Cathedral Rocks Wind Farm
Bushfire Mitigation Plan



CONTROL

PREPARED BY	REVIEWED BY	APPROVED BY
Ross Tochez Anderson	Nielsen, Craig	Cox, Gary
25-10-2023	25-10-2023	25-10-2023
[SIGNATURE]	*[SIGNATURE]*	*[SIGNATURE]*

*The signed original is kept by **ACCIONA**.*

RECORD OF CHANGES

REV.	DATE	DESCRIPTION
01	01/01/2012	Initial release
02	05/2012	Change to document numbering structure
03	09/2015	Review and update
04	08/04/2019	Transition to Acciona Energy template with minor amendments.
05	18/12/2019	Editorial changes. Updated logo and font. No change to content.
06	12/10/2022	Inclusion of reference to hot works permit in accordance with Permit to work procedure. Included points about maintaining firebreak surrounding maintenance facility. Revised structure to match other site BMP formats. Updated to current plan template
07	16/10/2023	Updated Appendix A fire danger ratings and warnings with Nationally consistent ratings

CONTENTS

TITLE	PAGE
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	4
4. RESPONSIBILITIES	4
5. DESCRIPTION OF CATHEDRAL ROCKS WIND FARM	4
5.1. HERITAGE AGREEMENT	4
5.2. INFRASTRUCTURE	4
5.2.1. WIND TURBINES	4
5.2.2. UNDERGROUND POWER CABLES	5
5.2.3. PAD MOUNTS AND CONTROL BUILDING SWITCHROOM	5
5.2.4. SUBSTATION	5
5.2.5. OVERHEAD POWER LINES	5
6. BUSHFIRE PREVENTION STRATEGIES	5
6.1. INTRODUCTION	5
6.2. PREVENTION STRATEGIES	6
6.2.1. VEGITATION MANAGEMENT	6
6.2.2. ACCESS MANAGEMENT	6
6.2.3. WATER SUPPLY MANAGEMENT	7
6.2.4. FIRE DANGER DATES	7
6.2.5. MONITORING OF FIRE BANS	7
6.2.6. HOT WORKS	7
6.2.7. FIRE FIGHTING EQUIPMENT	8

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED. (Except copies explicitly stamped as CONTROLLED COPY)

TITLE	PAGE
6.2.8. TRAINING	8
6.2.9. SMOKING	8
6.2.10. VEHICLES	8
7. OPERATIONAL CONTINGENCY ARRANGEMENTS	9
7.1. FIRE DETECTION/SUPPRESSION	9
7.2. IN THE EVENT OF A BUSHFIRE	9
7.3. ON DAYS WITH A FIRE DANGER RATING OF CATASTROPHIC FIRE RISK DANGER	9
7.4. ON DAYS DECLARED AS A DAY OF TOTAL FIRE BAN	10
8. FIRE INVESTIGATION	10
8.1. BUSHFIRE INCIDENTS OR NEAR MISSES	10
8.2. ASSISTANCE WITH FIRE INVESTIGATION	10
9. COMPLIANCE AND MONITORING OF THE PLAN	10
9.1. IDENTIFYING DEFICIENCIES AND REVISING THE PLAN	11
9.2. WORPLACE CONTACT	11
10. RELATED DOCUMENTATION	11
APPENDIX A: FIRE DANGER RATINGS & WARNINGS	12

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED.
(Except copies explicitly stamped as CONTROLLED COPY)

1. PURPOSE

Acciona Energia Global SA and Acciona International SA (Acciona Energia) has developed this Bushfire Mitigation Plan (BMP) to support its Environmental Management Plan (EMP) and Emergency Response Plan (ERP) for and on behalf of Cathedral Rocks Wind Farm (CRWF).

This procedure has been put in place to ensure that all high-level risks in relation to bushfire mitigation and the CRWF are identified and where possible appropriate control mechanisms are either enacted or identified to minimise any disruption to CRWF.

This procedure is to be utilised continually, on an as-needs basis.

This plan shall be considered by the HSEQ Team and the Operations Team when assessing the risks that may impact the viability of the CRWF.

2. SCOPE

Cathedral Rocks Wind Farm (CRWF) is owned as a joint venture between Acciona Energy Australia Global Pty Ltd (Acciona Energia) and Energy Australia (50/50). The Cathedral Rocks Wind farm is located on the lower Eyre Peninsula, approximately 27 kilometres south-west of Port Lincoln on the edge of the Great Australian Bight. Turbine operation and maintenance activities are managed by Vestas contractors, while balance of plant (BOP) activities are managed by Acciona Energia. The wind farm is situated on private property, and includes land covered by a Heritage Agreement.

Key assests located at the Cathedral Rocks Wind Farm include:

- 32 Vestas type V80 wind turbine generators (WTG) which have a nominal generating capacity of 2 MW
- 8 Pad mount transformer buildings
- Operations compound, including offices, workshop, and control switch room.
- Substation – solely managed by ElectraNet, although Acciona Energia is responsible for maintaining the area around the substation perimeter.

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED.
(Except copies explicitly stamped as CONTROLLED COPY)

3. DEFINITIONS

TERM	DEFINITION
BMP	Bushfire Mitigation Plan
Bushfire	A generic term for an unplanned fire which includes grass fires, forest fires and scrub fires. Used interchangeably with “wildfire”.
CRWF	Cathedral Rocks Wind Farm
CFS	South Australian Country Fire Service
EMP	Environmental Management Plan
ERP	Emergency Response Plan
HA	Heritage Agreement
HSEQ	Health Safety Environment and Quality

4. RESPONSIBILITIES

POSITION	RESPONSIBILITIES
Business Area Leader	Ensure that bushfire mitigation activities are resourced and completed. Requirements in this plan are regularly reviewed as per document control and internal audit processes
Site Manager	Conduct and review risk mitigation works. Notify interested parties of bushfire danger period and requirements to be observed. Ensure vegetation is maintained in accordance with BMP. Conduct regular reviews of access roads and ensure maintenance is conducted wherenecessary. Conduct regular inspections of water supply, fire services equipment. Monitor Fire Ban Ratings

5. DESCRIPTION OF CATHEDRAL ROCKS WIND FARM

5.1. HERITAGE AGREEMENT

Cathedral Rocks Wind Farm Pty Ltd has a Lease Agreement dated in 2004 with the owners of the ‘Cooanilla’ property. Part of the property is subject to a Heritage Agreement under the Native Vegetation Act 1991. The Management Plan for Cathedral Rocks Wind Farm Heritage Agreement includes requirements for fire management actions.

5.2. INFRASTRUCTURE

5.2.1. WIND TURBINES

The wind turbines comprise a rotor and nacelle mounted on tall, tapered steel towers approximately 60m above the ground.

The electrical generator itself is located within the nacelle at the top of the tower and generates power at 690V, 50Hz with wind speeds between 4-25m/s. The generated 690V is transformed to

33kV before leaving the turbine. A large mechanical gearbox and hydraulic circuits with their associated hydraulic fluids and lubricating greases and oils are also located within the nacelle. The wind turbine's high voltage switchgear is located at one of eight pad-mount distubution buildings and is fused and insulated with SF6 gas.

While the likelihood of fire ignition from the wind turbine is minimal, it has occurred previously at the site. In the event of a fire within the wind turbine tower the fire should be contained within the tower itself. A fire in the nacelle may not be contained within the nacelle and would then become a fire ignition source to the area surrounding the wind turbine.

5.2.2. UNDERGROUND POWER CABLES

The wind farms internal electrical reticulated system is underground and operates at 33kV. The underground power cables are buried in trenches. Protective plates and warning tapes are laid at various depths to protect the cable and warn any ground disturbance activities of the presence of the cable. The cables themselves are heavily insulated, armoured and shielded. The likelihood of fire ignition from the underground power cables is almost not plausible as only a mechanical break into a live conductor (e.g. when digging) could act as a fire ignition source.

5.2.3. PAD MOUNTS AND CONTROL BUILDING SWITCHROOM

The wind turbines are connected to one of eight pad-mount distribution switchgear enclosures via underground cables. The pad-mount enclosures contain the 33kV ring main units (RMUs) and associated protection equipment for each wind turbine. The pad mounts are connected by underground cable to the control building switch room. Four of the pad mounts underground cables are routed through the other pad mounts RMUs.

5.2.4. SUBSTATION

From the control building switch room, the wind farm is connected to ElectraNet SA's Sleaford substation via underground cable. The Sleaford substation is owned and operated by Electranet SA, with ElectraNet's responsibility commencing at the connection point of the underground cables coming from CRWF. Acciona maintain the vegetation surrounding the substation in order to provide a fire break and minimise risk of fire impacting the substation.

5.2.5. OVERHEAD POWER LINES

There are no overhead power lines under the scope of the Cathedral Rocks Acciona Energia operations.

6. BUSHFIRE PREVENTION STRATEGIES

6.1. INTRODUCTION

CRWF is vulnerable to bushfire and because it is located in a region that has a history of bushfire events, it is probable that the site may be threatened by bushfire when seasonal conditions are conducive to such events.

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED.
(Except copies explicitly stamped as CONTROLLED COPY)

As such, CRWF must continually monitor the level of bushfire risk within the site and on lands adjoining the site and plan accordingly, to mitigate the risk. The bushfire risk mitigation measures employed by CRWF must be relevant to the prevailing conditions and address all potential bushfire threats whilst meeting CRWF's environmental objectives. Bushfire risk mitigation measures will include:

- Fuel reduction by land management techniques, mechanical and chemical fuel reduction
- Assessment of potential threats within the district (e.g. tree plantations, public land, etc.) and liaison with the appropriate authorities and committees to negotiate the application of risk mitigation measures
- Monitoring bushfire risk indicators (e.g. weather forecasts, Fire Danger Indices, etc.)
- Maintaining surveillance of the district through vigilance and regular communication with the CFS
- Liaison with relevant Authorities with respect to bushfire risk mitigation within the CRWF fence line
- Applying for relevant permits and other approvals to carry out any hot work during a fire ban period, and
- Notification to all stakeholders of the timing of the introduction of the fire danger period and the requirements to be observed during this period.

6.2. PREVENTION STRATEGIES

6.2.1. VEGITATION MANAGEMENT

An annual site inspection will be conducted to determine the vegetation control plan for the CRWF site prior to each fire season. Monthly environmental inspections will monitor vegetation growth and weed control activities will be conducted quarterly or as required.

During the Bushfire Danger Period (Refer Section Fire Danger Season Dates):

- Grass should be no more than 100mm in height and leaf litter no more than 10mm deep where possible on the land that CRWF Renewable Assets are responsible for;
- A fuel reduced area of four (4) metres width should be maintained around the perimeter of electricity compounds and sub-station type facilities;
- When plant and heavy equipment will be working are working on site a risk assessment shall be performed to assess grass / leaf clearance required;
- All plant and heavy equipment should carry at least one serviceable fire extinguisher;
- A 10m Firebreak is maintained around the existing maintenance facility. Within the firebreaks grass and weeds shall be reduced to a maximum height of 10 cms. Surface litter, thin understorey, bushes and shrubs, prune limbs up to 2 metres and prune limbs that overhang buildings shall be removed from ground level to create a vertical firebreak

6.2.2. ACCESS MANAGEMENT

- Access roads shall be regularly checked and maintained as scheduled.
- The normal considerations for vehicles (such as those used by the Country Fire Service (CFS)) is:
  - Constructed roads should be a minimum of four (4) metres in trafficable width with a four metre (4m) vertical clearance for the width of the formed road surface,

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED.
(Except copies explicitly stamped as CONTROLLED COPY)

- Roads should be constructed to a standard so that they are accessible in all weather conditions and capable of accommodating a vehicle of 15 tonnes for the trafficable road width.

6.2.3. WATER SUPPLY MANAGEMENT

Location of water access points are detailed in the CRWF Emergency Response Plan. Consideration shall be given to:

- Water access points shall be located in safe, easily identifiable areas, accessible in all weather conditions
- Water access points should be designed, constructed and maintained for a load limit of at least 15 tonnes
- A turning circle with a minimum radius of 10 metres is required for fire appliances at all water access points
- Fire brigade appliances should be able to park within four (4) metres of the water supply outlet on a hard standing area
- Bulk static water storage is available on site
- Fill points are fitted with couplings suitable for the CFS to attach their equipment, and
- CFS are informed of location of water access points.

The fire water supply system undergoes a structured maintenance program based on inspection.

Actions from these inspections, and any other regular inspections or routines related to fire safety, are given top priority for completion, especially in summer.

6.2.4. FIRE DANGER DATES

To help reduce the chance of wildfires occurring during summer and to protect lives and property, the Fire Danger Season is declared by the CFS. This season sets legal restrictions on the activities that can be undertaken. These dates highlight the change in risk level and the requirements for permits.

Fire Danger Season dates can be found on the CFS website and may alter from year to year so must be checked annually before fire season.

6.2.5. MONITORING OF FIRE BANS

Each day during the Fire Danger Season the Bureau of Meteorology forecasts a Fire Danger Rating for each District. The Fire Danger Rating has corresponding actions that should be taken depending on the level of Fire Danger, and also describe the predicted fire behaviour (in the event of a fire) and level of fire suppression effort that may be required. See Appendix A for further details about fire danger ratings.

These ratings may be found on the CFS Fire Ban web page or via communication with the CFS. The ratings shall be checked on a daily basis during the Fire Danger Season. CRWF is in fire district 14 - Lower Eyre Peninsula.

6.2.6. HOT WORKS

Hot Works" is the term used for a potential ignition source for fires – they have the potential to start serious fires or cause explosions if combustible products are present or near the work site.

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED.
(Except copies explicitly stamped as CONTROLLED COPY)

Hot Works may include activities involving welding, grinding, arc or flame cutting, exposure of hot surfaces in flammable surroundings, or any other process producing sparks/fire.

Each person who wishes to carry out Hot Works on or in the vicinity of apparatus must consider the risks that could lead to:

a) Serious injury to people.
b) Damage to plant, equipment or apparatus.
c) Disruption of supply.

Where Hot works are unavoidable, a hot works permit to work F11_ PAU07102 is required in accordance with the Permit to Work Procedure PAU07102.

Prior to issuing a hot works Permit to Work, the Permit Issuer will confirm with the Permit Applicant:

- That precautions to be taken and if any further precautions are required
- The nature, duration, and frequency of firewatch (if any)
- Total fire ban restrictions
- Weather conditions and proximity to vegetation/ sources of ignition
- Equipment and supervision requirements
- Emergency considerations including exit points

6.2.7. FIRE FIGHTING EQUIPMENT

Fire extinguishers are maintained and managed on site. It is the Site Manager's responsibility to ensure adequate numbers and types of extinguishers are located and easily identified throughout the site. Fire extinguishers must be inspected at six monthly intervals in line with the Australian Standard (AS1851).

The firefighting unit and trailer shall be checked and prepared at the start of the Fire Danger season and closed down at the end of the season. It shall be regularly inspected thoughout the Fire Danger season, to ensure it is in good condition and ready for use.

6.2.8. TRAINING

All personnel are trained to perform the tasks detailed within this plan. The training of personnel is managed and recorded in Acciona Energia's Training Management System. All personnel carrying out work on site must complete the appropriate level of induction for the work which is to be conducted. The induction process states the minimum requirements for carrying out work on site, the need to report fires and provide firefighting assistance within their capabilities.

6.2.9. SMOKING

Smoking is prohibited within 2m radius of flammable grass / vegetation. All butts shall be suitably extinguished and disposed of in an acceptable receptacle.

6.2.10. VEHICLES

To reflect best practice, access to areas off wind-farm access roads (eg, for the inspection of fence lines) shall be by diesel-powered vehicles. If a diesel powered vehicle is not available, a petrol powered vehicle may be used, but owing to significantly higher exhaust temperatures, should

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED.
(Except copies explicitly stamped as CONTROLLED COPY)

never be driven over any vegetation where the clearance between the vehicle underbody and the vegetation is less than 300mm.

Driving over any vegetation which is dead and dry such as hay paddocks, cropped paddocks with stubble, and vegetation such as spinifex by a petrol powered vehicle is prohibited at all times. Vehicles must not be parked over the top of vegetation; only in cleared areas such as firebreaks or vehicle tracks.

It is a legislative requirement that the engine exhaust be designed to prevent contact with flammable material; grass and the like. It must also be in good working order to prevent the escape of any heated particles from the engine.

Under no circumstances shall a petrol-powered vehicle be taken off wind-farm access roads during a period of Total Fire Ban.

7. OPERATIONAL CONTINGENCY ARRANGEMENTS

This section sets out the way in which the wind farm will be operated or maintenance activities undertaken in various contingencies.

7.1. FIRE DETECTION/SUPPRESSION

Bushfire alerts will only be advised by normal public channels such as the CFS website, electronic media or local advice. Firefighting must only be conducted where the fire is manageable, or at the direction of qualified fire fighters.

7.2. IN THE EVENT OF A BUSHFIRE

In the event of a bushfire in the area, Acciona Energia will, where appropriate, bring all staff back from the wind farm site to the Maintenance Facility, assess the risk in consultation with emergency services information and potentially send personnel home (i.e. evacuate the site) if it is safe to do so. The procedure is covered in the Cathedral Rocks Emergency Response Plan.

The site will continue to be operated remotely, via the Control Room. Instructions to the CRWF by emergency services, including the evacuation of site, shutdown and de-energisation of plant will be automatically redirected to the Control Room. Electric safety devices, such as line, transformer and turbine protection relays, will ensure that the plant is shut down in the event of smoke or flames interfering with the wind farm.

7.3. ON DAYS WITH A FIRE DANGER RATING OF CATASTROPHIC FIRE RISK DANGER

In the event of a Fire Danger Rating of Catastrophic being declared for the area, Acciona Energia will instruct staff to work from home, due to the limited escape routes if a fire does develop in the area. The site will be operated remotely, via the SCADA system. Electric safety devices, such as line, transformer and turbine protection relays, will ensure that the plant is shut down in the event of smoke or flames interfering with the wind farm.

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED.
(Except copies explicitly stamped as CONTROLLED COPY)

7.4. ON DAYS DECLARED AS A DAY OF TOTAL FIRE BAN

The operation of CRWF will continue as normal during days of Total Fire Ban. However maintenance activities will be altered such that:

- Vehicle travel will be confined to defined access tracks, and
- Hot works are not permitted (except where required in emergency circumstances such as catastrophic plant failure, and fire risk-controlled Maintenance Facility workshop area).

Mitigation procedures described in this BMP ensure that all facilities can be operated and maintained without significantly increasing the risk of starting a bushfire

8. FIRE INVESTIGATION

8.1. BUSHFIRE INCIDENTS OR NEAR MISSES

Following a bushfire event, including near miss events, Acciona Energia will cooperate with the CFS and other emergency control authorities to investigate the cause of the fire. Following an event, Acciona Energia will in consultation with fire authorities:

- Identify the actual or potential cause/source of the ignition
- Investigate and document:
  - The circumstances leading to the event;
  - Reasonably practicable changes that can be made that will mitigate similar events recurring:
    - To the design of the item of plant involved in the event (e.g. intrinsic design changes, clearance requirements, vegetation control requirements etc), and/or
    - To the operations and maintenance procedures that led to the event, and
- Implement the appropriate combination of plant/procedural changes that will mitigate similar events recurring.
- Where applicable - Identify and document where firefighting efforts were hindered by the operation of the Cathedral Rocks Wind Farm, and
- Based on an analysis of that hindrance, implement changes to:
    - operations and maintenance plans, and/or
    - design to reduce the negative impact on the firefighting effort in future fires.

8.2. ASSISTANCE WITH FIRE INVESTIGATION

Acciona Energia will provide assistance to fire control authorities when requested, including technical details relating to Wind Farm assets.

9. COMPLIANCE AND MONITORING OF THE PLAN

The primary mechanism for monitoring conformance with this plan will be through compliance inspections and the Internal Audit (IA) program. Upon the identification of non-conformances or where further actions may be necessary, items will be managed as per-Acciona Energia's Event Reporting Management Procedure.

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED.
(Except copies explicitly stamped as CONTROLLED COPY)

9.1. IDENTIFYING DEFICIENCIES AND REVISING THE PLAN

This BMP shall be reviewed if there are significant changes or deficiencies in this BMP identified by a variety of means such as:

- Regular review of this BMP by the Site Manager
- Reviews or recommendations by Regulators
- Audit findings
- Incidents and Investigations
- Changes in legislation, standards or industry practice, and Operational Changes.

9.2. WORPLACE CONTACT

Role	Contact Number
Site Manager	+61 8 8683 1995 0438 223 455

10. RELATED DOCUMENTATION

CODE	TITLE
PAU01_GAE07006	Emergency Management Procedure
PLN09_PAU01_GAE07016	CRWF Environmental Management Plan
PLN07_PAU01_GAE07006	CRWF Emergency Response Plan
PAU01_GAE03004	Competency Training Induction Procedure
PAU07102	Permit to Work Procedure
F11_ PAU07102	Hot works Permit to work
PAU01_GAE07021	Event Reporting Management Procedure
Legislation	South Australia - South Australia Native Vegetation Act 1991
Guidance	South Australia - Fire Management Environmental Assessment and Management Procedure
Guidance	South Australia - South Australian Firebreaks, Fire Access Track and Sign Standarts Guidelines

***NOTE**: Complete the table with the documentation, legislation, regulations, etc. that is relevant to the document.*

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED. (Except copies explicitly stamped as CONTROLLED COPY)

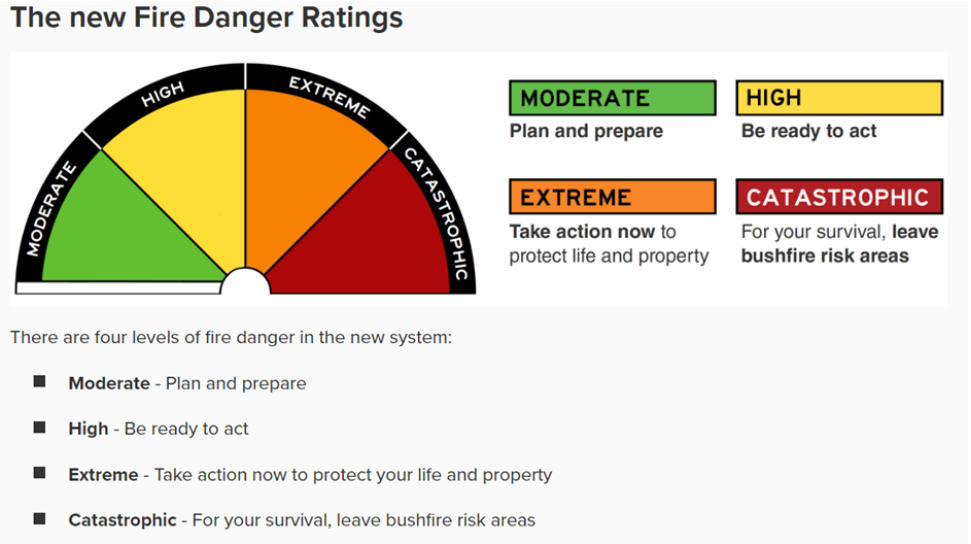
APPENDIX A: FIRE DANGER RATINGS & WARNINGS

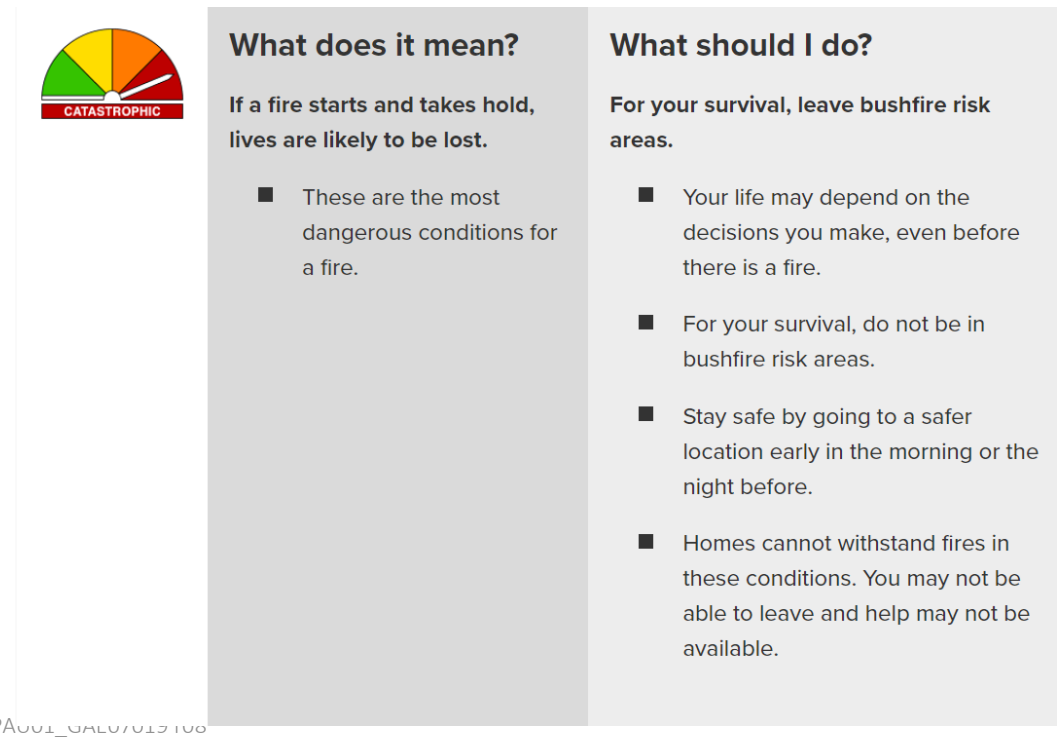
The Fire Danger Rating is an indicator of how dangerous a bushfire could be if it did occur. It is not a predictor of how likely a bushfire is to occur. It should be used as an early indicator to trigger your plans.

Across the country there will be nationally consistent colours and terminology. This means that wherever you go in Australia, and whatever the season or fuels you're surrounded by, you can understand the level of threat and what you need to do to stay safe.

The Bureau of Meteorology forecasts the rating each day. The higher the Fire Danger Rating, the more dangerous the fire conditions.

Stay up to date at https://www.cfs.sa.gov.au/warnings-restrictions/restrictions/australian-fire-danger-ratings.jsp





All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED.
(Except copies explicitly stamped as CONTROLLED COPY)



What does it mean?

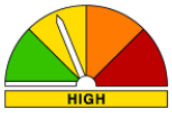
Fires will spread quickly and be extremely dangerous.

- These are dangerous fire conditions.
- Expect hot, dry and windy conditions.

What should I do?

Take action now to protect your life and property

- Check your bushfire plan and that your property is fire ready
- If a fire starts, take immediate action. If you and your property are not prepared to the highest level, go to a safer location well before the fire impacts.
- Reconsider travel through bushfire risk areas.
- Leaving bushfire risk areas early in the day is your safest option.



What does it mean?

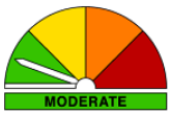
Fires can be dangerous.

What should I do?

Be ready to act.

- There's a heightened risk. Be alert for fires in your area.
- Decide what you will do if a fire starts.
- If a fire starts, your life and property may be at risk. The safest option is to avoid bushfire risk areas.

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED.
(Except copies explicitly stamped as CONTROLLED COPY)



What does it mean?

Most fires can be controlled.

What should I do?

Plan and prepare.

- Stay up to date and be ready to act if there is a fire.

All printed or computer copies of this document not hosted in Acciona systems are considered NON-CONTROLLED.
(Except copies explicitly stamped as CONTROLLED COPY)