparation of the plan;

Name: Jon Valent

Position: HSEQ Advisor

Address: Goldwind Australia Pty Ltd

Level 4, 485 La Trobe Street **MELBOURNE VIC 3000** 

Mobile: +61 477 886 300

Email: jonvalent@goldwindaustralia.com

(c) the position, address and telephone number of the persons who are responsible for carrying out the plan;

Name: Glenn Shillito

Position: Site Manager

Address: Moorabool Wind Farm

2801 Ballan Meredith Road,

Ballan VIC 3342

Mobile: +61 418 105 650

Email: glennshillito@goldwindaustralia.com



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(d) The telephone number of the specified operator's control room for contact in an emergency that requires action by the specified operator to mitigate the danger of a bushfire is detailed below:

In case of an emergency the following person should be contacted in the first instance.

This contact phone number is accessible 24 hours, 7 days a week.

Name: Glenn Shillito

Position: Site Manager

Address: Moorabool Wind Farm

2801 Ballan Meredith Road,

Ballan VIC 3342

Mobile: +61 418 105 650

Email: glennshillito@goldwindaustralia.com



# 3 Regulation requirements

This Plan has been prepared to address each requirement of Regulation 6 (a-o) Prescribed particulars for the bushfire mitigation plans – specified operator under the Electricity Safety (Bushfire Mitigation) Regulations 2023 (see Table of provisions below) and with responses as listed in the Table 3-1.

## Electricity Safety (Bushfire Mitigation) Regulations 2023

S.R. No. 40/2023

#### TABLE OF PROVISIONS

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Table 3-1 Prescribed particulars for the bushfire mitigation plans – specified operator

Regulation 6	Requirement	Section found in this plan
(a)	the name, address, email and telephone number of the specified operator;	Section 2
(b)	the position, address, email and telephone number of the person who was responsible for the preparation of the plan;	Section 2
(c)	the position, address, email and telephone number of the persons who are responsible for carrying out the plan;	Section 2
(d)	The email address (if any) and telephone number of the specified operator's control room so that persons in the room can be contacted in an emergency that requires action by the specified operator to mitigate the danger of bushfire;	Section 2
(e)	the bushfire mitigation policy of the specified operator to minimise the risk of fire ignition from its at-risk electric lines;	Section 4
(f)	the objectives of the plan to achieve the mitigation of fire danger arising from the specified operator's at-risk electric lines;	Section 5
(g)	a description, map or plan of the land to which the bushfire mitigation plan applies, identifying the location of the specified operator's at-risk electric lines;	Section 7
(h)	the preventative strategies and programs to be adopted by the specified operator to minimise the risk of the specified operator's at-risk electric lines starting fires;	Section 8
(i)	a plan for inspection that ensures that all of the specified operator's at-risk electric lines are inspected at regular intervals of no longer than 37 months;	Section 9
(j)	details of the processes and procedures for ensuring that each person who is assigned to carry out the inspections referred to in paragraph (i) has satisfactorily completed a training course approved by Energy Safe Victoria and is competent to carry out such inspections;	Section 10
(k)	details of the processes and procedures for ensuring that persons (other than persons referred to in paragraph (j)) who carry out or will carry out functions under the plan are competent to do so;	Section 11
(1)	the operation and maintenance plans for the specified operator's at-risk electric lines—	Section 12



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	(i) in the event of a fire; and	
	(ii) during a total fire ban day; and	
	(iii) during a fire danger period;	
(m)	the investigations, analysis and methodology to be adopted	
	by the specified operator for the mitigation of the risk of fire	Section 13
	ignition from its at-risk electric lines;	
(n)	details of the processes and procedures by which the	
	specified operator will—	
	(i) monitor the implementation of the bushfire mitigation	
	plan; and	
	(ii) audit the implementation of the plan; and	
	(iii) identify any deficiencies in the plan or the plan's	
	implementation; and	Section 14
	(iv) change the plan and the plan's implementation to	Section 14
	rectify any deficiencies identified under subparagraph (iii);	
	and	
	(v) monitor the effectiveness of inspections carried out	
	under the plan; and	
	(vi) audit the effectiveness of inspections carried out	
	under the plan;	
(0)	the policy of the specified operator in relation to the	
	assistance to be provided to fire control authorities in the	Section 15
	investigation of fires near the specified operator's at-risk	Section 15
	electric lines.	



# 4 Reg 6 (e) Bushfire Mitigation Policy

Moorabool Windfarm Pty Ltd ensures assets are operated and maintained to:

- deliver safe, effective and reliable services
- protect and improve the environment
- meet agreed performance targets for the government and the wider community; and minimise the risk of fire ignition by Moorabool Windfarm Pty Ltd operated high voltage power lines.

Moorabool Windfarm Pty Ltd Emergency Management Plan articulates the organisation's commitment to emergency management, including fire. It outlines emergency management objectives to:

- Prevent or reduce the risks of incidents occurring
- Maintain welfare and confidence of our people, customers, stakeholders and the community
- Minimise the impacts of a disruption
- Ensure that critical stakeholders are kept informed
- Return to normal operations as quickly as possible.

This bushfire risk management plan identifies assets at risk from bushfire and programs to mitigate that risk. The at-risk line consists of two 14-metre-high galvanized steel poles attached to guy wires, containing a single circuit (3 phase) 33kV overhead line measuring 429.42 metres in length above the MREB as shown in Figure 2.1(above)

In determining risk and risk management the international standard for risk management, ISO 31000:2018 is used.

Local plans and procedures in the Moorabool Wind Farm Emergency Response Plan provides governance in the management of fire risk from power lines.



# 5 Reg 6 (f) Plan Objectives

The Bushfire Mitigation Plan has been developed to identify possible electrical causes of fire from the Wind Farm and to reduce the likelihood and consequences of these through the implementation of various preventative measures.

The following Legislative and Regulatory requirements provide guidance on how to minimize bushfire risks from the at-risk electric line identified in this Plan:

- Section 83B of the Electricity Safety Act 1998,
- Section 84D of the Electricity Safety Act 1998 and
- Regulation 6 of the Electricity Safety (Bushfire Mitigation) Regulations 2023
- Regulation 9 of the Electricity Safety (Electric Line Clearance) Regulations 2020
- Approved MNWF Electric Line Clearance Management Plan.



# 6 Reg 6 (g) Network Description

The site has been historically cleared, however some isolated patches of native vegetation exists along roadsides, the Moorabool River East Brach (MREB) which intersect the northern section of the site and within the site itself. The northern section of the site consists of 50 turbines with four (4) internal underground 33kV collector groups that all feed from turbine locations to the site's substation as shown in Figure 1.2. To reduce cultural heritage risks it was determined that the internal Collector Group 4 connecting turbine BUWT29 to BUWT34 would not be buried entirely underground, instead a small section (of at-risk electric line) would span across the river.

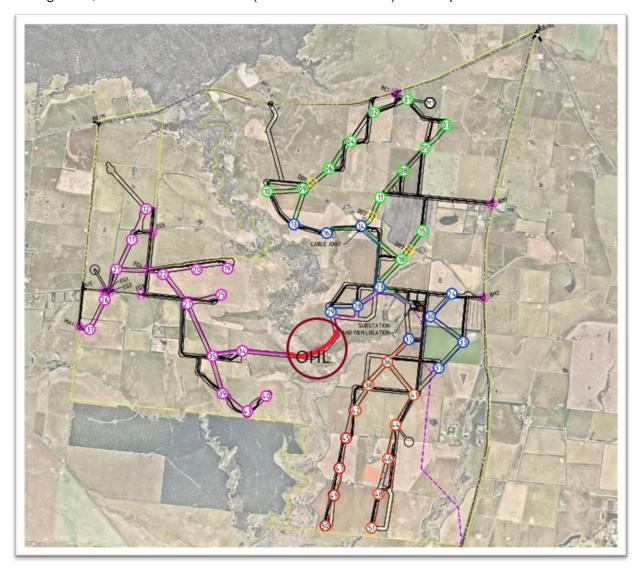


Figure 6.1 Site map of the Moorabool North Wind Farm and at-risk electric line



### 7 Reg 6 (g) At risk electric lines description and map

The at-risk line consists of two 14-metre-high galvanized steel poles attached to guy wires, containing a single circuit (3 phase) 33kv overhead line measuring 429.42 metres in length above the MREB as shown in Figure 2.1. This is the only Overhead Line (OHL) that GWA has responsibility for at either of the Moorabool sites and is the short section (429m) of single span 33kV OHL between the substation and Collector Feeder 4. The Plan applies to land within a High Bushfire Rated Area (HBRA). Overhead lines were installed in September 2019.



Figure 0-1 location of the Overhead line and poles across the Moorabool River East Brach

#### 5.2.9 33kV Overhead Line

There is a 429m section of OHL spanning a gully in Collector Group 4. The phase conductors are arranged in a flat configuration with a spacing of 1.4m between phases. The OHEW is run 1.5m directly above the centre conductor. The line is modelled with phase conductors 10.5m above the ground. The OHEW is modelled as 'grape' as final design has not been completed.

Table 5-12 - OHL Conductor Parameters

Parameter	Value
Phase Conductor	AAAC Sulfur
Overall Diameter (mm)	33.8
GMR	13.03
DC Resistance @ 20°C	0.0444
Current Rating	1423A
Earth Conductor	Grape
Overall Diameter (mm)	17.5
GMR	7.22
DC Resistance @ 20°C	0.196

Pic 1: The above is the snippet from the Design document

Table 0-1 Details of OHL pole locations

Pole number	X Coordinate of pole	Y Coordinate of pole
1	251170.56	5828268.7
2	250773.99	5828103.9

Representative images of the Line, Eastern and Western Tower Structures and Span across MREB are shown in Plates 1 to 8

Clearance (Horizontal and vertical) from trees to north of mid span of line to be periodically monitored and if necessary, required minimum clearance maintained.



33 kV Overhead Transmission line spanning MREB (T29 to T34) – Representative images





Eastern Tower Structure - 33kV Overhead Line

26 October 2023



### 8 Reg 6 (h) Prevention Strategies

Moorabool Windfarm Pty Ltd Emergency Management Policy articulates the organization's commitment to emergency management, including fire. It outlines emergency management objectives to:

- · Prevent or reduce the risks of incidents occurring
- Maintain welfare and confidence of our people, customers, stakeholders and the community
- · Minimise the impacts of a disruption
- · Ensure that critical stakeholders are kept informed
- Return to normal operations as quickly as possible.

Moorabool Windfarm's Pty Ltd Emergency Management Policy articulates the organisations commitment to emergency management, including fire. It outlines emergency management objectives to:

- · Prevent or reduce the risks of incidents occurring
- Maintain welfare and confidence of our people, customers, stakeholders and the community
- Minimise the impacts of a disruption
- · Ensure that critical stakeholders are kept informed
- Return to normal operations as quickly as possible.

Moorabool Windfarm Pty Ltd ensures assets are operated and maintained to:

- · deliver safe, effective and reliable services
- · protect and improve the environment
- minimise the risk of fire ignition by Moorabool Windfarm Pty Ltd owned and operated high voltage power lines.

Moorabool Windfarm Pty Ltd achieve this through the following preventative strategies and programs:

- Planned annual inspections of infrastructure including overhead lines and 33kV structure inspections.
  - Qualified and authorized personnel must carry out line clearance inspections and reports annually, no later than November 1



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- Qualified and authorized personnel must carry out pole inspections and reports bi annually
- · Competent technicians undertaking inspections using thermal imaging cameras
- Completion and reporting of any identified issues or damages using internal hazard reporting system, Viking, and logging preventative program inspections
- Documenting inspections and results utilising Goldwind Australia documents;
  - o GWA-OM-CHE-0008 Overhead Line Patrol and Visual Condition Inspection
  - o **GWA-OM-CHE-0009** 33KV Structure Inspection

The management of maintenance of the electric lines follows a regime of scheduled and unscheduled activities. Scheduled activities include all activities that are planned for execution throughout the year and are scheduled in the Annual Compliance Tracker. Unscheduled activities are defects that require planning and actioning in certain timeframes based on the severity of risk.

The timeframes to manage defects are determined according to the nature of the defect and planned accordingly as unscheduled tasks. The defects are generally categorised as below to guide the planning and execution of these tasks:

- 1. Minor activity does not pause any immediate risk of harm scheduled in the annual plan and monitored during routine inspections
- 2. Major Does not require stopping the operation but needs to be attended as soon as possible- Planned for execution within the month or earlier based on availability
- 3. Catastrophic This event can lead to serious harm- stop operations and act immediately

#### **Last Asset Inspection Plan**

The last inspection was conducted on the 2<sup>nd</sup> of September 2024. Overhead lines and associated infrastructure appeared in good condition.

Reference: Overhead line inspection Report Dt 02.09.2024

The Two pole structures at risk were inspected on 23.04.2024 and no defects were identified.

Reference: Omexom P1 and P2 Reports



#### **Asset Action Plan**

There were no defects identified from the last asset inspections and so no actions required.

#### Activation of the Emergency Response Plan

Managers/supervisors are required to make sure conditions at each relevant worksite are monitored on Extreme and Catastrophic Fire Danger Rating days. This can be monitored by:

- Monitoring the CFA website <a href="https://www.cfa.vic.gov.au/plan-prepare/your-bushfire-plan">https://www.cfa.vic.gov.au/plan-prepare/your-bushfire-plan</a>
- <a href="https://www.cfa.vic.gov.au/home/local-information">https://www.cfa.vic.gov.au/home/local-information</a> (Set local area to Beaufort)
- Vic Emergency Site https://www.emergency.vic.gov.au/
- Australian Fire Danger Rating System <u>afdrs.com.au</u> As of September 22, 2022, the Australian fire danger rating system was standardized across all states.
- Severe Weather Preparation Plan GWA-HSE-FRM-0061 shall be completed by Site Manager/HSEQ Advisor on days of high fire danger. This will aid in deciding whether or not to active the Emergency Response Plan.
- Additional information may be available from listening to the local ABC radio station.

Line Managers/supervisors must tailor their plans relevant to their operations and ensure they are practiced and activated when the Fire Danger Rating is forecast as 'Extreme' or 'Catastrophic' for the fire district. (See CFA Local Information Site for Risk Rating Level)

When Bushfire Survival Plans are activated, managers/supervisors shall prepare the site for a fire and the outcomes of decisions are communicated to workers.

On days declared as Extreme or Catastrophic Fire Danger rating outside of the fire danger season managers/supervisors must activate the Bushfire Survival Plan at any time of the year.

In accordance with the Fire Management Planning process, Moorabool Windfarm Pty Ltd has developed bushfire risk management plan identifying assets at risk from bushfire and programs to mitigate that risk. The at-risk line consists of two 14-metre-high galvanized steel poles attached



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to guy wires, containing a single circuit (3 phase) 33kv overhead line measuring 429.42 metres in length above the MREB as shown in Figure 2.1.

Moorabool Windfarm Pty Ltd has developed the Electric Line Clearance Management Plan which outline our responsibilities for clearing vegetation to manage the fire risk from powerline on our area of operation and ensure our compliance with relevant legislation.

Local plans and procedures at the Moorabool Wind Farm include the Team Bushfire Survival Plan and Emergency Response Plan.



### 9 Plan Availability Reg 6 (i) A plan for inspection

This plan is available for public inspection, in accordance with section 83BA (a) and (b), following acceptance of the plan by Energy Safe Victoria. The Plan will be available on the Project's website and for viewing during normal business hours (8am to 5pm) or on request at Goldwind Australia Head Office located on Level 4/845 La Trobe Street, Melbourne, Vic 3000.

The Electric Line Management Clearance Plan – Asset Protection Zone (APZ) details the annual vegetation inspection and clearance works required for the overhead line:

Note-All require tree clearing activities have been completed.

#### Scope of bushfire prevention work

#### 1 Site Inspections

Inspections shall be performed in liaison with the local CFA Team Leader and undertaken by staff experienced in civil works, vegetation management and bushfire control.

#### 2 Fuel

The surface fine fuel and elevated fuel in the APZ's is to be monitored as frequently as necessary dependent on vegetation regeneration and other conditions.

Monitoring and assessment are to be undertaken no later than September each year and is to continue on as required basis for the duration of the bushfire danger period as defined by the relevant regional CFA Bushfire Management plans.

Asset Protection Zone (APZ) is part of the Emergency Management and incorporates the approved scope of vegetation control for bushfire hazard management. APZ dimensions have been determined using the VIC CFA documents: Building in Bush Fire Prone Areas Single Dwelling; and Planning for Bush Fire Protection (2006).

Features of the location or site that affect the level of risk include:

- · access and egress both to the location or site within it
- proximity to established urban or township areas
- vegetation on site that planning schemes seek to protect.



# 10 Reg 6 (j) details of the processes and procedures for competency and training to carry out inspections

Moorabool Windfarm Pty Ltd engages suitably qualified contractor(s) to undertake maintenance inspections of our HV overhead power lines in the Moorabool area. The qualifications of internal and external contractors are reviewed and verified before engagement to ensure they meet the minimum level established by the Victorian Electricity Supply Industry (VESI) and, therefore, meet the Australian Qualification Framework (AQF) requirements or equivalent. This ensures that people undertaking the inspections have the relevant qualifications and licenses.

It is a Moorabool Windfarm Pty Ltd contractual requirement that all employees and contractors engaged to carry out cyclic inspection of overhead power line assets including poles must have minimum of Certificate II in Asset Inspection – UET20621. Where this qualification has been attained in a State of Australia other than Victoria, induction shall be conducted by a person holding a Certificate IV in Training and Assessment at a minimum, and include information on Victorians Acts, Regulations, Codes of Practice, Safety Rules, Industry Guidelines and Asset Identification.

Moorabool Windfarm Pty Ltd and its contractors maintain the records of relevant authorisation and review to ensure re-authorisation shall occur at intervals not exceeding a three-year period.

#### **Asset Inspection plan**

Routine inspections will be undertaken by suitably qualified and competent employees and/or contractors, as identified above.

Inspection timeframes will align with seasonal change moving into the higher fire danger period of summer. All inspections will be completed annually by the last business day of November All documents will be stored internally on Moorabool Windfarm Pty Ltd systems and monitored for completion, accuracy and identified issues by site management and HSEQ.



# 11 Reg 6 (k) details of the processes and procedures (other than persons referred to in paragraph (j)) to ensure competency in roles;

Moorabool Windfarm Pty Ltd engages suitably qualified contractor(s) to undertake maintenance activities associated with our HV overhead power lines in the Moorabool area. The qualifications of internal and external contractors are reviewed and verified before engagement to ensure they meet the minimum level established by the Victorian Electricity Supply Industry (VESI) and, therefore, the Australian Qualification Framework (AQF) requirements or equivalent.

All contractors and sub-contractors engaged to manage vegetation near electric power lines must have minimum of Certificate II in ESI Powerline Vegetation Control – UET20312.

Verifications of all contractors and subcontractors is undertaken at the point of initial engagement utilising Goldwind's third party contractor management system, CM3, to ensure all qualifications and licenses are correct and up to date, insurances and health and safety documentations are valid and representative of the works that are to be undertaken. Regular auditing of contractors in this system is undertaken by the departmental HSEQ team.

In addition to the contractor management system, all contractors and subcontractors are subject to compliance with Goldwind Australia's Contractors and Consultants Prequalification Procedure (GWA-HSE-PRC-0021 Contractors and Consultants Prequalification Procedure).



# 12 Reg 6 (I) the operation and maintenance plans for at-risk electric lines:

#### During a fire event

In the event of a fire in the Moorabool Windfarm area, Moorabool Windfarm Pty Ltd staff will immediately contact emergency services and respond as outlined in the site Emergency Response Plan. If a fire is confirmed and has the potential to impact High Voltage lines, suitably trained technicians will conduct appropriate High Voltage switching works, to isolate the supply if safe to do so,

#### **Total Fire Ban days**

The risk of certain work activities starting a fire or staff being caught in a dangerous environment as a result of a fire is extremely high on a Total Fire Ban (TFB) day. To help manage this risk, Moorabool Windfarm Pty Ltd has guidelines, procedures, instructions and a hot works permit process that must be adhered to on TFB days, including declared High, Extreme or Catastrophic conditions under the National Fire Danger Rating system and as advised by the CFA.

On fire danger days declared as Severe, Extreme or Code Red under the National Fire Danger Rating system Moorabool Windfarm Pty Ltd will defer High Voltage Switching Operations where practical or restrict operations to essential activities to maintain critical services. In the event a plant has experienced a High Voltage feeder fault, a visual inspection of the relevant feeders is conducted to ensure the fault has not initiated a fire.

The lines are AAAC Sulphur Bare conductor and is protected by an air circuit breaker with one shot protection and has phase overcurrent and Earth Leak Protection.

#### Fire danger period

**Goldwind** 

Moorabool Windfarm Pty Ltd inspection and maintenance programs for asset condition and vegetation clearance are completed prior to the beginning of a fire danger period, to ensure electrical assets are clear and operating during this period. Therefore, maintenance operations around electrical assets during the fire danger period would be restricted to fault investigation or emergency works, lowering the risk of potential fire ignitions during this high-risk period.

The design features of the HV line (discussed above) also help to mitigate bushfire risk during the fire danger period.



# 13 Reg 6 (m) the investigations, analysis and methodology adopted for the mitigation of the risk of fire ignition from its at-risk electric lines;

Moorabool Windfarm Pty Ltd applies a condition-based maintenance approach to ensure mitigation of fire ignition risk from our at-risk electric line. Periodic inspections and works are undertaken to ensure the possibility of causing an ignition source from HV overhead lines is minimised by:

- Completing annual inspections and completing actions identified during inspections to maintain appropriate vegetation clearance.
- Completing inspections every 3 years and repairing any identified defects during inspections to ensure electrical assets are in good working order and are operating in such a way as to mitigate the risk of fire ignition.

Any safety issues or incidents relating to the electrical assets are investigated using Goldwind Australia's incident management system Viking. The incidents recorded in Viking are reviewed by a team of senior managers and assigned to the most appropriate person to action within a given time frame. The status of actions not completed within the specified time period is escalated to the next level in the organisational hierarchy through internal reporting processes. The peak point of escalation is the Managing Director.

The assignee of the Viking action will typically be directed to investigate and determine the root cause of the incident as outlined in the incident reporting and investigation procedure. Tasks undertaken to achieve this objective include:

- Site visits and information collection including photos and samples of materials.
- Conduct brain storming session with relevant people of various expertise if require

• Engage technically qualified persons to perform detailed analysis and recommend corrective actions to prevent recurrence of similar incident.

The risks associated with electrical assets (including bushfire risk) are reviewed annually. This process involves determining the consequence and likelihood of potential asset failure scenarios (using the Risk Management Procedure) and evaluating the effectiveness of mitigation strategies currently in place. Risk ratings are used to determine and prioritise improved mitigation actions to reduce all risks to 'as low as practicable'.



# 14 Reg 6 (n (i-vi)) details of the processes and procedures:

As part Goldwind Australia Audit and Inspection Procedure an audit and inspection schedule (GWA-CO-TMP-005 Audit and Inspection Schedule MNWF) is maintained and a yearly audit and inspection of the OHL is planned before the beginning of each fire season.

#### I. Monitor the implementation of the bushfire mitigation plan.

Moorabool Windfarm Pty Ltd have defined works planned for the upcoming twelve (12) month period, utilising a system that defines in detail; task, start/finish dates, percentage progress etc., for all its operational wind farm sites. This Plan is developed prior to the commencing operating period and involves departmental, site based and HSEQ management consultation and involvement and is undertaken by a dedicated regional Service Planner.

The plan has been developed to incorporate components that are specific to the requirements of MNWF and is held as an overarching Annual Compliance Plan which is tracked using the Annual Compliance Tracker.

All requirements for compliance and preventative inspections and works are tracked in this high-level plan, including reviewing of the Bushfire mitigation Plan which is monitored weekly and reviewed monthly by senior departmental management and reported on by the Service Planner and Site Manager monthly.

Tasks that ensure the implementation of the plan are to be included on the Annual Compliance Plan and monitored accordingly.

#### II. Audit the implementation of the plan.



The Bushfire Mitigation Plan will be audited by appropriately competent HSEQ employees in line with the requirements of the plan and evidence supporting the completion of items/tasks to confirm compliance.

#### III. Identify any deficiencies in the plan or the plan's implementation

All deficiencies or non-conformances to the plan and its implementation will be noted in the audit and review of the plan by the appropriately competent HSEQ employee and logged in Goldwind's HSEQ reporting system, Viking, as an action and non-conformance or opportunity for improvement to be rectified against the audit.

# IV. Change the plan and the plan's implementation to rectify any deficiencies identified under subparagraph.

All identified and recorded deficiencies and non-conformances required to be rectified will be included in the updated review of the Bushfire Mitigation Plan that is subsequently revised and updated at each review period or on identified deficiencies through the audit and review process.

#### V. Monitor the effectiveness of inspections carried out under the plan.

Inspections are reviewed through the WHS Audit process in line with consultation between the reviewing party, Moorabool Windfarm Pty Ltd HSEQ Service department employees, and the Moorabool Windfarm Pty Ltd Site Service Manager. As required, Moorabool Windfarm Pty Ltd will seek independent, third-party intervention or review of the inspections to ensure quality standards are met for inspections and due diligence of inspecting parties.

All equipment utilised for inspections, thermal imaging cameras, are checked for correct operation and calibrated as required and in line with manufacturer specifications.

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#### VI. Audit the effectiveness of inspections carried out under the plan.

WHS audit schedule encompasses reviews of inspections and documentations and identifies any opportunities for improvement and non-conformances. Inspection effectiveness does not form a direct audit item or outcome, however any discrepancies identified between inspections and onsite reviews are to be followed up with site and departmental management with further requirements for independent third-party verification of effectiveness of inspections to be instigated as required.

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# 15 Reg 6 (o) assistance to be provided to fire control authorities in the investigation of fires near atrisk electric lines.

Moorabool Windfarm Pty Ltd has proactively developed positive and open cooperation with the Country Fire Authority (CFA). Upon commissioning of the Wind Farm the CFA and other emergency services will be invited to attend a site familiarization visit. The Project has provided DEECA with spatial data of the site to assist in the event of an emergency.

Bushfire planning and mitigation on the Moorabool Wind Farm Sites is undertaken in conjunction with these agencies. Moorabool Windfarm Pty Ltd will assist Fire Control Authorities in their investigation of fires near our at-risk electric lines by:

- Assisting with safe access to assets
- Making assets safe before commencement of investigations including, where appropriate, isolating power
- Sharing appropriate information regarding an incident and related inspection or maintenance reports
- Inviting external authorities to attend incident investigations as required.

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# 16. Referenced documents

Document Name		Approval date
GWA-OM-CHE-0008 Overhead Line Inspection		10.10.2023
GWA-OM-CHE-0009 33KV Omexom Structure Inspection		22.04.2024
GWA-HSE-PRC-0021 Contractors and Consultants	4	27.09.2022
Prequalification Procedure		
MWF Line Clearance Management Plan_	6.0	8.08.2022