

Escalating bushfire weather

	Bushfire season (days with Low, Moderate or High Fire Danger Rating only)	Fire Weather Day (Very High, Severe, Extreme or Catastrophic Fire Danger Rating)	Total Fire Ban (prohibits any activities that may start a fire)	Vehicle Movement Ban (must not operate a vehicle likely to cause or contribute to the spread of a bushfire)
Responsible agency	Western Power's assessment of bushfire threat based on reported fire statistics and seasonal advice from BOM and DFES	A Western Power designation when the Fire Danger Index is forecast to be 32 or greater. A Fire Weather Day is not the same as a Fire Weather Warning issued by the Bureau of Meteorology (BOM)	Issued by the Department of Fire and Emergency Services (DFES)	Issued by the Bushfire Control Officer in individual local government areas
How long does it last?	At Western Power this is usually from December to March, although sometimes it is extended	As long as the Fire Danger Index is 32 or above (Very High or higher)	Usually for 24 hour periods from midnight to midnight	It varies but usually during the heat of the day

How are our activities affected in high or extreme bushfire risk zones?

Preparedness	Standard bushfire readiness including asset inspections and replacement Bushfire protection setting scheme activated	Inform operational Western Power employees of Fire Weather Day. Field crews will follow appropriate work practices and process during these periods	Inform operational Western Power employees of Total Fire Ban. Field crews will follow appropriate work practices and process during these periods	Inform operational Western Power employees of Vehicle Movement Ban. Field crews will follow appropriate work practices and process during these periods
Operating conditions		A risk assessment is required before power can be restored after an outage.	A detailed risk assessment is required to meet DFES Total Fire Ban Exemption conditions before power can be restored after an outage	Vehicles are not permitted to leave gazetted roads to inspect poles and powerlines
Fast protection settings	Fast protection settings are modified but not yet activated		Fast protection settings are activated on reclosers that can be controlled remotely	
Auto reclose minimisation	The auto reclose minimisation scheme is activated Auto reclose is disabled on reclosers that can't be controlled remotely so there will be no auto reclose attempts	Where auto reclosers can be controlled remotely, a single auto reclose sequence is attempted. Any successive attempts are blocked as a reasonable compromise between reliability and risk	Auto reclose is disabled in high and extreme bushfire risk zones When those risks aren't present, one auto reclose sequence is attempted	
Restoration	If the auto reclose attempt is unsuccessful, manual restoration of power can be attempted after 30 minutes if no cause has been identified and there is no reported possible cause	If the auto reclose attempt is unsuccessful, line patrols are required to visually identify the cause If the cause is found, the damaged part of the network can be isolated and, where possible, power to other customers can be restored. Once repaired, the affected network can be re-energised restoring supply to all customers If the fault can't be found or we can't complete the patrol, we will not restore power to any affected customers until the Fire Danger Index is below 32 and falling (often late in the evening)	If the auto reclose attempt is unsuccessful or was disabled, line patrols are required to visually identify the cause Even if the cause is found, if the risk of starting a fire is too great power will not be restored until conditions ease in the affected section If the cause can't be found or we can't complete the patrol, we will not attempt to restore power until the BOM forecast period is over and the Fire Danger Index is below 32 and falling (often late in the evening)	Line patrols by vehicle are restricted to gazetted roads Foot patrols are possible for powerlines close to roads, if it is safe to investigate Helicopter patrols for regional powerlines may be possible within range and in daylight but not at night or if it's windy
Impact on communities	Outages may be more frequent	Large parts of the network may be off for long periods of time	Larger parts of the network will be off for longer periods of time	Communities may have no power for significant periods of time

Bushfire protection setting scheme

The bushfire protection setting scheme applies to all remotely controllable reclosers in a particular district for the entire bushfire season.

The scheme consists of two approaches - auto reclose minimisation and fast protection settings.

- **Auto reclose minimisation** restricts the number of automatic reclose attempts after a fault occurs on a feeder to reduce the risk of starting a fire. The settings for the number and duration of reclose attempts depends on the bushfire risk zone and the fire danger rating.
- **Fast protection settings** reduce the duration of a fault and the duration of discharged energy, reducing the subsequent fire risk. They are applied to devices protecting high and extreme fire risk areas during Total Fire Bans.

What is an auto recloser?

Auto reclosers are automatic reclosing circuit breakers.

A recloser responds to a fault by shutting off the supply of electricity on a powerline. It then waits a few seconds and attempts to automatically switch the power back on. Sometimes it has to do this two or three times before the fault is cleared. Every time a protection device recloses onto a network fault, energy is discharged. This discharge may cause a spark which can ignite a fire. This is why we make changes to the way auto reclosers operate during bushfire season.